ANNALS of

Seth Gordhandas Sunderdas Medical College and KEM Hospital [1925-2025]

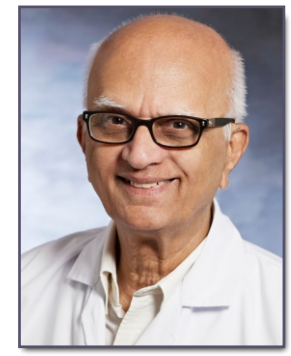
Nationalism, Foundation, and Growth

Sunil K. Pandya

Edited by
Lopa Mehta

BHALANI

GOSUMEC FOUNDATION



Dr. Sunil Krishnalal Pandya
(1940–2024)

Professor Sunil Krishnalal Pandya— neuro-surgeon, ethicist, medical historian, and teacher— was a lifelong pillar of **Seth G.S. Medical College and King Edward Memorial Hospital**. A pioneer of microneuro-surgery in India, he helped establish K.E.M. Hospital as a nationally respected centre for neuro-surgical care, combining clinical ex-cellence with deep moral conviction.

A gentle yet exacting teacher, Dr. Pandya exemplified discipline, humility, and uncompromising ethical standards. A passionate advocate for medical ethics and the humanities, he served as Editor of the Indian Journal of Medical Ethics.

He played a central role in establishing the Janus Archives and became the first Chairperson of the Dr. Manu V. L. Kothari Chair and Division of Medical Humanities, which he shaped into a vibrant and rigorously structured academic entity.

Pursued with unwavering commitment until his final days, this centenary volume was a dream he held close to his heart. More than a historical chronicle, it stands as a tribute to his vision, his scholarship, and his lifelong devotion to the institution he cherished.

ANNALS of

Seth Gordhandas Sunderdas Medical College and KEM Hospital [1925-2025]

Nationalism, Foundation, and Growth

Sunil K. Pandya

Edited by
Lopa Mehta

BHALANI

GOSUMEC FOUNDATION

ANNALS
of
Seth Gordhandas Sunderdas Medical College and KEM Hospital
[1925–2025]
Nationalism, Foundation, and Growth

Centenary of Healing

Dr Manoj Singrakhia's "Centenary of Healing" artwork celebrates KEM's 100-year journey.

Inspired by the KEM emblem, the artwork features a staff with an entangled serpentine, symbolizing disease, and wings, representing doctors' efforts to make patients disease-free.

The absence of a face is intentional, emphasizing that KEM is not a representation of an individual identity or likeness.

KEM is not an identity, gender or face but an emotion that we all carry within us. The wings on the sandals and bag of elixir signify KEM's journey over the past century. The color palette is deliberate, with green representing healing and a smooth surface conveying calmness. In contrast, the front features bold colors like red, raw umber, burnt umber, and burnt sienna, symbolizing disease and agony.

The artwork looks forward to KEM's future, depicting unlimited and infinite healing. This piece honors KEM's legacy while highlighting its ongoing commitment to providing exceptional care. The artwork's themes of healing, hope, and resilience reflect KEM's enduring mission.

Dr Manoj Singrakhia

ANNALS
of
Seth Gordhandas Sunderdas Medical College and KEM Hospital
[1925–2025]
Nationalism, Foundation, and Growth

Sunil K. Pandya

Edited by

Lopa Mehta

Bhalani Publishing House
Mumbai | New Delhi | Pune
INDIA

© 2026 **GOSUMEC Foundation USA**

ISBNs

ISBN (EPUB): 979-8-9943479-0-4
ISBN (PDF – Digital Edition): 979-8-9943479-1-1
ISBN (Cloth): 978-9-381496-98-5

Library Metadata

Library of Congress Control Number (LCCN): **2025925518**
Library of Congress Classification (LCC): **DS436 .P36 2026**
Dewey Decimal Classification (DDC): **954—dc23**
Includes bibliographical references and index.

Rights and Open Access Statement

GOSUMEC Foundation USA is the copyright holder of this work.
The digital editions (EPUB and PDF) are published as **open access**, in furtherance of the Foundation's mission to preserve institutional history, advance medical education, and support students into perpetuity. This work is **not in the public domain**.

The digital editions may be freely read, downloaded, shared, hosted, mirrored, cataloged, and preserved by libraries, archives, and educational institutions worldwide for **educational, scholarly, and non-commercial purposes**, provided the integrity of the work and proper attribution to the original source are maintained.

The digital editions are distributed under the **Creative Commons Attribution–NonCommercial–NoDerivatives 4.0 International License (CC BY-NC-ND 4.0).**

This volume is sponsored by the **Dr. D. R. SarDesai Endowment**, honoring a renowned historian and educator. It commemorates **100 years of legacy, learning, and leadership** at Seth G. S. Medical College and KEM Hospital.

Disclaimer

The views and interpretations expressed in this volume are those of the author(s) and editor(s) and do not necessarily reflect the views of the publisher.

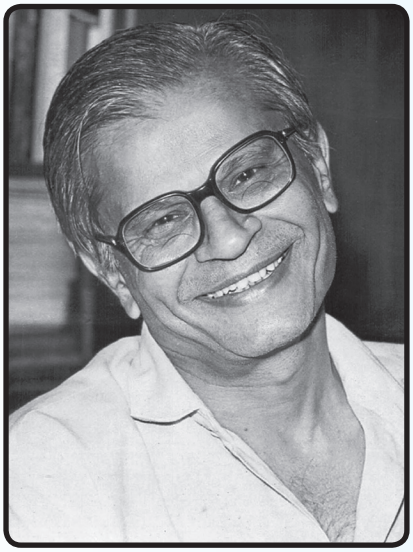
Publishing & Rights Information

Digital Publisher and Copyright Holder
GOSUMEC Foundation USA
Fremont, California, USA
https://gosumec.org
Contact: founder@gosumec.org

Print Edition
Published separately in print by **Bhalani Publishing House**, Mumbai, India.

Credits

Author: **Dr. Sunil Pandya**
Editor: **Dr. Lopa Mehta**
Cover Design: **Dr. Manoj Singrakhia**
Design & Typesetting: **Vishal Mayekar**



Dr Manu Vijaya Liladhar Kothari
(19 November 1935–16 October 2014)

Marij ke muskurahatope ho nissar
Marij ka dard mil sake to le udhaar
Marij ke waste ho tere dil mein pyaar
Doctor isika naam hai ….

मरीज की मुस्कुराहटोपे हो निसार
मरीज का दर्द मिल सके तो ले उधार
मरीजके वास्ते हो तेरे दिलमें प्यार
डॉक्टर ईसिका नाम है…

Veteran artist Raj Kapoor immortalized the above song, and in much the same way, Dr Manu Kothari — a legendary figure in the medical world — immortalized it through his thoughts, actions, and conduct. He was a renowned name in the revered tradition of K.E.M. Hospital. Doctors, nurses, medical students, and even hospital staff speak about him with unending admiration. Besides being a great humanitarian, he was a prolific author who wrote numerous books and publications on topics like cancer, death, and medical philosophy. He was a beloved teacher and mentor known for his dedication to students.

The walls of K.E.M. Hospital have witnessed the compassion of Dr Kothari — a man who, after treating a patient, would often take money out of his own pocket to help them buy food rations. These twin institutions (K.E.M. and Seth G.S. Medical College) are like sacred pilgrimage sites — temples for the poor and the ailing. For the underprivileged, the doctors here are nothing less than gods in service, offering healing with devotion.

In silent halls where sorrow sighs,
He walks with light in gentle eyes.
No wealth he seeks, no fame he claims,
Yet hearts remember his name well.
With healing hands and spirit high,
He lifts the weak, the lost, the shy.
His joy—a smile, a life restored,
His service is his true reward.
Amidst the poor, the frail, the pained,
He gives, and gives, yet feels no strain.
A cheerful soul with purpose grand,
A healer shaped by love, not hand—
This doctor walks a nobler way,
A saint in scrubs, by night and day.

Dr Manubhai Liladhar Kothari, a well-known name in the medical fraternity not only in Parel, but in most parts of Maharashtra for his services. With his wife, Jyotiben, he pioneered a medical project in the adivasi village "Sakwar", 86 km from Mumbai in 1972 under the aegis of the Ramkrishna Mission. The untiring efforts ranged from digging a well to constructing a dispensary for the local community which has flourished into a center treating over 30,000 tribals and has a vocational training center, an agricultural farm demonstrating techniques for better yields, and balwadis and camps for youth and women.

Dr Kothari was a doctor who effortlessly bridged brilliance with warmth—a rare blend of sharp intellect and deep humanity. With eyes that instantly read both charts and emotions, and a wit that brought laughter even in hospital corridors, he had a way of making everyone feel seen and valued. Whether comforting a worried patient, mentoring a young doctor, or sharing a light moment with staff, he was a universal friend — approachable, wise, and always present. His diagnoses were precise, but it was his ability to heal hearts while treating bodies that set him apart. In every sense, Dr Kothari embodied the spirit of medicine at its most human. He was a man with a razor sharp mind, infinite courtesy, and unconventional thinking.

Manubhai obtained his M.S. in 1963 and was appointed Lecturer in Anatomy at his alma mater and then progressively rose to Professor in 1976 and became the Head of Department in 1981. On his retirement in 1993, the status of Professor Emeritus was conferred on him. His love for his alma mater that had nurtured him ensured his continued services in various capacities till his demise.

Manubhai had suggested to Mr Hamilton Bailey, British Surgeon, teacher, and author of several famed text books, a novel method for measuring the fixed adduction deformity in the diseased hip joint when he was still a student.. Mr Bailey included it in his Demonstrations of Physical Signs in Clinical Surgery (1960). Dr Kothari studied the acid secretion of the human stomach and the effects of extra salt intake on gastric acidity and

on the common cold with Dr U.K. Sheth, his Pharmacology Professor, and Dr Ashok Vaidya. Particular about how studies were to be carried out, Manubhai insisted on being the prime subject. The number of insertions of the nasogastric Ryle's tube he underwent for this study is not recorded.

His lifelong interest in cancer led to his first publication, Genesis of Cancer, a temporal approach (1968) and a stream of publications, all written with Dr Lopa Mehta. He had a photographic memory and read literature, history, biography, and philosophy widely, which reflected in his writings. Their masterpiece was The Nature of Cancer (1973), referred to as "The Green Book" from its cover. Books and papers flowed from his pen as he co-authored on a variety of other topics as well — anatomy, embryology, genetics, evolution, immunity, medicine, semantics, the art of teaching medicine, dying, and death. His thoughts on the structure and function of man posed continuing challenges to established dogma and stimulated thought. The nature of bones and joints (1990) is an outstanding example.

A child at heart up to the very end, he let simplicity govern his every action. He would marvel at the structure and function of a leaf, the beauty of a bud, the sunrise and sunset, a cloud, often quoting Joyce Kilmer's evocative poem 'Trees'. He never understood the urge for power and wealth without any consideration for scruples and ethics.

Two topics often clouded his otherwise sunny nature — he expected honest and ethical medical practice from this noble profession. He was a strong advocate for integrating the humanities into medical education. Medical practice is usually all science and technology and the humane perspective is completely missing. This has led to a lot of dissatisfaction, distrust, and yearning for benevolent humane doctors to give a sense of "all is well". Unfortunately, the medical curricula do not cover the art of medical practice. Who is a good doctor? Dr Manu V.L. Kothari demonstrated the answer to this question through his thoughts, words, and actions.

On the passing of Dr Manu Kothari on 16 October 2014, members from the medical fraternity felt that we need to have humanity in medical sciences. They desired to institute a Chair of Medical Philosophy in the name of Dr Manu V.L. Kothari as the best way to nurture Manubhai's philosophy of life. Seth G.S. Medical College and K.E.M Hospital established "Dr Manu V.L. Kothari Chair of Medical Humanities" in his name. Dr Manu Kothari left behind countless students who will treasure his thoughts on medical humanity and their experiences with him forever and continue his legacy to promote and perpetuate Dr Kothari's ideas and values in medical education and practice.

Mrs. Rama Malik
Personal Assistant to the Dean GSMC-KEMH

References:

Indian Journal of Medical Ethics Obituary MLK – Sanjay Nagral

Dr Sunil Krishnalal Pandya, a Gentle Giant
(11 February 1940–17 December 2024)

The land of India has been sanctified by countless sages, saints, and noble individuals. In that very spirit, the King Edward VII Memorial Hospital, celebrating its centenary in 2025–26, is a sacred space hallowed by the presence of many doctor-saints. Among them stands the name of Dr Sunil Pandya. He served patients with the same devotion, faith, and passion as one would offer worship to God. His voice, softer than butter, and his gentle touch would immediately reassure and uplift patients — half the healing would happen right there. A divine presence for his patients, Dr Pandya was also a pillar of discipline, known for his unwavering commitment. He remained eternally youthful and enthusiastic about his cherished fields of Medical History and Medical Humanities. This book, along with the one on the history of J.J. Hospital, was a dream he held close to his heart.

India's soil has long been sanctified,
By sages, saints, and souls glorified.
In that same sacred, selfless flame,
Shines King Edward VII Hospital's name.
As its centenary year draws near,
We honor those who served with cheer.

Among them, one stands tall and true—
Dr Sunil Pandya, with a healer's view.
To him, each patient's pain and plea
Was answered like a devotee.
With faith, with fire, with reverent care,
He served as though in silent prayer.

His voice, like butter—soft and kind,
His touch brought peace to troubled minds.
With gentleness, he eased all fear,
A healing angel drawing near.

Yet firm as steel when duty called,
In discipline, he never stalled.
A lifelong student, wise and bright,
He chased the truth with steady light.
Medical History, Humanities deep—
He held their wisdom, wide and steep.

These books he dreamed, this story vast,
To bind the present with the past.
A vision fueled by love and grace,
A doctor-saint, time can't erase.

Dr Sunil Krishnalal Pandya, born in 1940, was an ethicist, neurosurgeon and medical historian. He was truly a renaissance man, a revered teacher, a gentle giant of Neurosurgery. Rising before dawn each day, he meticulously prepared for long hours in the operating room, often performing complex procedures with limited resources. His commitment to excellence was matched by his deep compassion; he treated each patient with dignity, regardless of their background or ability to pay. Colleagues admired his unwavering focus, humility, and tireless work ethic, which inspired others in the hospital to strive for the highest standards of care. Driven not by profit but by purpose, Dr Pandya exemplified the true spirit of service in medicine.

Dr Sunil Pandya graduated from Grant Medical College and J.J. Group of Hospitals in 1961 and M.S. General Surgery in 1965, where he had his initial training in Neurosurgery. He then moved on to Seth G.S, Medical College and K.E.M. Hospital, Mumbai, where he spent a lifetime in Neurosurgery. During his initial few years at K.E.M., he worked under Dr H.M. Dastur, who headed the department. Dr Pandya was deeply inspired by the work and character of Dr Dastur. Throughout his career, Dr Pandya attributed all his achievements and success of the department to the teachings of Dr Dastur.

During his tenure at the biggest public medical institutions of western India, he made the department a leading center of the country. The reputation of the department was so deep that patients from all corners of India thronged for neurosurgical opinion and care at K.E.M. Hospital.

Dr Pandya was a man of few soft but powerful words spoken in eloquent English. He was a powerful personality with the highest personal and work ethics, simplicity,

discipline, and punctuality. The disciplined medical record-keeping without modern computers was exemplary. Courtesy for everyone irrespective of position or stature inevitably blended with his discipline. The operation notes written by Dr Pandya form a treasure trove of the department.

Dr Sunil Pandya is among the first doctors in the country to start microneurosurgery in general and vascular surgery in particular. His contributions to the field of neuro-oncology and cervical spine is noteworthy. The reputation of the department was spread far and wide not only in the country but also in the world of neurosurgeons and students who visited the center for short and long durations. Numerous conferences and workshops were conducted during that time.

Dr Pandya would prepare his lectures diligently. His art of lecturing was unique and mesmerizing, involving science, philosophy, art, history, and science of medicine in general and neurosurgery in particular.

The most important feature of his personality and work was his highest standards of medical ethics. He was thus the editor of the Journal of Medical Ethics for several years. He contributed to various journals in a variety of forms. He avoided laurels and accolades. This kind of unique personality with an unusual aura was awe-inspiring.

He had a deep interest in "history and medical humanity", which prompted him to accept the special chair instituted in K.E.M. Hospital after the death of his close friend Dr Manu Kothari. He put in every possible effort to imbibe on the present generation of medical students what he himself practiced. He set a high standard of ethical and humane medical practice.

Dr Pandya's fondness for "institutional history" birthed this book. According to him, "Medical history and medical humanities offer a profound lens through which we understand not only the evolution of medicine but also the human experience within it. While medical history traces the journey of scientific discovery, clinical practice, and healthcare systems across time, medical humanities delve into the ethical, cultural, and emotional dimensions of healing. Together, they foster empathy, critical thinking, and a deeper appreciation for the patient-doctor relationship, reminding us that medicine is not just a science but also an art rooted in compassion, context, and human connection".

In modern medical education and practice, medical history and medical humanities play a vital role in shaping well-rounded, empathetic healthcare professionals. By studying the triumphs and failures of medicine's past, students gain perspective on the ethical challenges and social contexts that have influenced care over centuries. Medical humanities — through literature, philosophy, art, and ethics — nurture compassion,

communication skills, and moral sensitivity, helping doctors see patients not just as cases, but as individuals with stories, struggles, and dignity. Together, these disciplines enrich clinical training, encouraging a practice of medicine that is both scientifically sound and deeply human.

Mrs. Rama Malik
Personal Assistant to the Dean GSMC-KEMH

References:
National Institutes of Health (NIH) [http://pmc.ncbi.nlm.nih.gov SK Pandya]

A Tribute

Remembering Dr Sunil Pandya

It is nearly impossible for me to write about Sunil in the past tense. Having thrived in the warmth of his friendship, admired his deep scholarship, and adored his ethical life course, it is difficult to imagine he is no more. Moreover, after learning the details of his final illness and components of his will, my respect and reverence for this incredible human being, who was amongst us until very recently, was enhanced. That said, I will try to do some justice for the opportunity offered to me to write a few words about my friend Sunil.

My earliest memories of Sunil take me back to the late 1960s when I joined G.S. Medical College as a postgraduate, signed up for a Diploma in Pediatrics under Professor Manek Bhagat. I had obtained my MBBS from Mysore Medical College. In those days, it was unheard of for a graduate from the "south" like me to enter a postgraduate course in Mumbai. But due to Dr Bhagat's graciousness, I was able to inaugurate my pediatric studies and career, first as a student of DCH, then as an MD Pediatrics student.

Dr Bhagat was close to Dr Anil Desai, the neurologist working in the KEM Hospital Department of Neurosurgery, which led to my introduction to Dr Desai—another person with the most magnanimous heart. By then, I believe Sunil had joined the Department of Neurosurgery as a junior neurosurgeon, getting mentored under the eminent Dr Homi Dastur.

Another set of most unusual circumstances led me to acquire a job under Dr Anil Desai as Assistant Research Officer under a research grant from the Indian Council of Medical Research to Dr Desai. The grant was to study muscular dystrophies in children. That led to my working in the neurosurgery department, where I got to know Sunil more intimately.

It did not take long for me to discover the most admirable qualities of Sunil. He was most meticulous, industrious, and above all, a most thorough gentleman in every aspect of his activities. I have seen him interacting with his patients, which was a model of a perfect doctor-patient relationship. He never raised his voice, never seemed to be in a hurry, answering all questions of his patients and their families, even when explaining a very serious neurosurgical condition. His bedside manner was a model for any student of medicine to emulate and undoubtedly influenced my own approach to taking care of my pediatric patients.

The department of neurosurgery office also served as the office for the three of us—Dr Desai, Sunil, and I. The office had a decent-sized bookshelf. Two books in that collection attracted my attention: *Garrison's History of Neurology*, and Russell Brain's phenomenal collection of essays titled *Some Reflections on Genius: and Other Essays*—the books

considered classics now. These were the two books I first bought as soon as I was able to afford to buy them after coming to the United States in 1972!

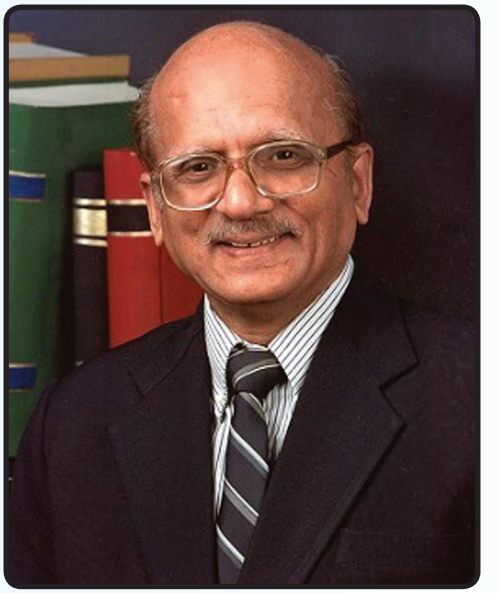
While I expressed my interest in reading them, Sunil and I realized that both of us shared a deep passion for the study of the history of medicine, further enhancing our bond as friends. Our passion for this subject continued after I came to the United States. We maintained correspondence ever since. Since I had been a member of the American Osler Society, I was able to share my copy of the *Oslerian* newsletter with him. Eventually, I arranged for AOS to automatically send him a copy of the *Oslerian* electronically. He was thrilled and pleased to receive the same.

I must conclude my notes by recollecting another connection I had with Sunil. One aspect of research on muscular dystrophy involved performing EMG and nerve conduction studies on research participants, followed by muscle biopsies. As a non-surgeon, I did not have the skills to perform muscle biopsies. It was invariably Sunil who would carry out those biopsies to help my research activities. Another research colleague of ours, Dr Banerjee, performed advanced histochemical studies. It is noteworthy that Dr Desai was one of the very few neurologists capable of conducting such elegant research related to muscle diseases in India. I am proud of having a minor role in those endeavors, and Sunil's help and contributions were invaluable in our collective efforts.

It is also most fitting that Sunil ended up writing this landmark history of the G.S. Medical College and KEM Hospital, the two institutions both he and I love and adore. Others have written about this volume; therefore, I will not dwell much on it except to conclude that this monumental volume will remain as a historic publication educating generations of medical students, historians, and hopefully, the general reader.

With thanks to the editors of this volume for inviting me to reflect on my memories of Sunil, I conclude my writing and say: "Thank you, Sunil, for all the things you did! May your soul rest in peace."

Tonse N. K. Raju, MD
Program Officer
Office of Environmental influences
on Child Health Outcomes
Office of the Director
National Institutes of Health
Bethesda, MD, USA



Dr Damodar R. SarDesai – A Scholar, Visionary, Mentor, and Humanitarian
(8 January 1931–16 January 2016)

Dr Damodar R. SarDesai (1931–2016) was a distinguished historian, a revered professor at University of California Los Angeles (UCLA), a pioneering builder of South and Southeast Asian Studies in America, and a deeply compassionate human being. His life was a testament to the ideals of scholarship, service, resilience, and humanity, leaving an indelible legacy that continues to inspire students, scholars, and communities around the world.

Born on January 8, 1931, in Portuguese-ruled Goa, India, Dr SarDesai hailed from a family with a documented royal lineage dating back to the 1300s. Though the political influence of his family had faded by his father's generation, the values of education, service, and leadership were deeply ingrained in him. Overcoming a life-threatening illness at the age of ten and political obstacles during his youth due to his activism for Goa's liberation, he demonstrated resilience that would characterize his entire life. He excelled academically, graduating from Wilson College and earning a Master's degree from the University of Bombay, where he was awarded the prestigious Sir William Wedderburn Prize for standing first in Social Sciences.

In 1960, he married Bhanu Gandhi, an equally passionate academic, community leader, and humanitarian. Their marriage, forged against the backdrop of cultural and linguistic differences, blossomed into a partnership built on mutual respect, shared ideals, and profound love, lasting over 55 years. Together, they built a life anchored in values of education, service, and deep familial bonds.

In 1961, Dr SarDesai arrived in the United States as a graduate student at UCLA. It marked the beginning of a remarkable lifelong association with the institution and the city of Los Angeles. He earned his Ph.D. in 1965 with a dissertation on India's relations with Vietnam, Laos, and Cambodia, a work that presaged his later focus on Southeast Asian nationalism and decolonization. In 1966, he joined UCLA's faculty, and by 1977, he had risen to the rank of Full Professor, holding leadership positions including Vice-Chair and Chair of the History Department.

At UCLA, he transformed the academic study of South and Southeast Asia. He introduced new fields, expanded curriculum offerings, and coordinated programs that became national models. He was a dynamic and inspiring teacher, known for his clarity, honesty, and ability to connect world events to historical forces. His courses during the Vietnam War era regularly filled lecture halls with 300–350 students, eager to hear his principled interpretations that often challenged dominant narratives.

His scholarly contributions were profound. Dr SarDesai authored 17 books, including *Southeast Asia: Past and Present* and *Vietnam: Past and Present*, works that went through multiple editions and translations into Spanish, Chinese, and Khmer. His analysis was not confined to academia; his insights were often sought by media during pivotal global events such as the liberation of Goa, the assassination of Indira Gandhi, and major transitions in Southeast Asia. His scholarship earned him prestigious fellowships and support from institutions like the Ford Foundation and the National Endowment for the Humanities. In 1979, he was elected a Fellow of the Royal Historical Society (London), a recognition of his contributions to the understanding of imperialism and nationalism.

Beyond his individual scholarship, Dr SarDesai was a builder of institutions and opportunities. He played a central role in establishing the *Navin and Pratima Doshi Chair in Pre-Modern Indian History* at UCLA and served as its first holder. He spearheaded the creation of the *Sardar Patel Award* at UCLA's Center for India and South Asia, recognizing the best doctoral dissertation on modern India in the United States. His leadership extended internationally, serving as the first Director of the University of California's Education Abroad Program in New Delhi and as the President of the prestigious Asiatic Society of Bombay.

His achievements were recognized in both India and the United States. In 1982, the state of Maharashtra honored him as a freedom fighter for his contributions to Goa's liberation. In 2007, he received the Global Goan Award for lifetime achievement. In 2005, the Yadunandan Center for India Studies at California State University, Long Beach conferred upon him a Lifetime Achievement Award and established the *Damodar R. SarDesai Prize* for teaching excellence in Indian Studies in California's schools.

Yet, beyond his many honors, Dr SarDesai was most revered for his humanity. He was known for his deep kindness, humility, selflessness, and mentorship. To his students, he was not just a professor but a second father — a source of guidance, encouragement, and unwavering support. He dedicated countless hours to writing recommendations, advising students, and fostering their growth as scholars and as individuals. His former students, many of whom became distinguished academics themselves, honored him in 2015 with a festschrift, *Nationalism and Imperialism in South and Southeast Asia*, a profound tribute to his enduring influence.

Dr Arnold Kaminsky, one of his students, captures it well: "In life, we encounter many gurus— individuals who collectively influence our education, moral compass, and overall demeanor. Rarely, however, do all these qualities converge in a single person. Dr Damodar SarDesai was that rare individual. As his students, we were not only fortunate to find in him the wisdom of many mentors embodied in one selfless, compassionate soul, but we also feel deeply blessed to have had a second father — someone who shaped us not only as scholars and educators, but as thoughtful, humane individuals."

Known for his razor-sharp wit and disarming humor, Dr SarDesai often lightened scholarly discussions — and family dinners — with perfectly timed remarks that revealed his keen intellect, gentle playfulness, and gift for finding joy even in life's most serious moments.

A devoted husband, proud father to Dr Vandana SarDesai and Dr Archana Bindra, loving father-in-law to Dr Sanjay Bindra — all three proud GOSUMECs — and doting grandfather to Arnav Bindra, Dr SarDesai found his greatest joy in the company of his family, with whom he shared the enduring values of perseverance, integrity, and compassion.

Dr Damodar R. SarDesai passed away peacefully on 16 January 2016, after a courageous battle with cancer. His life was a celebration of intellectual rigor, compassionate mentorship, global citizenship, and unwavering dedication to truth and education. His legacy continues to resonate in the hearts of his family, students, colleagues, and the countless lives he touched — and will inspire future generations to come.

By Drs Archana and Sanjay Bindra

Foreword

My journey of 62 years

On 14th June 1963, I entered the portals of the majestic Heritage building - the renowned Seth Gordhandas Sunderdas Medical College and King Edward Memorial Hospital as an undergraduate medical student. I remained with this temple of education, which provides dedicated service to needy patients, up to July 2023. During this period, these two institutions were firmly established. It was a phase of growth, meeting the increasing demand for health services, at the same time keeping pace with global progress in medicine. It had to meet the expectations of people in a country which was now a free, democracy. We had lost the war against China in 1962. To meet with the increasing demand for trained doctors the MCI increased the number of admissions to 160. This was a major change. During every year of our batch, departments were trying to cope with a sudden increase in the number of students in lecture theaters, ward clinics, operation theaters and so on.

My life has been intertwined inseparably with these two institutions for 62 years. 33 of those years were spent living on campus. I have been an active role player, as well a witness and a silent observer of the Circarama (a continuous, all-encompassing spectacle) which goes on 24x7 at these institutions. In this theater there are multiple stages and multiple artists. Multiple scenes are played simultaneously on each stage. The whole theater depicts all the stages of human life. It arouses all the emotions - grief, empathy, sympathy, pity, helplessness, relief, joy and the whole spectrum a human life can experience. The nobility of conduct in day-to-day transactions between patients and doctors is a rule and both doctors and patients excel, rising to the occasion with selfless service and co-operation. And once in a way, the worst aspects of human conduct are seen, though these are more of an exception rather than the rule. All the best medical practices are carried out ethically. For patients it has remained the last bastion for correct diagnosis and most appropriate treatment without worrying about expenses. Medical research, innovations, and creativity have flourished.

I have lived through the changing scenarios in the medical college and hospital. All these years many changes have taken place in terms of medical education and medical practice, keeping pace with progress in medical practice in the world. The college and hospital have shown great resilience and adapted to the changes suitably. The methods adopted by the institutions have often become trend setters. For example, the institution has the Department of Medical Education and GSMC-KEMH MCI nodal center and GSMC-FAIMER Regional Institute which has an educational leadership program for the south Asia region. There have been changes in entrance rules and university affiliation. Various hospital departments and specialties have grown, there have been changes from honorary teachers to full-time teachers and full-time teachers being allowed to do private practice. All role players have fulfilled the demands put on them conscientiously. Each change has brought with it both positive and negative impacts. But the institutions have kept

pace with the times and have marched ahead.

The institutions are like a giant tree which has many branches in the form of all the departments and services. The number of branches has grown to the mind-boggling figure of 44 academic departments. There is no specialty which has not come up with the growth of medical knowledge. On these branches, many perch. These are the administrators, the Dean being the head, Heads of departments, Professors, Associate professors, Assistant professors, Lecturers, Tutors. There are undergraduate and postgraduate students who are also Residents, Nurses, Workers, Offices, Societies, and Unions. The number of people associated with the institution has grown over the years regularly like the population of our country. This giant tree is becoming heavier with exponential growth. Each group chirps making its presence felt, sometimes silently, at times loudly, sometimes defiantly going on strike but the institutions have never shut down since their inception. The institutions have always solved the issues and gone ahead to adhere to their dedicated goal.

The whole campus has physically remained of the same dimension since its inception but it has transformed itself progressively from a small family to a community to a village and now to a small town. The hospital bed strength has increased more than 10 times from 200 to 2000. The number of wards has risen from around 8 to 44, operation theaters from 2 to 17, ICUs from none to 17, Radiology sections from 1 to 17, and laboratories from 1 to 27. Each indoor patient is attended by at least one relative. Several relatives come to visit the patient. The number of hospital OPD services has grown phenomenally from 3 to 65+. It includes all the specialties, super-specialties, and subspecialties of each. All the latest, advanced treatments and investigating and operative as well as imaging modalities have come up. Each patient is accompanied by 2 to 3 relatives during an OPD visit. This has resulted in a vast number of people walking through the campus day in and day out, almost amounting to the population of a small country. Besides these visitors, there are students, teachers, staff members, nurses, workers, and various service providers working on the campus. In the original premises, new buildings have come up. In the original ground outside the Pathology Museum, a 4-storeyed library building has come up. In the original Dhobighat a new building of 13-storeyed has come up, housing many departments. The pathway adjacent to the Boys' Hostel now houses a building of 21-storeyed for undergraduate and postgraduate students. The CVTC (cardiovascular and thoracic center) building has been built across the main hospital building and the Orthopedic center is opposite Tata hospital. With such turnover, the campus is choked with parked two wheelers and big cars. The campus is now accommodating everything and everyone as a sleeper-class unreserved railway bogie does. The journey, however continues.

Very often over all these years I have been asked for my opinion on the college, hospital, and the present students. I reflectively say the institution is like a flowing river. The flow of water continues, serving its purpose but it is never the same water twice. The institution continues to carry out its work, dedicated to health services for the needy, education for students and research for greater understanding and improvement in medical practice.

There is no looking back. The work is sometimes slow, sometimes rapid, and turbulent but it has never dithered from its motto 'Not for Self but for All.' It has stood upright and high.

Every year, Foundation Day is celebrated with great fanfare on 22nd January. As usual a large number of students are felicitated for standing first in the University Examination. The trend of the college getting the highest number of University awards amongst all colleges affiliated to the University has been sustained till today. It has come together in unison whenever disasters or any form of tragedy struck the city of Mumbai. Whether it was the serial bomb blasts or riots or flooding of the city, the hospital has rallied. The most recent example is the Coronavirus pandemic. The hospital became a major center for taking care and guiding care takers towards the best way of taking care during the epidemic. It became a center that participated in developing the vaccine for the Coronavirus.

It has shared the joys over happy tidings in the city and country, and has mourned when the pall of gloom touched its own and grief spread when some near and dear members associated with the institution lost their lives. I am stating this based on my experience of having been a part of this flow. My ride has been as an undergraduate student, postgraduate student, lecturer, assistant professor, professor, and my final destination was professor and head of the anatomy department. While taking this ride I have also undertaken extra rides as a warden of the Ladies' Hostel for 33 years, as an acting dean for 3 deans, vice president of the Gymkhana, chairperson of the Hostel Committee, Treasurer and later as an advisor of the Diamond Jubilee of GSMC-KEMH, an office bearer of the Gosumec Alumni Association. I have also selected candidates for various scholarships, been Coordinator of the Academic Committee, facilitator for heritage building restoration work of the college, Ladies' Common Room renovation project and Coordinator of Emergency Medical Services. I have contributed towards the publishing of several Annual Reports and a Handbook of GSMC-KEMH. I have organized, along with Dr Kothari, two exhibitions displaying the important, academic achievements of the college in eighties. My last ride was working for the Archives—Janus—and the Dr Manu V L Kothari Chair and Division of Medical Humanities. I have lived through the Golden Jubilee, Diamond Jubilee, and Platinum Jubilee. The responsibility of souvenirs published for the Golden Jubilee and Platinum Jubilee was shared by me so we had to cull all the data about the institutions and hence I am so confidently stating that the institutions have grown with time. They have remained young in action despite the rapid pace of change in modern times.

The students have the same daily routine of lectures, practicals, dissection, autopsy, attending deliveries, ward clinics and emergency. Every year they continue to enjoy all extracurricular activities. Despite changes in dress, the traditional day, saree day, tie day, and rose day continue. I find the coming together of boys and girls is so natural that there is progressive blurring of gender differentiation in any group activity, classroom or library seating arrangement or sitting on the Katta. The students have now a new place Kalpdrum, a hangout created where there once stood a parking shed opposite the

Pathology Museum. Progressively, I have found greater participation, more coordination, and commitment amongst students. They are very bright and tech-savvy. Initially they seem a little lost but soon get a hold of themselves. It is delightful to watch a mini-India in each class as students seek admission from all over India.

Many activities have been added over the years, such as Advait, Apurvai, and Aavishkar. The Gosumag is published with great enthusiasm every year. Participants become self-confident and self-reliant over their undergraduate study period. Postgraduate students also come for rich, clinical, hands-on experience, and return as talented, competent, dependable doctors. Earlier the college was affiliated with Bombay University. It was renamed as Mumbai University in 1995. In 1998, the Maharashtra University of Health Sciences (MUHS) was established and so the affiliation changed from Mumbai University to MUHS. Admission to all the courses is through all India Entrance Examinations. The course has changed. The Aetcom module has been added to train the students in the art of the practice of medicine. The examination pattern during the course has changed. The question papers are more objective and include the MCQ pattern. This has dampened the spirit of questioning and deep reflection over any topic. It has also deprived them of the chance to cultivate their art of expression. The theory examination centers are restricted to the medical colleges and the practical examinations are conducted only in one's own college. No intermixing of students from all the colleges either for the theory or practical examination happens. Leave for exam preparation, and gaps between subjects are kept. This reduced the stress for the students but it also took away the molding influence of challenges of adapting to the new environment under stress.

Our college has retained its position for the first choice of college for admission in Maharashtra even though now students come from all over India. The class strength for undergraduates has increased from 160 to 180 to 250. Similarly, for postgraduation, the number of students for specialization and super-specialization have increased. Now postgraduates do not do house posts and registrarship. They do 3-years residency. They do not have to apply every six months for house posts. They are assured of 3-years residency with the postgraduate admissions. Admissions at all levels are based on all India based entrance examination. The number of postgraduation admission has jumped to 250+.

The teaching pattern has changed with the times. There are now a number of coaching classes to help students 'crack' the exam. Internet, electronic media, and Professor Google play a significant role. Academic activities, conferences, seminars, workshops, orations, guest lectures by international and national visitors remain a regular feature. Undergraduate students actively carry out research with ICMR grants. All departments publish a number of scientific papers. The Journal of Postgraduate Medicine has become a robust medical international journal. Every one remains in communication through WhatsApp. WhatsApp groups and other social media are thriving. The extra-curricular programs and Gymkhana activities have mushroomed.

With all this, what has not changed is the enthusiasm, the desire to study, and put in their

best efforts. The attitude of students remains committed and sincere. They are vibrating with aspiration and energy and keep the teachers active.

The hospital has also not changed in its dedication to serve needy patients. It adheres to its motto, not for self but for all. It accepts any patients who come, at all times. It is, in fact, the last refuge for anybody who is desperately in need of medical service. A patient is not refused medical treatment. Ever.

In this flow of time, I have seen 14 deans of the 19 deans that the institutions have seen. Dr S.V. Joglekar was the dean when I joined. Dr Sangeeta Ravat is the current dean. Every year, millions of patients are treated and enter and leave by the front gate, very few leave by the rear gate. I have seen many staff members of all strata and cadre retiring and new generations taking over. Every year 180 qualified and now 250 undergraduates and 250 post graduates, 80 + Occupational and Physical therapist practitioners and masters and trained nurses are gifted to society. That is how the institutions have remained alive, thrived and are rendering humane service to society by making humane doctors. The students' programmes in MLT continue to end with the loud echoing call, "*Chuk Chukachuk Chakanachuk,* who are we? GSite! Hearing this resounding note one's chest swells with pride for belonging to these institutions.

I end this note with a sense of fulfillment having lived in, lived with, and lived for these institutions which are truly universal.

Professor Lopa Mehta
Former Head
Department of Anatomy
Seth G S Medical College and K E M Hospital

About the Book

Dr Sunil Pandya was very actively engaged in preparing this book. While talking about it, very spontaneously he uttered the words, "Lopa, this will be a unique book." Being a scholar of medical history himself, and having written a book on the history of Grant Medical College and J J hospital and knowing his humility, and that he was a very critical evaluator of his own work, his evaluation of this book is the biggest compliment a work can earn.

The book deals in full detail about the how, why, when, what, where, by whom and for whom the institutions Seth Gordhandas Sunderdas Medical College and KEM Hospital (GSMC-KEMH) were created. This book narrates a saga of sacrifice by several highly qualified doctors to fulfil a burning desire to liberate medical practice and practitioners from British hegemony. They established the first Indian medical college and hospital, a symbol of freedom to prove to the colonial masters—we are on par. *Hum Kisise kum nahi*. The institutions established are GSMC-KEMH. These institutions were run entirely by Indians, for Indians and of Indians. Dr Sunil Pandya has poured his heart, his love for history and his love for the institutions in this book over a period of four years till his last breath. He has put together unique, minute details to paint a complete picture on how the institutions came into being. He details the role of the founder dean Dr Jivraj Mehta and pioneer teachers. He brings out the guiding and motivating forces – nationalism, self-respect, and desire of the founders to give their best to society.

The book is in three parts. Part I deals with the beginnings, foundation, and genesis up to 1945. It gives the details of how the institutions came into being. Juhi Jotwani, the copy editor of the book says, "These are some thoughts which I had as I was putting together this amazingly researched and curated document by Dr Sunil Pandya, into a centenary volume:

When I first saw the reams of pages that were in Part I, I thought that I would have to read a ton of boring history. At the first skim-through, I asked, "Why is there the history of Bombay Municipal Corporation? But, then, as I went from one page to another, formatting and copy-editing it, I witnessed a larger picture being constructed. KEM Hospital and GS Medical College are institutions that emerged as a response to the colonial ideology that dominated the entire formal medical landscape. They did not come up in thin air. Right from the idea that Indian Medicine should be practiced, taught, and pioneered by Indian doctors, to the construction of these two structures, to the appointment of an Indian non-IMS dean, every step was followed by struggle and resistance. These institutions were a crucial piece of the puzzle that was India's Independence Movement. The Bombay Municipal Corporation's history too lies in the insistence of Indian bureaucrats that local issues like health must be governed by local institutions. The Bombay Medical Union fought for the autonomy of Indian medical institutions against the domination of IMS.

Hence, tracing the history of these two institutions is impossible without deep-diving into the history of all these other institutions that advocated for KEM Hospital and GS Medical College. It is important to go into the biographies of a man like Gordhandas Sunderdas whose funds went into the making of the medical college on the condition that it would only admit Indian doctors as professors. It is important to study the personal histories of pioneers who gave up illustrious opportunities in order to work in institutions which were ideologically rich. Thus, this centenary volume truly belongs to passionate discerning readers who are filled with questions and who want to truly immerse themselves in the history of Bombay, the independence movement of India, and medicine as it emerged in the new-born nation state. It is written, researched, and curated by and for people who hold deep respect and love for these two institutions and those who recognize that they belong to an intergenerational community of freedom fighters; they stand on the shoulders of legends who themselves have stood on the shoulders of giants.''

Part I besides giving genesis of the institutions, gives their detailed annual reports. Dr Pandya has culled essential details to show future generations how carefully all activities were planned and diligently carried out and fully reported. It highlights the details noted for the turnover of patients, accidents – why, how, where, the strata of people affected. It is amazing to see in what details the diagnosis – its classification, treatment and outcome were recorded. Equally important is to note how meticulously the accounts of expenditure were maintained down to the last *rupiya, anna, pai.* One of the reports states.

In response to the incessant plaint against alleged extravagance of expenditure at these institutions, the sub-committee of the Medical Relief Committee carried out an exhaustive enquiry over several months. Their conclusion was, 'Both the King Edward VII Memorial Hospital and Seth Gordhandas Sunderdas Medical College were managed on as economical lines as possible.'

The general enquiry on retrenchment in the Municipal Corporation was carried out with Mr N.D. Mehta as the Retrenchment and Reforms Advisor. They found no scope for retrenchment at our institutions. In fact the committee noted that the cost per inpatient per day had been reduced by about 4 annas during the current year. The Dean thanked the Honorary Staff, Assistant Dean Captain R.E. Dadachanji, Matron Mrs McCarthy and other staff.''

Part I includes an article by Dr Jivraj Mehta on the art of Administration. There is one chapter on Dr Suvarna's account written at the age of 90 about his admission in the first batch of 1925 and subsequent years. It takes you to a different world.

Part I also describes the biographies of all the pioneers. They are all researched and poignantly drafted with heart-rending details provided by Dr Pandya himself. These

biographies capture role models for character building, nurturing right values in life – integrity, sincerity, dedication, discipline, selfless service, giving, not taking.

Part I ignites national spirit, generates gratitude for those who sacrificed personal comforts to earn for us freedom, self-reliance, self-pride.

Part II is a changing scenario. It glides over the remaining 80 years of the history of the institutions. This period is the post-Independence era. The nation is enjoying freedom. The institutions are already well established. They have already set a benchmark of efficiency and competency in medical education and medical service. They are far ahead of the government medical institutions set up by the British government.

Part II points out all the major milestones covered by the institutions. The vital statistics list how the infrastructures kept on increasing, how one by one the departments were started. It also enumerates the proud moments of achievements – being the first in the country to do that. After that 8 decade-wise reports are given to cover the years 1946 from where Part I stopped to the current year 2025. It gives in a nutshell decade-wise all the details such as bed strength, number of admissions, outdoor attendance, major and minor surgeries carried out and more, in terms of hospital activities in tabulated form. It also gives details on the number of students – undergraduate and postgraduate. It highlights the development taken place in various departments, milestones crossed, and also the unfolding of any pathbreaking event.

It becomes very clear by going through these reports carefully, how the institutions always progress year after year, decade after decade, and continue to grow from all angles in the fields of medical service, medical education, and medical research.

However, it is not possible for an institute to continue to do good work without its work force. Thousands of individuals contributed to this endeavour. It is not possible to name each of them. The remaining sections of part II give a bird's eye view of the association of some key individuals with GSMC-KEMH. They are described either as biographies or interviews given by them. These are representative of all those who contributed in different positions to the institutions, carried forward the baton received from the pioneers and passed it on successfully to the next generation. The inclusion of a bibliography is based only on one criterion and that is availability of details on public platforms. The interviews were conducted under the aegis of the Dr Manu V.L. Kothari Chair and Division of Medical Humanities after its establishment in the year 2016 until the Coronavirus erupted in 2020. All the staff members who retired during that period and who were willing to give interviews were interviewed. All the past retired staff members who were alive, whom we could contact and were willing, were interviewed. I would like to emphasize that everyone who has been associated with GSMC-KEMH is equally important, irrespective of whether they have a biography in this volume or not.

The volume has attempted to be representative of each and every one, equally. In case there is an inadvertent omission, the readers will realize that it is entirely unintentional.

The book ends with part III, titled Potpourri. Dr Pandya had collected very interesting details from various public domains – archives, newspapers, magazines, journals, books, personal communication—linked to the institutions. Each detail is a pearl. As they cannot be put together under one group, and not wanting to exclude them from the book, it was decided to put them together as a potpourri section. It caters to all tastes—academic activities, speeches, publications, work of institutional bodies and societies, anecdotes, some unique facets exclusive to the institutions, students' activities and national honors received.

The book has included a bibliography for bibliophiles, as well as name, and subject indices for researchers.

In conclusion, this book, woven moment by moment with the entwined threads of history of these glorious institutions tries to depict a total picture of the unparalleled, humanitarian medical service rendered by these twin institutions through their founders, philanthropists, teachers, students, nurses, health workers, and municipal administrators over 100 years. Our salute to all of them. It brings back nostalgic moments for those who were associated with these institutions in some capacity and kindles a sense of pride and gratitude. This book will absorb anyone who is a GOSUMEC connected in any way with these institutions, who is interested in history in general and medical history in particular, who is Indian in soul and spirit.

The book is a printed monument of the glorious history of these twin institutions of a century of selfless service in education and research. 'Not for self but for all'.

Professor Lopa Mehta
Former Head
Department of Anatomy
Seth G S Medical College and K E M Hospital

An Addendum: Completion of the book: My responsibility

Dr Pandya left without completing the book. That was a major set-back. This project was very close to his heart. He passed on the responsibility of completing the work just before he passed away. I consider it as an honor that he entrusted the completion of the work to me. I have been conscious that I should do full justice and live up to the vision he had of the book. I narrate here the unfolding of the events.

In the beginning of the year 2022, a meeting was held in the office of Dr Manu V.L. Kothari Chair and Division of Medical Humanities. Dr Sunil Pandya had at that time written a book on the history of Grant Medical College and J.J. Group of Hospitals. It was realized that GSMC-KEMH will be completing a century in 2025 and hence we should also have a book on the history of our institutions. We requested Dr Sunil Pandya to undertake the project. He agreed, with the assurance that he would be assisted by other members of the Division. He had already published articles on the history of GSMC-KEMH and had interviewed Dr Jivraj Mehta. He had collected some material while working on the history of GMC-JJGH. His love for the institution where he had spent nearly 3 decades actively working in the prime of his life made him accept this project without hesitation. He started his work very meticulously. Periodically, he kept us abreast of his progress. In November 2023 Dr Sanjay Bindra, president of GOSUMEC Foundation USA visited India. He met Dr Sunil Pandya at his residence. Dr Bindra offered to sponsor the publication of the book in memory of Dr Damodar R. Sardesai, a historian and humanitarian through funds donated for humanities in the GOSUMEC Foundation USA. This offer was accepted gladly by Dr Pandya and the committee members. Dr Pandya sent us some of the chapters he had already drafted in February 2024. The committee members met periodically to discuss how to contribute to the work. They were not getting a clear idea. In April 2024 he relinquished his position as chairperson of the Manu Kothari Chair and Division of Medical Humanities.

Dr Pandya continued his task on the book, undaunted. Suddenly, in September 2024 he did not feel well and got himself admitted to hospital. They investigated him extensively. He was diagnosed with pulmonary fibrosis. He did not have any gross symptoms of the disease. But in the second week of October, he was greatly disabled and was in hospital for fever which was not responding to medication. Dr Pravina Shah, neurologist and I went to see him at Jaslok Hospital on 15th October. The visit ended with his desire to hand over the project to me and casting full responsibility for completion of the book on me. On 19th October he called me at his residence. He had called his computer-savvy friend, Mandar Gupte who handed over to me a hard disk with all the material Dr Pandya had collected which included whatever he had already completed. It was an enormous wealth of data. I realized the Herculean task I was shouldering. Anyway, after glancing through

the data I met him in November at his residence, when he was relatively comfortable. We discussed the plan of the book, the title, author, copyright, publisher, sponsor. He gave very clear instructions. At that time, it was decided that the book will be in two parts. Part I- the foundation- will include all the work he had completed up to 1945. Part II would have to take care of the remaining 80 years from the material available, which he had passed on.

Organizing Part II was a very huge task. Dr Pandya was not in a position to continue to work. When I scrutinized the material collected by Dr Pandya, I realized that there were many interesting facets which would not find place in the first two parts of the book. Deliberating over this, it was decided to include it as a separate part- Part III - Potpourri. I could not discuss this with Dr Sunil Pandya in his state of fragile health. I just mentioned it to him. Dr Sunil Pandya and Dr Arghya Sengupta convinced me that I should write a foreword to the book giving the full details about the book and its making. I was still hopeful that Dr Pandya would be around. Unexpectedly, his illness took a very sudden, ugly turn and he left us on 17th December, 2024. Since then, I did my best to do full justice to the completion of this work. I know I should not undermine the importance of this monumental work. I have shouldered full responsibility to make it as complete as possible. Enormous wealth of information was ferreted out by Dr Pandya. I have tried my best to find a suitable place for it. I extend my apologies for not accommodating every detail researched by him. I also collected some more details which were not in his collection. I contacted the individuals who had initiated or contributed to those activities. I took this initiative to complete the history of the institutions as much as possible. All the bibliography and interviews in Part II have been edited, retaining only the salient points. The same holds good for various descriptions in Part III. What is left untouched is the whole of Part I which was crafted by Dr Pandya and those descriptions which were written or originally selected by him, included in Part II and Part III. All information is gathered from the public domain – annual reports, souvenirs, medical journals, newspapers, magazines or personal communication. Some annual reports are not available. Similarly, as I mentioned earlier, data is missing on many important individuals. Due to lack of availability of data, they do not feature in this book. It is worth placing on record that all those who have been associated with these institutions deserve kudos for having contributed to the glory of these institutions for 100 years.

I apologize for any error of omission and commission while completing this precious, unique history of Seth G S Medical College and KEM Hospital – the pride of India housed in Mumbai.

Professor Lopa Mehta
Former Head
Department of Anatomy
Seth G S Medical College and K E M Hospital

In Gratitude

"Gratitude is heaven itself, there could be no heaven without gratitude."
—William Blake

I was handed over the task of completing the book on the Centenary History of Seth G S Medical College and KEM Hospital by Dr Sunil Pandya. He shortly departed after that, leaving me in limbo, wondering with whom I could deliberate and ensure that what is being done is in the right direction. At that time, Dr Arghya Sengupta, a Rhodes scholar, writer, lawyer, and Founder and Research Director at Vidhi Center for Legal Policy was visiting us. He took whole-hearted interest and discussed the full plan of the book. Since then, for every dilemma I face, he has stood by me giving me clarity and has relieved a lot of my stress. Fortuitously, he was accompanied by his lawyer friend, Mr. Raag Yadava, Advocate. He joined in the deliberation. He suggested professional help for editing and curating manuscript. He connected me to Juhi Jotwani and Shrushti Bhosale both of whom were more than happy to undertake this work. It has been a pleasure working with them. I sincerely thank both of them for their painstaking work to put this volume together, as editors and curators of the book. Their efforts were indispensable.

I requested our alumnus Dr Manoj Singrakhia, spine surgeon who is also a painter—trained at the Royal College of Art, England to make a painting for the cover. He was excited by the idea of working for his alma mater. The outcome is seen in his very touching painting which adorns the cover. I am thankful to Dr Pankaj Goyal for his painting on cochlea recognized in India Book of Records.

Girish Parmar, an architect by profession but a photographer by hobby has taken pains to provide very beautiful photographs. He has also given me a lot of encouragement. Vikas Dilawari, a heritage architect has taken pains to provide original drawings for the building. Mandar Gupte transferred all the material of the book collected by Dr Sunil Pandya on a hard disk for me. Suhas Mhetre, an engineer has recorded all the interviews conducted by Dr Manu V L Kothari Chair and Division of Medical Humanities. Suhas Kothari arranged to make transcripts of the video recordings of interviews. Pawan polished all photos from Interviews video recordings. Bharat Patel and Darshana Patel of creative graphics have transcribed some articles.

Gratitude is due to founder Dean, Dr Jivraj Mehta, seventeen past Deans and current Dean Dr Sangeeta Ravat for steering the institutions forward by their vision, foresight, sense of dedication and commitment over 100 years, and contributing to the historical growth and glory of the institutions.

Dr Ravi Ramakantan provided photographs and helped in transcript editing of the interviews. Dr Nilima Kshirsagar provided some publications of the institution,

photographs, and encouragement. Thanks are due to Dr Nithya Gogtay for documenting Annual Reports of the institutions in 21st Century.

There is a tradition of making a Rangoli at the entrance of JMLT for all the important functions held at Seth G S Medical College and KEM Hospital. All the Rangoli photographs interspersed and given at the end of this book are courtesy of Sachin Mahadik, the creator of these Rangolis, and Dr Kamaxi Bhate. All the photographs, paintings, and sketches given in this book at the end of various chapters of this book have been selected from GOSUMAG issues of the last 84 years.

The past staff members and alumni very gladly wrote their articles or provided required information—Dr R S Satoskar, Dr Malini Nadkarni, Dr Pragna Pai, Dr Urmila Thatte, Dr Kamaxi Bhate, Dr Shubhangi Parkar, Dr Nima Rege, Dr Sucheta Dandekar, Dr Avinash Supe, Dr Yeolekar, Dr Irani, Dr Mahrukh Joshi, Dr Bhuvenshwari Kandalkar, Dr Philip Abraham, Dr Sanjay Pai, Dr Sharad Iyengar, Dr Ashutosh Pai, Dr Jayesh Vira, Dr M. Natarajan, Dr C. T. Deshmukh, Dr Amita Joshi, Dr Prafulla Kerkar, Dr Satyavan Sharma, Dr Rumi Jehangir, Dr Prabodh Karnik, Dr Vinita Salvi, Dr Shilpa Bhojraj, Dr Hemant Morparia, Dr Anil Karapurkar, Dr Atul Goel, Dr Nikit Kothale, Dr Mehreen Mir, Dr Alhad Mulkalwar, Dr Nitish Sancheti, Dr Falguni Shah, Dr Yuvaraj Bhosale, Dr Sunil Kuyare, Bijal Asher and Dr Snehal Desai.

The present staff members—Dr Padmaja Samant, Dr Swarupa Bhagwat, Dr Hetal Marfatia, Dr Sandesh Parelkar, Dr Gita Nataraj, Dr Shenvi, Dr Vyanktesh, Dr Jayashree Sharma, Dr Vidya Kharkar, Dr Milind Tullu, Dr Kanchan Kothari, Dr Muzumdar, Dr Khushale, Dr Praveen Iyer, Dr Rashmi Patil, Dr Sandhya Kamat, Dr Padmaja Marathe, Dr Ramakrishna Kamath, Dr Ajay Rana, and Dr Manoj Telkatwar extended their helping hands.

A number of students have given valuable technical help in putting information together. Rahul Kothari, an intern has stood by me throughout. He has helped in putting the collected material in order. He has helped me in proof correction. Prajwal Varak helped out greatly in putting the material in order. So many others also helped. They are Krish Jain, Vishwatej Gaikwad, Sharvari Khot, and Sakshi Kasture. Madhuri Khochikar, Mangleshwar Sharma, Mukesh Shinde, Sameer Marathe, Shrikant Ravan, Kalyani Naik, Jyoti Ketkar, and Vilas Kadam provided some missing publication details.

Rama Malik has painstakingly drafted poignant writings on Dr Manu Kothari and Dr Sunil Pandya. She has transcribed Marathi interviews into English. She has also helped in correcting proofs. Geeta Imran has drafted some bibliography.

I am grateful to Dr Sunil Pandya for giving me this opportunity. I also thank Dr Shubhaben Pandya, Nirad, and Anandi giving me support in this venture.

Drs. Archana (daughter) and Sanjay Bindra (son-in-law) have provided financial support through the Dr D.R. SarDesai Endowment at GOSUMEC Foundation USA, along with continuous encouragement throughout this effort.

I am also grateful to Mrs. Bhanu SarDesai, (wife of Dr D.R. SarDesai), and Dr Vandana SarDesai (daughter), for their support and goodwill.

Hemant Bhalani has completely supported the entire publication work without any financial gain. He has done this for the love of the institutions. His team members—Himanshu, Vishal, Pooja, and Vandana make a team. Vishal has painstakingly done entire typesetting under able supervision of Hemant S. Bhalani. Thanks are also due to the printer for carrying out this work so elegantly.

I thank Dr Pravina Shah, Dr Bindu Desai, Dr Sulabha Punekar, Dr Usha Mehta, Dr Nila Vora, Dr Meena Kothari, Jayashree Joshi, Dr Minal Kothari, Dr Vatsal Kothari, Harsha and Mukesh Kothari, Shefali Desai, Dr Chirag Desai, and Mehta family—Divya, Manali, Sachin, Manan, Kshitij, Harsha, Anil, Dhaval, Vidya, and Ami for support.

Lastly, and most importantly I am grateful to Asmita and Mayur—my dear sister-in-law and brother and their daughters—Dhvani and Shruti for taking tender care of me at home on all fronts, day in day out, creating amicable, congenial, loving support for me to shoulder such responsibility, and carry on with my work.

I am grateful to one and all. I apologize for inadvertent omissions.

Professor Lopa Mehta
Former Head
Department of Anatomy
Seth G S Medical College and K E M Hospital

Contents

PART I: FOUNDATION AND ITS BEGINNINGS 1925–1945

Sr. No.	Chapter	Page No.
	Dr Manu Vijaya Liladhar Kothari (19 November 1935–16 October 2014)	V
	Dr Sunil Krishnalal Pandya, a Gentle Giant (11 February 1940–17 December 2024)	VIII
	A Tribute: Remembering Dr Sunil Pandya	XII
	Dr Damodar R. SarDesai— A Scholar, Visionary, Mentor, and Humanitarian (8 January 1931–16 January 2016)	XIV
	Foreword by Dr Lopa Mehta My journey of 62 years	XV
	About the Book	XX
	An Addendum: Completion of the book: My responsibility	XXIV
	In Gratitude	XXVI
1.	Genesis	3
	Three Significant Events Bombay Act III of 1907 Death of King Edward VII Seth Gordhandas Sunderdas' Estate	5 5 5 6
	Bombay Presidency King Edward Memorial Association	6
	Funds for the Medical College	8
	A Brief History of Parel and its Government House	9
	Architectural Plans for the Hospital	11
	Bombay Medical Union	12
	Construction of College and Hospital Details of Construction Cost and Sources of Funds Appointment of Staff Affiliation of the new medical college to the University of Bombay Need for Scholarships and Prizes	16 16 20 21 23 24
	Opening of the Hospital Opening Ceremony of the Hospital	26 28
	Milestones (1907–1942)	35
2.	Municipal Corporation Presidents	37
	Consolidation	38
	Eminent Corporators Presidents of Bombay Municipal Corporation 1873–1932 Mayors of Bombay Municipal Corporation 1931–1948	40 41 43
	Suggested Reading	43

3.	Formative Years (1925–1942) from the Lens of Annual Reports Late Dr Sunil Pandya's Remarks	44
4.	The First Year: Annual Report (1925–1926)	47
5.	Annual Report (1926–1927)	58
6.	Annual Report (1927–1928)	77
7.	Annual Report (1928–1929)	85
8.	Annual Report (1929–1930)	95
9.	Annual Report (1930–1931)	101
10.	First Person Account by Dr Nireshwalaya Rangappa Suvarna (1901–2001), member of the first batch of students who joined the Seth Gordhandas Sunderdas Medical College	111
11.	Annual Report (1931–1932)	118
12	Annual Report (1932–1933)	126
13.	Annual Report (1934–1935)	136
14.	Annual Report (1938–1939)	147
15.	Annual Report (1939–1940)	160
16.	Annual Report (1940–1941)	174
17.	Annual Report (1941–1942)	195
18.	The Art of Administration of a Medical College and Teaching Hospital by Dr Jivraj Mehta	216
19.	Annual Report (1944–1945)	227
	Addenda	238
	Addendum I	238
	Addendum II	249
	Addendum III	249
20.	Biography of Pioneers	252
	Dr Ardeshir Pestonji Bacha	252
	Dr Phiroz Cooverji Bharucha	254
	Bombay Medical Union	256
	Dr Rustam Nusserwanji Cooper	261
	Dr Arthur E. de Sa	266
	Dr Gopal Vinayak Deshmukh	268
	King Edward VII	275
	Dr Abraham Solomon Erulkar	280
	Dr Manchersha Dhanjibhai Dorabji Gilder	284
	Dr Ramchandra Gundopant Ginde	287
	Gordhandas Sunderdas	293
	Dr Habib Ismail Jan Mahomed	296
	Dr Rustom Jamshedji Katrak	297
	Dr V.R. Khanolkar: The First Professor of Pathology at GS Medical College	299
	Dr Jivraj Narayan Mehta	305

	Hansa Jivraj Mehta	314
	Matron Durga Mehta	315
	Dr Atmaram Pandurang	318
	Dr Vithaldas Ladhabhai Parmar	320
	Dr Nathubhai D. Patel	321
	Dr Purushottam Tulsidas Patel	325
	Dr Nilkanth Anant Purandare	326
	Dr Vatsala Samant	328
	Dr Prafulla Kumar Sen (i)	333
	Dr Prafulla Kumar Sen (ii)	340
	Mr George Wittet	348
	Dr Bhaskar Balwantrao Yodh	352

PART II: CHRONICLE 1946–2025

Sr. No.	Chapter	Page No.
21.	Vital Statistics: Year-on-Year Growth Infrastructure Expansion Departments	359
22.	Some Milestones	361
23.	Some Proud Moments	365
24.	Pioneers of the Departments	369
25.	Decadal Report (1945–1955)	371
26.	Decadal Report (1955–1965)	381
27.	Decadal Report (1966–1975)	392
28.	Decadal Report (1976–1985)	401
29.	Decadal Report (1986–1995)	414
30.	Decadal Report (1996–2005)	425
31.	Decadal Report (2006–2015)	437
32.	Decadal Report (2016–2024)	448
33.	Those Who Made It Possible	457
	Past Deans	457
	Current Dean	471
	Past Assistant Dean	473
	Past Professors and Heads of Departments	474
	Alumni	534
	Nursing	539
	Medical Social Work	539
	Office	540
	Gymkhana	545

PART III: POTPOURRI

Sr. No.	Chapter	Page No.
34.	Legacy of Knowledge: Research Papers and Speeches	549
35.	Journal Publications	567
36.	Medical Departments: From Foundation to Future	570
37.	Institutional Bodies	616
38.	Unique Legacy of GSMC and KEMH	635
39.	A Few Anecdotes	648
40.	Ancillary Services	650
41.	Gymkhana and Its Activities	659
42.	Hostels	673
43.	Affiliated Institutions	677
44.	Panorama	679
	Parel History A Walk Through Time: From Parel Station to KEM Hospital King Edward Memorial (KEM) Hospitals Worldwide	679 680 681
45.	National Honors	684
Gallery		686
Bibliography		691
Index		693

PART I
FOUNDATION AND ITS BEGINNINGS 1925–1945

Image courtesy: Girish Parmar

1

Genesis

Genesis

'… To those pioneers of medical education we owe a deep debt of gratitude for their unselfish efforts in the cause of medical education… The *alumni* of the college, owing to the system of the covenants on which the European teachers were engaged when coming out to India, could not become teachers in their own *alma mater*, the Grant Medical College. The teachers themselves have been zealous in preventing any encroachment on their privileges and although the college turned out scores of alumni every year not one of them could aspire to become a professor in his *alma mater* during these past 60 years except in one minor subject viz. botany.'

The present system of medical education in India was conceived in 1845, when not a single Indian possessed western medical education and qualification. Naturally, officers of the Indian Medical Service (IMS) in the employment of government were put in charge of teaching colleges like the Grant Medical College.

Modern medical education was introduced into Bombay Presidency by the Government of Bombay through the Indian Medical Service (IMS)—a division of the British Army. IMS controlled modern medical education and care in the three major presidencies—Bengal, Madras, and Bombay. In turn, the IMS was controlled by the Directors of the East India Company. After 1857, the Government of Britain took over the administration of our country through the Secretary of State for India, preserving the role of the IMS.

The successful establishment of medical schools in Calcutta and Madras was followed by the setting up of Grant Medical College and Sir Jamsetjee Jejeebhoy Hospital in Bombay in 1845. The IMS retained total control of the three medical colleges and their hospitals after 1857 and IMS officers occupied all administrative and professorial posts. Native physicians who had graduated from these colleges were denied appointments to these positions, especially in the clinical subjects (Pandya 2019). This caused resentment amongst them as many had become senior and more experienced than the British officers appointed to these posts.

One of the earliest pleas for a new medical college in Bombay was made by Dr Atmaram Pandurang Tarkhad. He was a member of the first batch of students graduating from the Grant Medical College in 1851. "The number of students now attending the Grant Medical College is fast increasing, and this year it has

risen to about 300. The present buildings accommodate but very inconveniently this large number… the classes have grown too unwieldy to be successfully managed by individual professors…" He mooted a proposal to open a new medical college in connection with the Gokuldas Tejpal Hospital. "The superior staff of the institution should be drawn from the qualified medical practitioners of the city who have passed out of the Grant Medical College… They should be appointed with or without the sanction of Government…" These two sentences reveal the frustration of senior city physicians (*Native Opinion* 1885). No official action followed these suggestions.

With much hesitation, a few non-clinical professorial posts were opened to non-IMS Indians and Dr Y.G. Nadgir was the first to be appointed to a chair (Anatomy). The fact that an IMS officer would be professor of materia medica one year and teach obstetrics and gynecology the next underlined the unwillingness of the authorities to give opportunities to capable Indians.

Members of the Corporation for the City of Bombay

Among nationalist Indians who strived to correct this imbalance was Dr K.N. Bahadurji, one of the first Indians to obtain the coveted Doctor of Medicine (M.D.) degree from the University of London. When he was denied the post of Professor of Medicine at the Grant Medical College (an IMS officer holding only the Licentiate of the Royal College of Physicians diploma being appointed instead), he advocated the establishment of a new medical college staffed by Indians that would break the monopoly of the IMS. He placed the idea before Sir Pherozeshah Mehta—the lion of Bombay—and other members of the Bombay Municipal Corporation. Dr Bahadurji died on 15 August 1898 before his plans could materialize.

The Municipal Corporation then had several stalwarts imbued with public spirit and a nationalistic fervor. Several of them were Parsis and some were physicians.

Three Significant Events

Three events set in motion the long-awaited change: the passing of an Act in 1907 by the Government of Bombay, the death of King Edward VII in Buckingham Palace in 1910, and the appointment of a trust that would settle the disposal of assets of Seth Gordhandas Sunderdas.

Bombay Act III of 1907

Hitherto the Government of Bombay was responsible for medical relief. The Act of 1907 transferred the responsibility of the control of vaccination, medical relief, and primary education to the Municipal Corporation of Bombay. In return, the Government undertook the city's liability for police charges. Sir Pherozeshah Mehta worked hard to effect this change both in the Legislative Council and in the Municipal Corporation (Edwardes 1910). The Municipal Corporation was now free to deal with matters pertaining to medical institutions in the city. This enabled individuals such as Sir Pherozeshah Mehta and eminent physicians in the city who were members of the Corporation to participate in decision-making.

In July 1909, it was decided in the Municipal Corporation that the time had come for the creation of a fully equipped hospital to meet the growing demands of the north of the island.

Death of King Edward VII

After a long waiting period as the Prince of Wales, King Edward VII was crowned in 1901 upon the death of his mother, Queen Victoria. By all accounts, he was a colorful individual even after assuming the throne.

The first inkling of his fatal illness was the announcement in the *Court Circular* that, unlike his usual custom, he had been unable to receive his wife, Queen Alexandra, at the railway station on her arrival in London because of a 'severe cold'. This diagnosis was later upgraded to bronchitis. Dr Bertrand Dawson and Dr St Clair Thompson were called in for consultation by the King's physicians. The subsequent bulletin referred to 'grave anxiety' among the doctors. Even

Portrait King Edward VII by Sir Luke Fildes.

the slightest movement resulted in coughing and choking. The King then lost consciousness and passed away shortly before midnight on 6 May 1910 (Sanderson and Melville 1910).

Seth Gordhandas Sunderdas' Estate

On 11 October 1902, *The Times of India* announced the death of Mr. Gordhandas Sunderdas Mulji which took place on the previous day. He was said to have been suffering from fever over the preceding fortnight. He was 28 years old and senior partner of the well-known and wealthy firm of Messrs. Mulji Jetha and Company at the time. He had inherited immense wealth and was one of the heads of the Bhatia community.

His nephew, Karsandas Dharamsi, laid claim to the entire Mulji Jetha estate although Gordhandas' will had specified that his widow, Gangabai, her brother, and three others were to be the executors for his half of the estate. The ensuing court case went on for 10 years. The court directed Mr. Chimanlal Setalvad to be the arbitrator. He set up a trust with three trustees: himself, Sir Pherozeshah Mehta, and Sir Narayan G. Chandavarkar.

Bombay Presidency King Edward Memorial Association

A note on the King as patron of hospitals was published soon after his death in *The Hospital* (Anonymous 1910). The Bombay Presidency King Edward Memorial Association was formed to collect donations.

His death prompted moves to establish hospitals as memorials to him in many parts of the British Empire including Bombay, Poona, Sholapur, Karnal (Haryana), Singapore, Perth, Adelaide, Bermuda, Kuala Lumpur, and The Falkland Islands.

The first meeting of the general committee of the Bombay Presidency King Edward Memorial Association was held in the Municipal Corporation Hall on 22 June 1910. The Governor of Bombay was the President of the fund. The Executive Committee included Sir Sassoon J. David, Sir Dinshaw Petit, Sir Dorabji Tata, Mr. Dinshaw Wacha, Sir Vithaldas Thackersey, Mr. Setalvad, Dr Sir Bhalchandra Krishna, and Mr. M.A. Jinnah.

Mr. David proposed and Dr Temulji Nariman seconded a resolution that, in the opinion of the general committee, a hospital in the northern part of the island and a convalescent home at Versova would be the most appropriate memorial to his late majesty King Edward VII. After some discussion, this resolution was adopted by the house (*The Times of India* 24 June 1910 Page 7).

At Sir Pherozeshah Mehta's suggestion, the matter was handed over to the Medical Relief Committee of the Corporation, chaired by Dr Atmaram Pandurang.

The Secretaries to the Bombay Presidency King Edward Memorial Association decided on 22 September 1911 that the hospital was to be in Parel in the northern part of the island so as to benefit the many people who came from all parts of the Presidency to form the labor force. The Committee had obtained 50,000 square yards on the estate of the Parel Government House for this purpose. A sum of Rs. 5,52,878 had been collected. Certain other sums, such as interest, were expected and these would raise the probable total to Rs. 5,75,000 (*The Times of India* 30 September 1911).

Lahore has King Edward Medical University. A private hospital in London was named King Edward VII's Hospital after the King became its Patron. Sheffield in England has King Edward VII Orthopedic Hospital. King Edward VII Memorial Hospital in Hatton, Warwickshire was opened in 1953. Birmingham Children Hospital was earlier named King Edward VII Memorial Children's Hospital. Wellington, New Zealand also has a King Edward VII Memorial Hospital for Children. In Gaya, we have King Edward VII Memorial Leper Asylum.

In its letter dated 18 June 1913, the Bombay Presidency King Edward Memorial Association reported its offer to give the Municipal Corporation a sum of Rs. 7,00,000. Of this sum, Rs. 5,52,978 which, with interest, amounted to Rs. 5,75,000 had been collected from many donors. A donation of Rs. 1,00,000 was received from Sir Currimbhoy Ebrahim Entertainment Fund. Mr. Mangaldas Nathubhoy offered a donation to be used for a maternity hospital named after his wife, Bai Lilavati. The Lalkaka Memorial Fund donated Rs. 17,000 for a ward or a dispensary named after him. This sum and the land at their disposal were offered towards the cost of a hospital to be built, equipped, and maintained by the Corporation. On 1 January 1914, Dr Rajabally V. Patel offered Rs. 50,000 from the estate of Dr Habib Ismail Jan Mahomed. It was to be used for the construction of an operation theater named after the donor.

By 1914, the funds had increased to Rs. 11,00,000. The Municipal Corporation undertook to construct a hospital with 250 beds, equip it, and maintain it in the future (*The Times of India* 22 September 1914).

Finally, in October 1914, the proposals were duly accepted. (*The Times of India* 2 October 1914)

Funds for the Medical College

Since Gordhandas had stipulated his residual estate be used for such charitable institution or institutions as hospitals, dispensaries, or asylums, Mr. Setalvad and the other Trustees along with the Attorney-General, Mr. D.N. Bahadurji, and Mr. R.D. Sethna, the official Assignee and receiver of the whole of Gordhandas' estate decided in 1915 that after apportioning funds for the widow and her adopted son, a sum of Rs. 12,00,000 be given to the Municipal Corporation for the building and equipment of a new medical college in conjunction with the King Edward Medical Hospital in Parel. This was later raised to Rs. 14,50,000.

'I discussed the matter with Pherozeshah Mehta. He suggested that an offer of endowment be made to the Bombay Municipal Corporation for the foundation of a medical college to be attached to the proposed King Edward Memorial Hospital. One of the conditions was to be that the staff of the college should be recruited entirely from the independent Indian medical practitioners of the city. It would follow that the staff at the hospital, who were professors at the college, would also be from the independent Indian medical practitioners.' (Setalvad 1946).

On 18 October 1915, the Bombay Municipal Corporation considered a letter written by Messrs. Payne and Co. under instructions from the Advocate General, Mr. D. N. Bahadurji, offering the gift of Rs. 12,00,000 for the construction of a second medical college in Bombay on behalf of the trustees of Mr. Gordhandas Sunderdas. Government loan notes of the face value of Rs. 12,00,000 were offered under the conditions: a) The college should be established in connection with and be attached to the King Edward Memorial Hospital, b) The college should be affiliated to the Bombay University and proper provision made for giving instruction up to the highest medical degree of the University, c) The Corporation should provide the necessary buildings and fully equip the college with all necessities for giving proper instruction, d) The Corporation should ever afterwards maintain the college and defray the necessary recovering expenses for the purpose, e) The professors and teachers to be employed at the college should all be properly qualified independent Indian gentlemen not in Government service, and f) The college should be named the Seth Gordhandas Sunderdas Medical College.

Sir Bhalchandra Krishna moved that the letter be referred for an early report to the Medical Relief Committee and that Messrs. Payne and Co. be informed that the Corporation cordially welcome the offer and will reply to the letter on receipt of the Committee's report. He pointed out that when the matter first came before the corporation Sir Pherozeshah Mehta had expressed a desire to have a Medical College in connection with the proposed King Edward Memorial Hospital even at some cost to the Corporation. In seconding the proposition, Sir Ibrahim Rahimtulla cordially welcomed the munificent offer made to them. Mr. Cowasji Jehangir

said that this was the largest offer made to them over a number of years and in order to encourage such offers, the Corporation ought to accept it. He thought this offer was a great compliment to the Corporation. Mr. D. E. Wacha welcomed the magnificent donation and the way in which this charity was being directed to a very benevolent object. He considered that if charity was directed in a channel of this character, the city would not only be magnificently benefitted but it would also be served ethically and sanitarily. (*The Times of India* 19 October 1915).

Welcoming the donation, the Medical Relief Committee of the Municipal Corporation pointed out that the want of new medical college had been felt for a very long time. The college would complement and supplement the work and usefulness of the hospital. The sum of Rs.12,00,000 offered would cover the revised estimates for the college buildings, the cost of the land and the equipment (Rs. 10,00,556) including the estimated cost of a hostel (Rs. 1,15,133). It was felt that the net recurring charges to be borne by the municipality would be about Rs. 42,000 annually. The great benefit the city would derive from the college justified this expense. The Committee stated that the Bombay Medical Union had evinced very keen interest in this proposal and had provided the committee with a scheme showing how the college could be run in connection with the King Edward Memorial Hospital. The Medical Relief Committee would work in conjunction with the Bombay Medical Union. (*The Times of India* 16 March 1916).

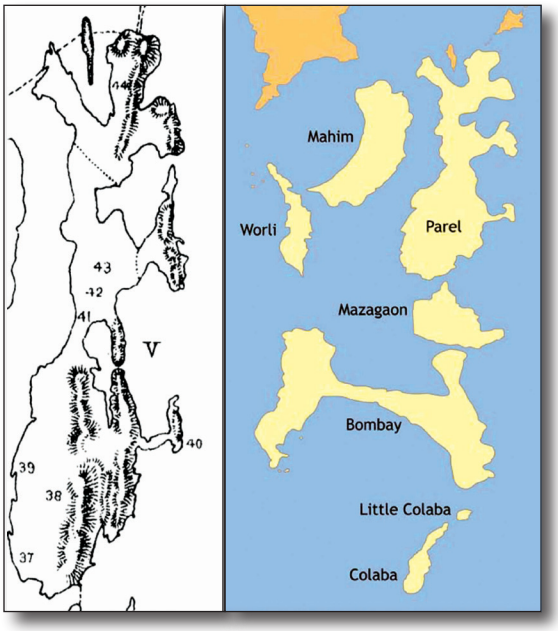
A Brief History of Parel and its Government House

Originally, Parel was a separate island. It was one of the seven islands of Bombay.

There are two stories behind this name. One story is that it is derived from *Bignonia suaveolens* (Tree-trumpet flower or "Padel"). The second story, according to S. M. Edwardes, an English colonial administrator of the Indian Civil Service, is that the Panchkalshis (a Hindu community of people who are native to the Konkan region of India) formed a colony in what is now known as Parel. The temple which they built was called the shrine of Parali Vaijnath Mahadev, *Parali* denoting that the lingam in it was as sacred as in the temple of Vaijnath at Parali in the Deccan. Parel was inhabited by Thakurs, Prabhus, and Bhois.

During the Portuguese occupation of Bombay, a Jesuit church and convent were built in Parel. These were confiscated by the British as the priests had sided with the Sidis (an ethnic minority group of African descent who live in India and Pakistan) during their battle with the British in 1689.

Being just six miles from the Fort, these buildings became the official summer residence of the Governor of Bombay in 1719. A traveler, Carsten Niebuhr, had suggested that the villa be called *Sans Pareil* (Without Parallel) since nothing could compare with it in all of India.



Map published in 1843.

In the 1770s, when William Hornby was the Governor, he shifted his official residence from Fort to Parel. The original building was enlarged and enhanced by Mountstuart Elphinstone (1819–27). Necessary repairs were undertaken during the regimes of Viscount Falkland (1848–1853), Sir Seymour Fitzgerald (1867–1872), and Sir Philip Wodehouse (1872–1877). The Prince of Wales (later King Edward VII) stayed in this building for about a week in 1875.

Sir Richard Temple (1877–1880) refused to stay here, because the house was too much out of the way. He transferred his headquarters to Malabar Point. His successor, Sir James Fergusson, occupied the Government House in Parel in November 1880. In 1883, his wife died from cholera in the same house. In 1885, Lord Reay moved the Governor's Bungalow to Malabar Point. The Governors of Bombay had finally moved to their permanent home.

The erstwhile Government House in Parel was used briefly as the office of the Recorders of the Bombay Presidency.

Even in the 1890s, Parel was described as a complex of leafy gardens and rice lands. Another commentator wrote that that the Parel mangoes were 'the best in India'.

In 1897 the advent of plague necessitated its use as a hospital and within its walls hundreds of plague patients were treated in 1897–98. The old Government House was then leased to the newly founded Bombay Bacteriology Laboratory —later to be known as the Haffkine Institute.

By the 1870s, many country villas and residences gave way to a huge industrial quarter having the heaviest concentration of cotton textile mills in the country.

37 Tamarind Dell.
38 Parali Village, Shrine and Settlement of Thakurs, Bhois etc
39 Prickly-Pear Tract
40 Shivadi
41 Naigaon, inhabited by Kolis, Agris, Bhandaris etc.
42 Brahman Settlement. Hall of Justice. Bhima Rajas Vadi. Temples & Dwellings of Parbhus, Panchkalshis & others.
43 Banian Trees (Vadála)

Close-up view of a segment of the map dated 1906 showing the Governor's residence (now Haffkine Institute) and surrounding grounds.

One can deduce the location on the grounds where Seth Gordhandas Sunderdas Medical College, King Edward VII Memorial Hospital, Wadia Hospitals, and Tata Memorial Center came up later (courtesy Mr. Vikas Dilawari).

The secretaries of the Bombay Presidency King Edward Memorial Association offered 50,000 square yards of land on the estate of the erstwhile Government House at Parel. The market value of the land to be used for the new hospital was at least Rs. 4,00,000. The old Government House property provided an abundance of light, air, and space necessary for the treatment, nursing, and convalescence of seriously ill patients.

Architectural Plans for the Hospital

At the request of the Association, Mr. G.W. Wittet, consulting architect to the government, was asked to prepare plans and an estimate for the hospital. He chose the Indo-Saracenic style.

Familiar with Florence Nightingale's *Notes on Hospitals*, Mr. Wittet's sketches showed rectangular pavilion wards with a considerable number of windows designed to provide entry of sunlight and natural ventilation. These were aligned in the north-south direction so that free access was provided for sunshine and breeze from the east and the west. The hospital had straight corridors 710 feet long running north to south with branches at right angles to the wards on the west.

In view of the heavy monsoons, Mr. Wittet modified the construction of the wards, placing large double windows on the outer walls which would open right down to the floor to provide adequate ventilation when required. He ensured shelter from rain so that what would have been verandahs were now enclosed within the walls. The extra space made available within the walls could also be used to house extra patients when required.

Mr. Wittet had opined that the land was adequate to build a hospital with 220 beds. The estimated cost of building two ward pavilions of 180 beds, an operation theater, administrative block, and other accessories was Rs. 6,00,000 (*The Times of India* 30 September 1911).

In 1913, the plans for the construction of the hospital for 250 patients, with all the necessary accessories and offices, were revised by Mr. Wittet after speaking with eminent physicians in Bombay. In consultation with the Executive Engineer and Executive Health Officer of the Municipal Corporation, the total expenditure was estimated at Rs. 21,05,000.

The Bombay Presidency King Edward Memorial Association nominated four of its members—Sir Basil Scott (Chief Justice, High Court of Bombay), Mr. W.L. Graham (Barrister, non-official Member, Legislative Council, Bombay), Sir Jamsetjee Jejeebhoy, and Dr (later Sir) Herbert Stanley Reed (Editor, *The Times of India*)—to confer with the Municipal Corporation on this matter.

The Municipal Commissioner advocated the general supervision of the building by Mr. Wittet as he had great experience in the design and execution of large buildings in India. He strongly suggested that the matter be taken into early consideration by the corporation (*The Times of India* 4 July 1913).

On 1 October 1914, the Municipal Corporation's Medical Relief Committee sought the advice of Mr. William Alfred Pite in London on plans for the hospital and college. Mr. Pite had designed the new complex of King's College Hospital in London. He submitted his report in 1916 without visiting Bombay. He recommended the need for additional acquisition of two plots of land to the north and south of the present site, the former for the location of the proposed medical college and the latter for the extension of the hospital itself.

Mr. Wittet modified his plans accordingly and the motion moved by Dr Sir Bhalchandra Krishna for this purpose was approved. The additional land was acquired from the Improvement Trust at the cost of Rs. 1,87,695.

The Municipal Corporation then approached the Bombay Medical Union for a detailed scheme for the organisation of the college and hospital.

It should be noted that plans were also made in 1912 for establishing a School of Tropical Medicine in conjunction with the Bombay Bacteriological Laboratory (later Haffkine Institute). They did not fructify and the School was established in Calcutta in 1914 by Leonard Rogers of the Indian Medical Service.

Bombay Medical Union

On 22 December 1883, Dr Jehangir Cursetji, along with Dr B.S. Shroff, and Dr D.B. Master founded the Bombay Medical Union. Drs Cursetji and Master were

also members of the Bombay Municipal Corporation. They were joined by stalwarts such as Dr Atmaram Pandurang, Dr K.N. Bahadurji, Dr Sir Nasarwanji Choksy, Dr Sir Bhalchandra Krishna, and Dr G. V. Deshmukh.

At the inaugural meeting at the Great Western Hotel, twelve members signed the prospectus. The stated purposes of the Union were giving public expression to the grievances of the Indian medical graduates; satisfying the just and legitimate aspirations of the increasing number of Indian medical graduates; affording full and free opportunities and facilities for equalizing the status of Indian aspirants for the Medical Services with their European compeers, especially in the higher grades; review the rules which the Government has laid down to the effect that only members of the Indian Medical Service should be appointed as professors in the medical colleges which it maintains. Members of the Union appeared before the authorities and Royal Commissions in pursuit of their goals.

Medical matters in Bombay are in a mess. The chief inducements to enter the Bombay service have hitherto being connected with the prizes presented by the Grant Medical College but these appointments are now by preference it appears to be conferred on civilians as advocated by a body calling itself the Bombay Medical Union. The object is to oust from the teaching staff of the college the European officers and unfortunately the governor seems to have been got at in this direction. The council of the British Medical Association should keep its eye on this retrograde policy.

Statement by *Retired* in *The British Medical Journal* (as it was then) dated 6 July 1889

In a letter from the Municipal Commissioner to the Municipal Corporation, he pointed out that the medical college had to be in close proximity to the hospital. Plans drawn up so far had sited the hospital on the southern part of the available land. He proposed that the land immediately to its north be reserved for the college. (*The Times of India* 16 March 1916).

In 1916, Dr Jivraj Mehta was approached by the Executive Committee of the Bombay Medical Union to enroll his services in the planning and running of the proposed medical college and hospital.

'The usual practice till then was for the departments of Anatomy, Physiology and Pathology to be located each in separate buildings of their own. The principal of the college often had his administrative office located in a different building in the college campus. The suggestion to construct Seth Gordhandas Sunderdas Medical College in one single compact building came to be made by me in the year 1916 when I happened to return from London after completing my postgraduate studies in the London University and the Royal College of Physicians… I strongly pleaded placing the anatomy department on the top floor of a single compact block of building to facilitate close relationship

between the staff, particularly the heads of departments, as also to enable the head of the institution to walk into any department at any time without inviting comment, which would ordinarily be the case if the various departments are placed or located in isolated buildings. This pattern also had the further advantage in that the students' time would be saved from running from one building to another for attendance in different classes… using the names which are heavy in Bombay.' (Dr Jivraj Mehta 1968)

Thus, Dr Mehta suggested that the entire medical college must be housed in one large building and the hospital (including the out-patient block) in a separate building. This would facilitate coordination between the various departments. The Union accepted Dr Mehta's suggestions.

At a meeting of the Municipal Corporation in September 1916 with Sir Chunilal V. Mehta presiding, the report of the Medical Relief Committee was adopted. Two adjacent plots of land were to be demarcated for the college and hospital respectively and obtained from the Government and the Improvement Trust by November 1916.

In Mr. Wittet's revised report, the total cost of the hospital was estimated at Rs. 25,27,699 and of the college at Rs. 13,64,574. In 1917, the Medical Relief Committee proceeded to obtain a building grant of Rs. 4,00,000 from the Government. In accordance with the Government's request, an Advisory Committee was formed with the Chief Justice and Surgeon-General to the Government being *ex-officio* members. The acceptance of Dr Rajabally Patel's offer of Rs. 50,000 on behalf of the executrix of the estate of the Late Dr Habib Jan Mahomed for the construction of an operation theater and the donation of Rs. 1,00,000 by Mr. Purshotamdas Mangaldas Nathoobhoy for the erection of a maternity ward were approved (*The Times of India* 12 May 1917).

In an editorial on 15 March 1920, *The Times of India* quoted two medical practitioners who had criticized the delay in construction of college and hospital at a time when all the hospitals in the city were overflowing and hospital accommodation at a center of investigation and instruction was greatly needed. The editorial ended with this caustic sentence: 'The new institutions are intended for the present generation, not merely for our grandchildren.'

On 12 May 1920, an editorial in *The Times of India* bemoaned:

Bombay people might be excused for saying that they had forgotten all about the King Edward Memorial Hospital … it was only on Monday that the Corporation had before them the P. W. D.'s detailed plans and estimates for an initial section of the work, consisting of the administration and admission block of the proposed hospital, four ward pavilions and an operating block… True, Government engineers could not spend time upon work during the war, but hostilities finished

eighteen months ago. We are glad that the Corporation on Monday approved the immediate commencement of work in accordance with the completed portions of the plans… Apart from the desirability of making headway with the memorial, the need for the new hospital accommodation is extremely urgent. Every hospital is overcrowded and has to turn away cases that would otherwise be admitted.'

In 1923, the Medical Relief Committee on the King Edward Memorial Hospital and Seth Gordhandas Sunderdas Medical College appointed a group including Dr Rustam Cooper, Major Hamilton. Major Taylor and Dr P.T. Patel to make recommendations on the medical college and hospital.

On 7 October 1924, *The Times of India* described the proceedings of Bombay Municipal Corporation. The report of the Medical Relief Committee was discussed. Dr G.V. Deshmukh moved the adoption of the report. Mr. K.F. Nariman submitted an amendment that in keeping with the condition laid down by the trustees of the Seth Gordhandas Sunderdas Estate, the staff of the hospital should consist only of independent Indian medical men. Municipal Commissioner Mr. C.W.E. Arbuthnot deprecated the racial character of the amendment and reminded the Corporation that Rs. 8,00,000 had been contributed towards the scheme by King Edward memorial committee. Dr Deshmukh, however, accepted the amendment, assuring the Corporation that the salaries they offered were so low that no European medical man of reputation would accept any of the appointments. The amendment was carried.

Dr M. B. Velkar (1942) noted that:

'It is due mainly to the efforts of persons like Dr Cursetji and the galaxy of distinguished past presidents, that the medical colleges and hospitals in the city are now being staffed by distinguished medical men belonging to the independent Indian medical profession who are now occupying the high and responsible positions in the medical colleges and hospitals which were once considered as a *preserve* of the high-browed European members of the Indian Medical Service.'

At a meeting in May, the estimated cost of the hospital as provided by Mr. Wittet in 1916 was compared with a revised estimate:

Items.	Estimated cost as per rate in 1916.	Estimated cost as per rates in 1920.
	Rs.	Rs.
Adm sion and administration block including kitchen behind.	1,89,195	2,16,443
Ward pavilion	1,59,665	1,74,967
Do.	1,59,665	1,74,967
Do.	1,53,682	1,74,967
Do.	1,53,682	1,74,967
Operating block	48,000	70,666
Total Rs	8,6[illegible],939	9,[illegible]6,877

The Times of India 11 May 1920.

A committee of four—Dr Rustam N. Cooper, Major A.F. Hamilton I.M.S., Major E.C. Taylor I.M.S., and Dr P.T. Patel—was appointed to the 'Equipment Committee' by the Municipal Corporation in 1925 to advise on the organisation of the hospital. Dr Patel was then in charge of the

Municipal Isolation (later known as Arthur Road Infectious Diseases) Hospital.

Mr. Wittet, in addition to drawing up the architectural plans had listed beds, lockers, mobile screens, and other equipment needed in the hospital and sources in Britain from which all of it had to be procured. Dr Cooper and the rest of the committee overruled this on the grounds that the expenses would be inordinately high. They decided on purchasing items such as patients' beds in wards, lockers, and mobile screens locally.

Construction of College and Hospital

Since Dr Jivraj Mehta had to leave for England to help in the medical treatment of Sir Ratan Tata, the actual construction of the hospital and college was supervised by Dr P.T. Patel on behalf of the Bombay Medical Union.

This was the 12th medical college being constructed in the country. All the medical colleges till then, excepting the one now known as K.A.R. Medical College in Calcutta and the Lady Hardinge Medical College in Delhi were government institutions.

Details of Construction

The main hospital building at present is more or less as it was soon after its construction except for the addition of an extra floor later.

The building is constructed with load bearing external ashlar basalt stone walls. The internal part is rough khandki lime plastered. The internal column and beams are steel sections encased in concrete with and without reinforcement. The floor slab is in reinforced cement concrete (RCC) and so is the lintel of the windows and the chajjas.

On the roof of the first floor were two domes as seen in archival photographs and also from the octagonal pattern of the beams. These domes with their varying scale made the hospital buildings prominent landmarks in the area and gave it distinct Indian overtones.

The domes were demolished when the second floor was added in 1957. The extension has runner beam treated with create plaster externally on which the dressed basalt wall is constructed.

The walls on all three floors are two feet thick. The floor slab is approximately 6 to 8 inches thick, the RCC chajja protrudes out by 4 feet.

The total length of the ward is 153 feet and 6 inches and the width is 42 feet and inches, providing a carpet area of 6292.17 square feet at each floor level.

The entire width of the ward is divided in three parts by the two rows of steel encased columns. On its eastern end from where the ward starts it has a toilet and bath on either side, it seems the bath is now converted to a store room. This is followed by wide pantry and a small store with a loft, after which are the sister

rooms and two special rooms used by the doctors as rest rooms and a class room. The partition walls are non-load bearing.

On the north-east of the wards, toilets tucked in separate bays, having 3 water closets, 3 bathing areas and a sink for the patients. Connecting the toilet is a RCC staircase leading from 2nd floor to the ground floor. Water tanks are located above the staircase and toilet. When the second floor was added the water tanks were shifted to their present location.

The flooring is of durable polished Kota stone, the doors and windows are of Burma teak with very good detailing of splayed frame to ward away the water. The teakwood glazed windows have transom and mullion—a style that architect George Wittet loved and is seen in many of his other buildings too. The windows are of the Dutch type with glazed panels above and paneled shutters below. All the three floors have a RCC *jali* vent above the windows, these are not seen internally as they have blocked. These served as excellent ventilation devices from the stack effect of air circulation and also admitted more light. These were sealed later probably due to the menace of birds and rats.

The long wards are visually divided by protruding bay window type. The original wash basins or sinks were provided there. The nurse stations were centrally located here.

Eight ward blocks, each accommodating twenty-four patients, were being constructed on two floors. The slanting rays of the morning and the evening sun were excluded by means of exterior shades which were supported by a double row of pillars.

The hospital was designed to accommodate 284 patients. Provision was made for extending the capacity in emergencies. Besides the ordinary wards, a casualty ward and the Jan Mahomed Operation Theater were also being constructed, the latter on the first floor featured a glass dome over a gallery whence medical students could witness operations without their conversation disturbing the operating surgeon.

A central administrative block would house the office of the resident above and an ophthalmic hospital, maternity hospital, an isolation ward, a pathology department below. An outpatients department and a nurses' home was also being constructed. The whole hospital outlay was arranged as a large quadrangle with the ward blocks facing south (Wards 1 and 2) and north (Wards 3 and 4).

Two operation theaters were constructed, one on the upper floor of a separate block on the east of the main corridor, the ground floor of which accommodated the casualty wards. It was flanked by anesthetizing, sterilizing and instrument rooms. An interesting feature was the gallery surrounding it, eight feet from the floor. Students admitted to the gallery through a private staircase without having to pass through any part of the operation theater, could watch operations through

sloping glass screens after. The theater was similar in size to the William Moore Block of J. J. Hospital. A separate room was provided for the nurses and a robing room for the surgeons. A patients' recovery room was attached.

The other operating theater was slightly larger but without the students' gallery. The walls were covered with white glazed tiles to a height of five feet to ensure cleanliness.

The fittings throughout were the best that modern medical and sanitary knowledge had devised. Although the hospital was for general medical purposes, its value as an educational institution would be considerable as it was part of a larger scheme which embraced the construction of a medical college in the same area.

The commodious outpatients' department on the north side of the hospital premises had provision for segregation of the sexes with separate entrances, exits and registration windows. The large central waiting room could accommodate 336 men and 180 women. A dispensary was sited near the main entrance. On the floor above it were the X-ray and electrical departments.

The ophthalmic department, one of the first departments started at the Hospital, was located in a wing consisting of two floors on the east of the main corridor. The outpatients' section for patients with eye ailments was on the ground floor. The upper floor provided the wards for men and women.

Special attention was paid to the maternity block to the east of the general hospital and connected to it by a covered path. For wards and four labor rooms were constructed with glazed white tiles and dadoes. A separate department was provided for septic cases.

On the east of the main hospital was the isolation ward for four patients, the pathology department with a laboratory, an autopsy room, the mortuaries and a cold room. A laundry with provision for drying clothes during the monsoon were erected nearby. The residents' quarters lay to the south of the hospital building, connected to it by a covered corridor.

Provision was made for the Seth Gordhandas Sunderdas Medical College on the land directly adjoining the hospital on the northern side. This college together with a students' hostel was in a large measure to be built and maintained with funds provided by the Seth Gordhandas Sunderdas Charities Trust, a sum of 14.5 lakh rupees having been placed at the disposal of the Municipal Corporation by its trustees and the necessary excess expenditure being met out of municipal funds. It was anticipated that the hospital and college would provide facilities for medical education second to none in India and would take their place among the most efficient of such institutions throughout the world (*The Times of India* 16 November 1920).

The hospital was built under the supervision of Mr. E. Austen from the

Government and the college was built under the supervision of Mr. George Wittet from the Tata Engineering company. Mr. Arbuthnot was the Executive Engineer.

The college had two floors at the start. A spacious library and a lecture hall were provided on the ground floor. The Pharmacology and Physiology Departments were located on the first floor. On the top floor were the Anatomy Department and its dissection halls, museum and two classrooms housing 150 students each.

On 16 November,1922 *The Times of India* reported that the hospital was nearing completion.

The King Edward Memorial were singularly fortunate in securing from Government an admirable site. Old Government House grounds at Parel provide just that plenitude of light, air and space which are necessary for the nursing through illness and convalescence of patients seriously stricken.

The Hospital's Capacity

'The capacity of the hospital will be considerable and it will treat all kinds of illness and disease.

Although the hospital will be for general medical purposes, yet its value as an educational institution will be considerable. It is part of a larger scheme which embraces the construction of a medical college in the same area.

Fostering Medical Resources

It is a melancholy fact that medical science in India is more seriously hampered in its progress by lack of adequate educational facilities than by any other factor and it speaks volumes for the enterprise and initiative of the Memorial Trustees and the Corporation that they should vigorously persist in the completion of these institutions at Parel at a time when their financial resources are strained to the utmost.

But penny-wisdom in this case is the worst folly.

'The financial stress may persist or may diminish. But the need for medical education will grow greater and more urgent exactly in proportion to the degree in which proper provision for it is deferred.

The hospital itself will benefit chiefly the inhabitants of Bombay and particularly the great and increasing number of manual workers whose homes and work will be situated in its vicinity. But, in combination with the College, to the students of which it will furnish actual experience of the treatment of disease and of surgery, the Hospital will scatter broadcast throughout the Presidency the benefits to be derived from an adequate provision of medical officers to combat the ravages of disease.

At a meeting of the Bombay Municipal Corporation in February 1924, Dr A.G. Viegas moved, 'that the commissioner

be requested to approach government with a request that they will be pleased to expedite the completion of the proposed King Edward Memorial Hospital and he be further requested to expedite the construction of the Seth Gordhandas Sunderdas Medical College and to report to the corporation that progress had been made in connection with both these institutions.' *(The Times of India* 15 February 1924 Page 4).

The Municipal Commissioner submitted revised plans for the Students' Hostel. It would accommodate 108 students in single rooms. If needed, a third storey could be added later to bring the accommodation up to 150 students. Four separate kitchens and dining rooms were provided for the different communities with one common recreation room.*(The Times of India* 27 November 1924 Page 4).

When completed, the Casualty Medical Officers' Bungalow and quarters for other staff were to the east of the hospital building. The E-shaped college building was connected to the hospital by a corridor. The Seth Jamnadas Lallubhai Pathology Museum extended from its south-eastern end and was connected to it by a corridor. The male students' hostel lay to the east of the college building.

In May 1925, it was reported that the King Edward Memorial Hospital was now fully equipped and the Seth Gordhandas Sunderdas Medical College was ready to embark upon its career. They were scheduled to start function on 1 June.

Cost and Sources of Funds

A total cost of Rs. 56,67,784 was incurred by the Municipal Corporation of the city of Bombay on the construction of hospital and Rs. 19,14,238 for the college. The men's hostel cost Rs. 3,29,000 and that for women students Rs. 83,490. The cost of equipment, apparatus, instruments, and books in all the departments cost a further Rs. 13,00,000. It was estimated that the annual maintenance of the hospital and college would be Rs. 6,00,000 (*The Times of India* 22 January 1926; *The Afternoon Despatch and Courier* 21 April 1987).

The sources of funds were as follows:

Municipal funds	Rs. 31,00,000
King Edward VII Memorial Association	Rs. 7,00,000
Government of Bombay's contribution	Rs. 5,00,000
Sir Currimbhoy Ebrahim Entertainment Fund	Rs. 1,26,055
Mr. Purshotamdas Mangaldas Nathubhai	Rs. 1,00,000
Dr Habib Ismail Jan Mahomed	Rs. 30,000
Lalkaka Memorial Fund	Rs. 17,000

An additional sum of Rs. 80,000 were received by the Municipal Corporation from the trustees of the charities created by the will of the late Seth Runchhoddas Vithaldas Shroff. The interest from this sum was to be used to buy clothing for convalescents leaving the hospital.

When the hospital and the college were formally inaugurated on 22 January 1926, Wittet was presented a gold cigarette case by the Governor of Bombay, Sir Leslie Orme Wilson, in appreciation of his services. In the very first week, however, a large piece of the plastered ceiling of the operation theater came down and within the first fortnight, the tiled floor cracked! (Cooper 1952).

Appointment of Staff

In making the first appointments to the staff, the Municipal Corporation was largely guided by Dr G.V. Deshmukh, a very active member of the corporation and also a big name in the profession (R. N. Cooper).

On his return from Britain, Dr Jivraj Mehta was appointed Chief Medical Officer for the state of Baroda. When applications were invited for the Principal Officer of the College and Hospital (later combined under the title of Dean), Dr Jivraj Mehta applied and was appointed Dean on 1 April 1925 (C. R. No. 12471 of 12 March 1925). In his address in Bangalore, Dr Mehta pointed out that when the appointment of Dean was being finalized, 'doubts were expressed at the time on the ability of an Indian to run such a medical college and hospital. The suggestion that this institution might be given to an I.M.S. officer, naturally a Britisher, to be later handed over to the Dean who had already been appointed for the purpose, was turned down by Shri Joseph Baptista, then president of the Bombay Municipal Corporation which had constructed the college and hospital and was to maintain them.'

In his first annual report (E.H./35-B of 1926–1927), Dr Jivraj Mehta noted he took charge as Dean on 1 April 1925. The initial staff appointments including his own and those of four full-time professors at the college and honorary staff at the college and hospital were made by the Bombay Municipal Corporation through its Medical Relief Committee. Details of the final appointments were included in Appendix 'A':

The first batch of teachers included Dr M.D.D. Gilder, Dr P.C. Bharucha, Dr A.S. Erulkar, Dr P.T. Patel, Dr G.V. Deshmukh, Dr R.N. Cooper, Dr V.L. Parmar, Dr N.A. Purandare, Dr V.R. Khanolkar and Dr B.B. Yodh. Dr Jivraj Mehta felt they were individuals of the highest capability and deepest integrity. There was a great bond of striving towards a common aim—ensuring a brilliant success for these institutions. These were the first medical institutions in the country staffed by Indians at the professorial and other levels and there was a great sense of pride in all of us. (Drs G.V. Deshmukh and P.T. Patel were also graduates of the London Hospital Medical College.)

The Medical Relief Committee met over 2 days in May 1925 and concluded the selection of staff members of the King Edward Memorial Hospital and the Seth Gordhandas Sunderdas Medical College. The principal appointments, carrying high salaries, had already been made by

List of staff members selected for KEM Hospital and Seth GSMC.

Name	Designation	C.R. No. & Date	Date of Appointment
Dr Jivraj N. Mehta, M.D., M.R.C.P. (Lond.)	Dean	12471 of 12-3-1925	1-4-1925
Dr M.D.D. Gilder, M.D. (Lond.), F.R.C.S. (Eng.)	Hony. Physician & Lecturer in Medicine	1927 of 11-5-1925	1-1-1926
Dr P.C. Bharucha, M.D. (Lond.)	Do. do.	Do.	Do.
Dr A.S. Erulkar, M.D. (Lond.)	Do. do.	Do.	Do.
Dr P.T. Patel, M.D. (Lond.)	Do. do.	Do.	Do.
Dr L.D. Dhawale, B.A., M.D. (Bom.)	Do. do.	Do.	Do.
Dr Jivraj N. Mehta, M.D., M.R.C.P. (Lond.)	Do. do.	Do.	Do.
Dr G.V. Deshmukh, M.D. (Lond.), F.R.C.S. (Eng.)	Hony. Surgeon & Lecturer in Surgery	Do.	Do.
Dr A.P. Bacha, F.R.C.S. (Eng.)	Do. do.	Do.	Do.
Dr R.N. Cooper, M.S. (Lond.), F.R.C.S. (Eng.)	Do. do.	Do.	Do.
Dr T.O. Shah, F.R.C.S. (Eng.)	Do. do.	Do.	Do.
Dr R.D. Shirwalker, M.S. (Lond.), F.R.C.S. (Eng.)	Do. do.	Do.	Do.
Mr. V.L. Parmar, F.R.C.S. (Eng.)	Do. do.	Do.	Do.
Dr N.A. Purandare, M.D. (Bom.), F.C.P.S.	Hony. Gynecologist & Lecturer in Gynecology & Obstetrics	Do.	Do.
Dr H.D. DeSa, M.D. (Bom.), F.C.P.S.	Do.	Do.	Do.
Dr Mrs. Doseibai J.R. Dadabhoy, M.D. (Lond.)	Hony. Lady Doctor	Do.	Do.
Dr R.R. Ratnakar, D.O. (Oxon.), D.O.M.S. (Eng.)	Hony. Ophthalmic Surgeon & Lecturer in Ophthalmology	Do.	Do.
Dr G.T. Mody, D.O. (Oxon.)	Do. do.	Do.	Do.
Dr H.G. Moghe, L.D.S.R.C.S. (Eng.)	Hony. Dental Surgeon & Lecturer in Dentistry	Do.	Do.
Dr D.M. Desai, L.D.S.R.C.S. (Eng.)	Do. do.	Do.	Do.
Dr A.O. Rebello, M.B., B.S., D.T.M. & H. (Lond.)	Hony. Dermatologist & Lecturer in Dermatology & Venereology	Do.	Do.
Dr J.L. Desai, M.B., B.S., D.M.R.E. (Cantab.)	Hony. Radiologist & Lecturer in Radiology & Electro-Therapy	Do.	Do.
Dr M.G. Kher, L.M. & S.	Hony. Anesthetist & Lecturer in Anesthetics	Do.	Do.
Dr J.S. Nerurker, B.Sc., L.M. & S., D.P.H. (Cantab.)	Lecturer in Hygiene & Preventive Medicine	Do.	Do.
Khan Bahadur Dr A.K. Turner, L.M. & S.	Lecturer in Toxicology & Medical Jurisprudence	Do.	Do.
Dr R.P. Koppikar, M.S. (Bom.)	Professor of Anatomy	965 of 30-4-1925 & 1297 of 11-5-1925	1-6-1925
Dr S.P. Niyogi, M.Sc., M.B. (Cal.), F.R.S.E.	Professor of Physiology		Do.
Dr V.R. Khanolkar, M.D., D.Sc. (Lond.)	Professor of Pathology & Bacteriology	9524 of 26-11-1926	14-10-1926
Dr A.S. Paranjpe, M.D. (Heidelberg), D.T.M., Ch.B.	Professor of Pharmacology and Materia Medica	1296/7 of 11-5-1925	4-1-1926
Dr F.A. Khan, M.B., B.S. (late) I.M.S.	Assistant Dean & Warden	965 of 30-4-1925 & 1297 of 11-5-1925	7-8-1925

the corporation from time to time on the recommendation of the committee. On this occasion, the names of medical men selected for subsidiary posts were placed before the Municipal Corporation.

Whilst Mr. V.A. Desai and Dr D. De Monte moved that the report be approved and adopted, Dr R.M. Mistry suggested changes—Dr B.P. Banaji be appointed professor of ophthalmology instead of Dr Girdharlal T. Mody; Dr Sorab Cowasju Hormusji be appointed Professor of Hygiene instead of Dr J.S. Nerurkar; Dr R.B. Billimoria be appointed Honorary Physician instead of Dr L.D. Dhavle; and Dr N.J. Bandorawala be appointed Associate Professor of Anatomy instead of Dr G.M. Kurulkar. Mr. Naoroji M. Dumasia pointed out that not a single Mahomedan doctor had been included on the staff and suggested Dr N.C. Gangriwala in place of Dr R.P. Ratnagar. Mr. Mohanlal M. Desai regretted that the question should be discussed on racial lines. When Mr. Phiroze C. Sethna emphasized the claims of Drs Banaji and Billimoria, Mr. Jamnadas Mehta felt that, as a Parsi, Mr. Sethna had come into contact with Parsi doctors only and did not know the merits of Hindu doctors. Mr. K.F. Nariman deplored the racial turn the debate had taken and considered that the appointments made by the committee were on the whole satisfactory. When put to vote, the amendments were lost by a narrow majority and the original proposition was agreed to (*The Times of India* 12 May 1925).

Even before the inauguration of the college and hospital, far-sighted suggestions were being made.

Affiliation of the New Medical College to the University of Bombay

The Times of India, 8 July 1925 carried the following news item:

A meeting of the Senate was held in the solar tower Sir Cowasji Jehangir Hall of the University, Sir Chimanlal Setalvad presiding. The meeting considered an application from the Municipal Commissioner for the affiliation of the Seth Gordhandas Sunderdas Medical College and the report of the local inquiry committee appointed by the Syndicate. Professor Nadgir moved a resolution that the Seth Gordhandas Sunderdas Medical College be affiliated provisionally to the University of Bombay in the Faculty of Medicine for the course of study prescribed for the Intermediate M.B. & B.S. examination for the period of 18 months from the 1st of June 1925 subject to the following conditions: a) the number of students to be admitted annually should not exceed 100 b) There should be a second inspection preferably in June 1926 when the King Edward Memorial Hospital is expected to be in full working order. The proposition was seconded by Capt S.L. Bhatia, Dean of the Grant Medical College who assured the new institution of assistance from his institution. Dr Ranina moved the following amendments: a) that the limit of annual admissions should be fixed at 55; b) that the second inspection should take place in January 1926. After

some discussion, including that on the supply of dead bodies for dissection by students, the motion was put to vote and the amendments were carried by 40 votes to 6. The original resolution with the amendment was unanimously carried.

Dr A.G. Viegas advocated for the recognition of the postgraduate qualification. He moved: 1) that are Diploma in Ophthalmology (D.O.) be instituted in the Faculty of Medicine and conferred on medical graduates for proficiency in ophthalmic medicine and surgery; 2) that the syndicate be requested to draft and submit for the approval of the Senate regulations regarding the syllabus of studies and examination for the proposed diploma. The proposition was seconded by Major Duggan. It had been put before the Bombay Medical Union, who considered it premature and suggested postponement of its consideration till the King Edward Memorial Hospital was in working order. Dr Viegas pointed out the large number of cases of eye disease in the city and presidency of Bombay and Major Duggan certified the adequacy of teaching staff for the purpose. The resolution being put to vote was carried.

It was proposed to open the college in June 1925.

The standing committee of the Bombay Municipal Corporation sanctioned Rs. 53000 for the initial cost of clothing required for the 304 beds that were proposed to be provided in the King Edward Memorial Hospital. The cloth that would be used would be of Indian manufacture and khaddar would be purchased for those items for which it was suitable. A request would be made to His Excellency the Governor to open the hospital on 15th January 1926. (*The Times of India* 19 May 1925).

Need For Scholarships and Prizes

The King Edward Memorial Hospital is now practically fully equipped and the Gordhandas Sunderdas Medical College is ready to embark upon its career. Requisite staff was appointed recently… At the present moment there is not a single endowment in the form of a scholarship, prize or medal. The Grant Medical College is richly endowed, having as many as 40 scholarships, prizes and medals to attract able and intelligent young medical students. For every single scholarship that is open to competition, five or ten clever students will be drawn to the College to compete for it. As the Bombay Municipality has already spent so much money in constructing and equipping the Medical College and the King Edward VII Memorial Hospital it would not seem right to tax it still further by asking for municipal endowments. It is hoped that the rich public will come forward to endow scholarships. Each scholarships would be worth Rs. 15–25 per month. An investment of about Rs. 3,000–4,000 in 6 percent municipal bonds will fetch the necessary interest to endow a permanent scholarship. (*The Times of India* 19 May 1925 Page 6).

This was officially articulated in a letter by Dr Jivraj Mehta *(The Times of India 27 January 1926)*, in which he stated that the hospital would receive outpatients and inpatients from Monday, 15 February 1926.

He appealed to the people of Bombay to take an active interest in these institutions of which they may well be proud. 'They are a magnificent monument expressive of the spirit of charity which characterizes the people of Bombay.'

To enable them to fulfil in every way the object for which they were erected and in order to make them unique institutions, he made some appeals all over India. He suggested the organization of a Patients' Help Society composed of donors. The Society would be connected to the King Edward VII Memorial Hospital. Funds from this Society could be used to provide special diet, artificial limbs, and other accessories to needy patients.

Already 7 scholarships had been donated but there was need for at least 25 more to help deserving students for whom the cost of a medical education was too heavy.

Finally, he requested endowment for medical research. Research could be conveniently carried out in these institutions particularly on diseases which were prevalent in our country such as sprue and anemia. It could also be used for testing the properties of Indian herbs and medicines and in devising better forms of surgery.

Appendix 'B' of the annual report for 1925–1926 showed the endowments announced when the college was opened.

APPENDIX "B"
Donations, & c.

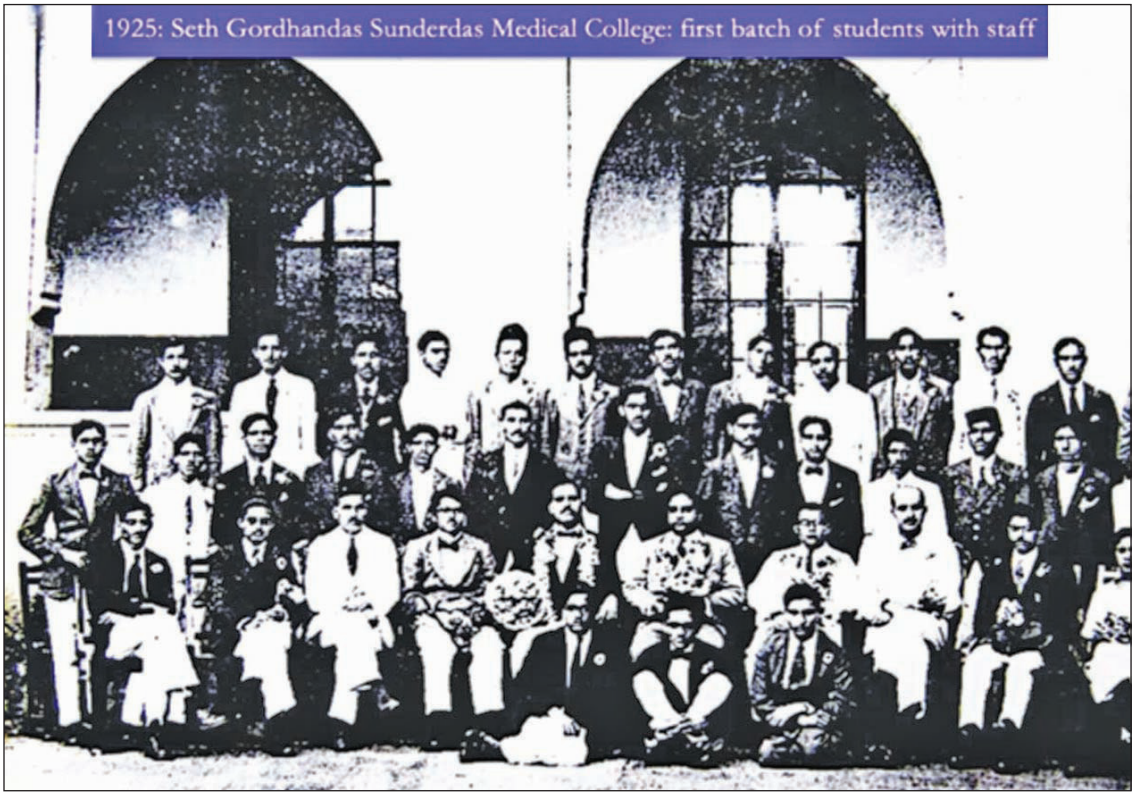
1. An anonymous donation of Rs. 28,000 through Messrs. Ardeshir Hormusji Dinshaw & Co., Solicitors, to supply warm clothing annually out of the accrued interest to the patients of the Hospital.
2. Endowment from Mr. Chaturbhuj Gordhandas Sunderdas for a Scholarship to be, called "Bai Gangabai Gordhandas Sunderdas Scholarship" of Rs. 20 per mensem to a student entering this College with the highest number of marks at the Intermediate Examination of the University of Bombay.
3. Endowment from Mr. Chaturbhuj Gordhandas Sunderdas for a Scholarship to be called "Chaturbhuj Gordhandas Sunderdas Scholarship" of Rs. 20 per mensem to the student of this College who stands highest in Anatomy at the Intermediate M.B., B. S. Examination of the University of Bombay.
4. Endowment from Mr. Lalji Naranji for a scholarship to be called "Lalji Naranji Scholarship" of Rs. 20 per mensem to the student of this College who stands highest in Physiology in the Intermediate M.B., B.S. Examination of the University of Bombay.
5. Endowment from Mr. Tulsidas H. Parekh for a Scholarship to be called "Bai Bachoobai Thakoredas Entrance Scholarship" of Rs. 15 per mensem to a Gujerati Hindu Lady Student of this College who secures the highest number of marks at the Intermediate Science Examination of the University of Bombay.
6. Endowment from Mr. Jehangir Ratanshaw Dadabhoy for a scholarship of Rs. 15 per mensem to be called "Ratanshaw Dadabhoy Scholarship" to the student of this College who stands highest in Medicine at the College Competitive Examination in the 4th year's course of studies.
7. Endowment from Dr (Mrs.) Dossibai Jehangir Ratanshaw Dadabhoy for a Scholarship of Rs. 15 per xnensem to be called "Awabai Ratanshaw Dadabhoy Scholarship" to the Lady Student of this College who stands highest in Midwifery at the College Competitive Examination in the 4th year's course of studies.
8. Endowment by the Honorary Staff and whole-time Professors of the College and Hospital for a scholarship of Rs. 15 per mensem in commemoration of the late Dr K.N. Bahadurji and to be 'named after him.
9. From Dr Rukhmabai of Zenana Hospital, Rajkot, a set of 60 bound volumes of British Medical Journal in cabinet.
10. From Mrs. Bardi a set of Medical Books belonging to her husband, the late Dr Bardi.

Opening of the Hospital

The college began work on 1 June 1925 but its formal opening coincided with that of the hospital on 22 January 1926. (The hospital started functioning on 15 February 1926.)

The King Edward VII Memorial Hospital, Parel was Bombay's first Municipal General Hospital. It was expected that, in the course of time, it would be the biggest in the city. It was fully equipped and embodied all the latest developments in hospital design. It had a fine Medical College adjoining. Several new ideas had been adopted in the construction of the building and the design of the premises over the past five years but the most interesting innovation would be in the working of the institution. It was the first hospital in India served entirely by non-official members of the Indian medical profession, most of whom will work in an honorary capacity. The members of the I.M.S. would be excluded from serving in the hospital.

Summarising the planning of these institutions, the reports stated that the opening ceremonies would be the culminating point of nearly 20 years' work by the Municipality of Bombay to increase hospital accommodation.



1925: Seth Gordhandas Sunderdas Medical College: First Batch of Students with Staff.

BOMBAY'S NEW HOSPITAL.

MAGNIFICENT GROUP

BUILDINGS AND COLLEGE DESCRIBED.

BOMBAY'S NEW HOSPITAL: KING EDWARD VII MEMORIAL

A general view of the front group of buildings of the King Edward VII Memorial Hospital, Parel, Bombay's magnificent new hospital which is to be opened on Friday by H.E. the Governor. An article describing the hospital and Medical College appears on this page.

Another view of the front of the main group of buildings, showing the Nurses' Home on the right, facing Chamarlang Road.

The Medical College which forms part of the Hospital group of buildings, and which faces King Edward Road.

CONSTABLE TO A KNIGHT.

SIR JAMES OLIVE'S RETIREMENT

The Times of India provided a detailed report in its issue dated 22 January 1926.

The site was bounded on the north by the new 80-feet King Edward Road, on the east by the old Government Gate road, and on the West by an existing road widened by 40 feet and now called Hospital Avenue. Cannon-ball trees, *lignum vitae*, and other picturesque shade-giving trees were planted on the grounds around the periphery of the buildings. Well-kept lawns were bordered by ferns and shrubs. Amidst the hospital buildings was a tennis court to be used by the staff and students.

Opening Ceremony of the Hospital

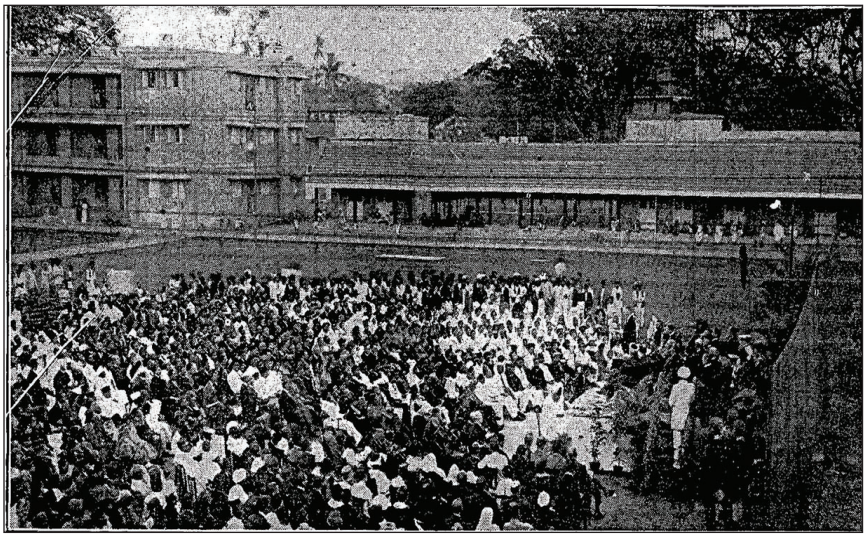
Sir Leslie Wilson.

On the afternoon of Friday, 22 January 1926, Sir Leslie Wilson, Governor of Bombay opened the King Edward VII Memorial Hospital to patients.

The function was reported in considerable detail in the issue of the *Times of India* dated 23 January 1926. Extracts from this report are reproduced below.

We are informed that a large and representative gathering of Bombay citizens was present at the site of the college and hospital in Parel. Most of the members of the Bombay Municipal Corporation were present. These included Mr. Joseph Baptista, President of the Corporation; Mr. H.B. Clayton, Municipal Commissioner; Mr. C.W.E. Arbuthnot, Chairman of the Municipal Standing Committee; The Honorable Mr. Cowasji Jehangir, general member of the Bombay Government, and Dr Jivraj Mehta, Dean of the new college.

A guard of honor was furnished by the Municipal Boy Scouts who had taken up their position near the entrance to the campus under the command of Rao Bahadur A.K. Pai, the district Scout Master. The Honorary Staff and the whole-time professors of the hospital and college were then presented to the governor by Mr. Baptista in the hall of the hospital. The governor then opened the gate of the



The scene on the tennis court at the opening ceremony of King Edward VII Memorial Hospital, Parel, Bombay.

hospital and was conducted around some portions of the college and the hospital.

The governor was taken to the dais where some of the past presidents of the Bombay Municipal Corporation and other dignitaries were present. Among them were Sir Dinshaw E. Wacha (Industrialist, member of the Legislative Assembly, the Imperial Legislative Council, and founding member of the Indian National Congress); the Honorable Sir Ibrahim Rahimtoola (Mayor of Bombay, President of the Central Legislative Assembly); the Honorable Mr. (later Sir) Phiroze C. Sethna (member of the Imperial Legislative Assembly and Council of State); Dr Kavasji E. Dadachanji (member of the medical sub-committee of the Municipal Corporation); Sir Stanley Reed (Editor of the *Times of India* from 1907–1924); Sir Purushottamdas Thakurdas (industrialist, member of the Acworth Committee, Sheriff of Bombay) and Mr. Chaturbhuj Gordhandas Sunderdas (adopted son of Mr. Gordhandas Sunderdas).

Barrister Kaka Joseph Baptista.

The college and hospital embodied the growing aspirations of the corporation in the sphere of medicine and constituted notable milestones in the progress of the health administration of Bombay. It was envisaged that they would promote the cause of health and humanity in every department of medical science: preventive, curative, and educational. The institutions cost over Rs. 77,00,000 and entailed and annual recurring expenditure of nearly Rs. 6,00,000. They were fully equipped and fully staffed. They enabled the services of a number of eminent members of the medical profession, animated by an ardent enthusiasm for the work they had undertaken on a negligible honorarium. He referred to the efforts, nearly 30 years ago, of the late Dr K.N. Bahadurji, who had mournfully complained that the Aesculapius of Bombay could find no adequate scope for their talents in the Grant Medical College. He had striven strenuously for a fair field for developing a medical profession in Bombay equal in status and skill to the medical profession in Europe. He sowed the seed but he did not reap the fruit. In the inscrutable design of Providence, it fell to the lot of his brother, Mr. D.N. Bahadurji, as advocate-general, to offer the corporation a princely donation for the foundation of a medical college. The offer was accepted with alacrity. The college will provide training for 300 students and the hostel under construction will provide accommodation for 100 students. The capital cost has exceeded Rs. 24,00,000 and the recurring expenditure will exceed Rs. 2,00,000. The donor had contributed 3.5% Government

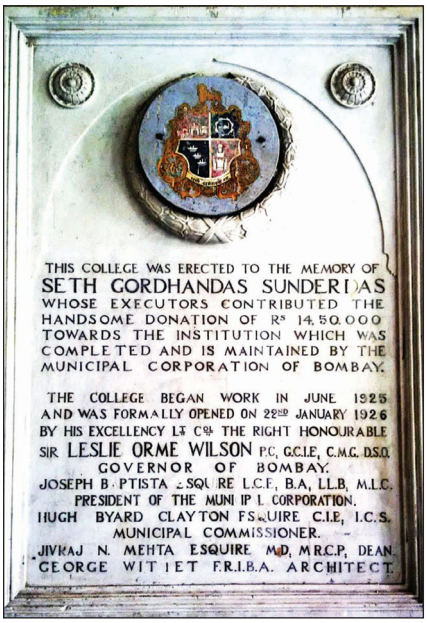
paper of the face value of Rs. 14,50,000. It is an excellent example of wealth well applied. The college, named after the donor, will worthily commemorate the munificence of this good patron of medical education in the city of Bombay.

Introductory Remarks by Mr. Baptista

Mr. Baptista requested the Governor to accept the key which he had used to open the floral gate to the institutions as a token of the auspicious moment.

In his address, Governor Sir Leslie Wilson said that he had great pleasure in taking part in a ceremony which had, for its object, the provision of better hospital accommodation. Shortly after he arrived in Bombay, he had come to see these buildings, then in the course of construction. He had realized even then how great the benefits would be to the people of Bombay and had looked forward to this red letter day in the history of hospital development in Bombay. He

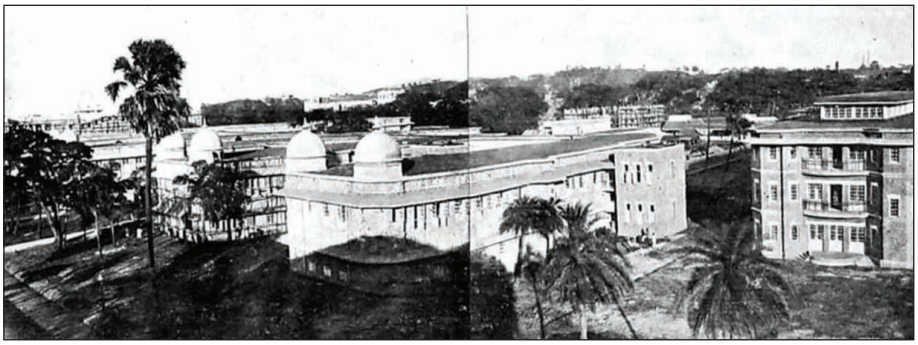
Plaque for the hospital.



Plaque for the college.

The medical college facing King Edward Road – ground floor, 1st and 2nd floors.

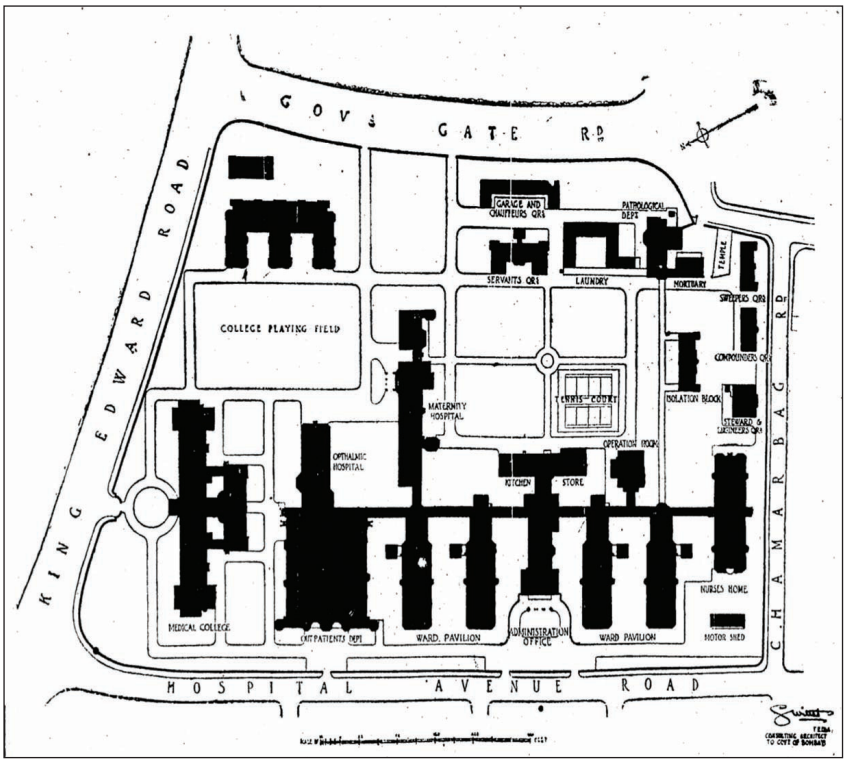
A general view of the front of the buildings of the King Edward VII Memorial Hospital – ground floor, 1st floor.



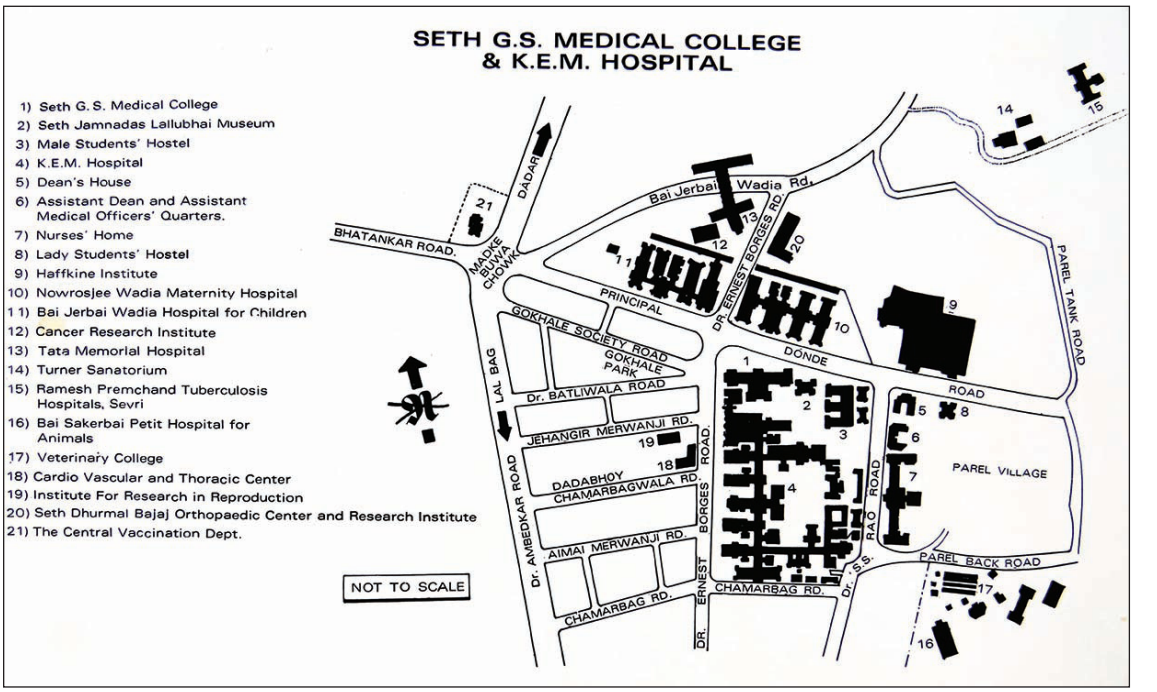
General view of two pavilions of the King Edward VII Memorial Hospital, Parel, Bombay.

also recalled the many consultations with Mr. Baptista and his predecessor, who had met him with representatives from the Corporation to discuss medical relief. He also thanked the Corporation for the ready desire which was shown in working wholeheartedly with government to improve hospitals in Bombay and to assist all efforts to advance the knowledge and teaching of the great science of medicine and to help the sick and the suffering in the city and the presidency.

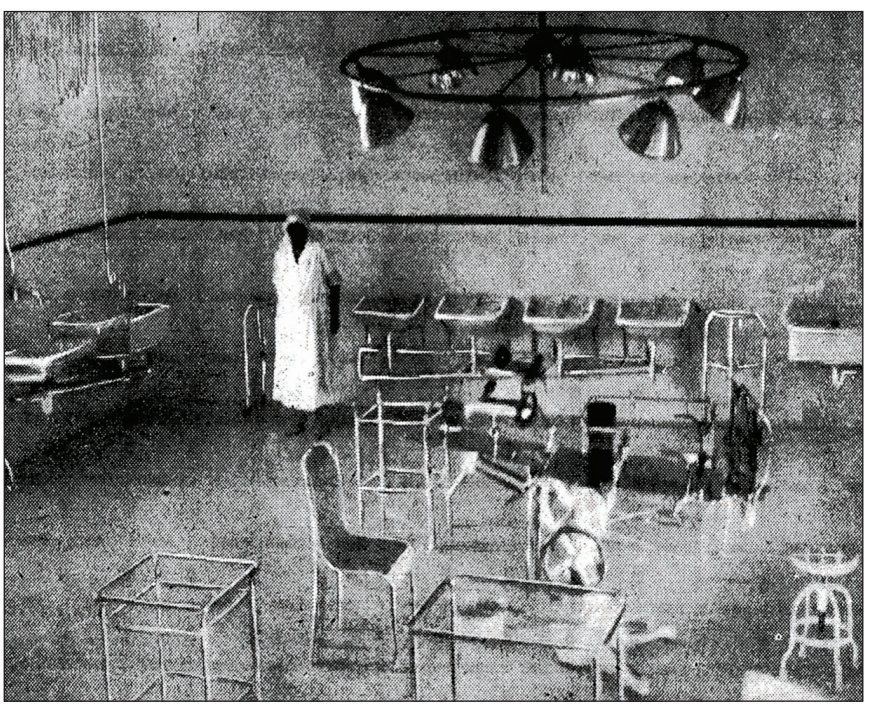
King Edward Road is now Acharya Donde Marg, Hospital Avenue Road is now Dr Ernest Borges Marg, Government Gate Road is Dr S.S. Rao Road and Chamarbag Road is Parmar Guruji Marg.



Ground plan of the King Edward Memorial Hospital open by His Excellency, the Governor of Bombay.



Current ground plan for comparison.



The operating theater at Bombay's new hospital - and all white room fitted with a wonderful arrangement of electric lights. (The Times of India 4 February 1926).

An erudite and far-sighted editorial in The Times of India (23 January 1926) welcomed 'the new hospital':

'The opening of the King Edward VII Memorial Hospital at Parel is not only a municipal triumph but of step of undoubted importance in the history of modern medicine in India. Government, Municipality, and private citizens are all to be congratulated for the whole-hearted manner in which they have cooperated to achieve success in this notable foundation and the work of the architect has been admirably in tune with the spirit and desires of the inaugurators of the scheme and of those who have supported it to the present conclusion.

'Apart from the urgent need which it is destined to fill, the hospital is of the greatest importance as being the first in India to be staffed and controlled by non-official members of the Indian medical profession. It is, in its way, a microcosm of the whole future of India. Not only is the Indian medical profession being given a wonderful opportunity to show its worth and by a successful record to place itself on a general level with the practitioners of medicine in other countries, but the management of a large general hospital is not very different from the management of a country, and the proof of the accomplishment of one will be additional evidence of the ability to accomplish the other.

'The skill of surgeons and physicians is of little avail unless supported by skilful staff-work supplemented by discipline and coordinated with the general management by unlimited tact and discrete determination. And as we have said, there will be full opportunity here for those in command to demonstrate not only their professional but their governmental skill; and also—which is just as important—for the subordinate ranks of all kinds from the houseman to probationers and from senior students to bottle washers, to show a spirit of loyalty and a zest for the good reputation of the hospital.

'It is a great privilege for any body of men to be able to establish a tradition and we hope that those who go to teach and those who go to learn at the Edward VII Hospital will be inspired by this will to prove to the world their ability by their strenuous determination to work selflessly in the twin causes of science and humanity, by a loyal regard for the noble traditions of their profession and by their duty to the India of tomorrow.

'The decision to embody a school of medicine and a hospital in the same institution is extremely wise. Hitherto the weakness of the Indian medical degree has lain in the paucity of practical experience available to students, and by combining school and hospital there should always be a sufficiency of clinical material at hand to illustrate and supplement the information of textbooks and professors.

'The theaters seem adequate not only for excellent surgical work but also

for efficient demonstration; and the provision of an extensive outpatient department should bring minor surgery and minor maladies generally well within the experience of the student. Further, the existence of a maternity wing, as well as being a necessity from the public's point of view and of considerable assistance to the Public Health Department, must very materially help to remedy the sadly inadequate knowledge of gynecology and midwifery which at present mars the Bombay degree.

'Great as the immediate benefit of the hospital will be, we are inclined to attribute even greater importance to its future as a medical school, a school which some day should apply every town in India with a physician, a surgeon or a consultant who has reason to be proud of his *Alma Mater*.'

References and Suggested Reading

- Alphonso. Seth Gordhandas Sunderdas Medical College and King Edward Memorial Hospital. Mumbai News. Published May 16, 2008. Accessed April 29, 2025. https://mumbainews.wordpress.com/2008/05/16/seth-gordhandas-sunderdas-medical-college-and-king-edward-memorial-hospital/
- Anonymous. King Edward VII and charity. *The Hospital.* May 14, 1910:192-194. Accessed April 29, 2025. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5221066/pdf/hosplond73167-0008.pdf
- Anonymous. King Edward Hospital. Plea for Indian staff. *The Times of India.* October 7, 1925:8.
- Bombay Medical Union. The war and doctors. *The Times of India.* February 28, 1916:11.
- Cooper RN. A page from history. In: *Silver Jubilee Souvenir, GSMC-KEMH.* 1952.
- Cursetji Jehangir J. Preface by Velkar MB. Inaugural address on the occasion of the diamond jubilee of the Bombay Medical Union. Bombay: M. B. Velkar; 1942.
- Deshmukh MG. The evils of the Military Medical Service monopoly. Bombay: Ripon Printing Press; 1893.
- Deshmukh SD. History of the King Edward Memorial Hospital 1926-1947 [dissertation]. Mumbai, India: University of Bombay; 2012.
- Edwardes SM. The rise of Bombay: a retrospect. Reprint from Volume 10 of The Census of India Series 1901. Bombay: The Times of India Press; 1902.
- Edwardes SM. The Gazetteer of Bombay City and Island. Vol 3. Bombay: The Times Press; 1910.
- Masani RP. Evolution of local self-government in Bombay. Bombay: Oxford University Press; 1929.
- Mehta Jivraj N. The art of administration of a medical college and teaching hospital. In: *Souvenir: St. John's Medical College, Bangalore. Dedication Ceremony.* September 29, 1968:54-61.
- Mehta Lopa A, ed. *On the Wings of Time… A Saga of Seth G. S. Medical College and K. E. M. Hospital 1926-2001.* Mumbai: Souvenir Committee, Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital; 2001.
- Nightingale F. Notes on hospitals. London: Longman, Green, Longman, Roberts & Green; 1863.
- Pandurang Atmaram. A plea for a new medical college in Bombay. *Native Opinion.* 1885.
- Pandya SK. An interview with the Founder-Dean. In: Bhatnagar SM, Kothari ML, eds. *Golden Jubilee Souvenir Seth G. S. Medical College and K. E. M. Hospital.* 1976.
- Pandya SK. Medical education in Western India: Grant Medical College and Sir Jamsetjee

Jejeebhoy's Hospital. Newcastle-upon-Tyne: Cambridge Scholars Publishing; 2019.
- Ramanna M. Western medicine and public health in colonial Bombay, 1845–1895. Hyderabad: Orient Longman Pvt. Ltd.; 2002.
- Russell WH. The Prince of Wales' tour: a diary in India. New York: R. Worthington; 1877.
- Sanderson E, Melville L. King Edward VII: His life and reign. The record of a noble career. Vol 6. London: The Gresham Publishing Company; 1910.
- Setalvad CH. Recollections and reflections: an autobiography. Bombay: Padma Publications Ltd.; 1946.

Milestones (1907–1942)

1907 Bombay Police Charges Act passed, making it mandatory for municipal corporation to provide medical relief

1909 Municipal corporation asked by committee to put up proposal for hospital

1910 Governor of Bombay appealed for donation in memory of King Edward VII

1911 Memorial Committee decides location of hospital in northern part of the erstwhile island

1915 Dr Jivraj N Mehta invited by Bombay Medical Union for committee meeting of the proposed hospital

1916 CR 8246 Passed Proposal for college
Endowment by Seth Gordhandas Sunderdas

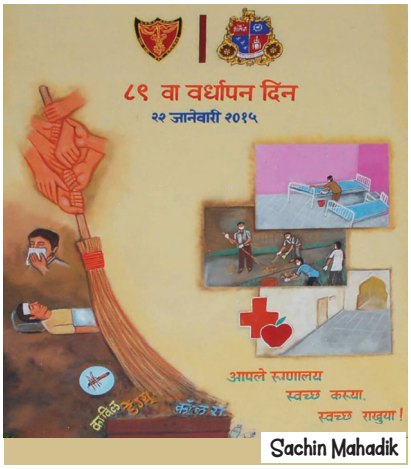
1924 CR 6575 passed Only Indians to be employed in KEM hospital

1925 Seth Gordhandas Sunderdas Medical College, the 12th medical college in India started

1926 Seth G.S. Medical College and King Edward VII Memorial Hospital inaugurated
KEM VII M Hospital actually started
College affiliated to University of Bombay
Training center for nurses
Staff Honorary
46 students
28 RMOs
100 Beds In hospital
Gymkhana of college had 8 departments

1927 Poor Box Charity Fund started
Nurses Training recognized
Post Graduation Commenced in Ophthalmology and Pathology with diploma and Degree Respectively
260 beds in hospital
Maternity cases shifted to Wadia

1928 Hospital pharmacopoeia published
MD, MS recognized
First blood transfusion at KEMH
1929 Annual Sports Day started
Clinical term for pediatrics in Wadia Children's Hospital
BSc affiliated to university of Bombay
1931 Staff Society started as Bahadurji society
1932 Circle duty system for nurses started
1934 80 students admitted
Pathology Museum christened Seth Jamnadas Lallubhai
1935 Social Welfare Center started
First college magazine released
Biochemistry and Biophysics incorporated
1936 Co-operative credit society started
Formal Instructions for MD Course started
1937 RMOs Mess started
1938 370 beds in hospital
Accommodation for 28 students in ladies hostel
1939 66 PG students
426 beds in hospital
1940 Tata Hospital started
Skin ward started
1941 Blood Bank started
1942 Dr Jivraj Mehta retired



Rangoli welcoming at the entrance of JMLT.

2

Municipal Corporation Presidents

The first city in India that attempted the formation of a municipality was Madras. The royal charter of 1687 was important in constituting municipal corporations in India. Madras was chosen in preference to Bombay as it was then the *Urbs Prima in Indis.* One mayor, 12 aldermen and 60 or more burgesses were appointed with the power of levying taxes on the building of the convenient Town House or Guildhall, public gaol, and a schoolhouse. It was only in 1726 that the Crown granted Letters Patent and declared that mayor's courts should also be established in Bombay and Calcutta. William Henry Draper was the first mayor of Bombay. The initial functions restricted judicial affairs and the regulation of prices and wages. The urban administration of the town was conducted by the officers of the East India Company under the direct orders of the Governor.

Measures were taken to improve health in the city by draining swamps and prohibiting the application of rotten fish to the toddy trees as manure. The woods were trimmed to permit the free perflation of the westerly breeze. A dam was constructed across the great breach. The island soon lost its reputation of being a charnel house. In the closing years of the 18th century, an institution of Justices of the Peace for the municipal and judicial administration of the city was created. On 17 February 1803, a terrible fire broke out in the north of the town. In March, the governor resolved to form a committee to report on the best means of repairing the destruction caused by the fire. This committee was named the Town Committee. Justices of the Peace were appointed to this committee.

The formation of a Municipal Government in Bombay was necessitated by the increasing spread of the city and the influx of people adding to the population. In the 1830s, the deliberate enlightened policy followed by Governor Mountstuart Elphinstone made it possible for enlightened native citizens to send their children to schools and colleges. Sir Bartle Frere, Governor, in a speech at the laying of the foundation-stone of the Elphinstone Circle in October 1864, remarked that 'the three great objects which Lord Elphinstone (nephew of Mounstuart Elphinstone) had ever kept in view were, firstly, the water-supply of the city; secondly, the efficient drainage of the whole town and island; and, lastly, the reclamation of the flats.' The first object had already been achieved by the construction of the Vehar Lake. When Sir Bartle Frere took up the reins of Government, he found that the three Justices of Peace, appointed by the Act of 1858, had effected little towards the completion of the other two objectives. The population was dissatisfied by the fact that they could play no role to effect the radical improvements in conservancy and

communications which were demanded by the spirit of those years.

One of the most notable features, therefore, of Sir Bartle's administration was the abolition of the old triumvirate and the passing the Act II of 1865, whereby the Justices for the Town and Island of Bombay were made into a corporate body, and the executive power and responsibility was vested in a Commissioner, appointed by Government for a term of three years.

The new system was unfortunately marred by one flaw, which eventually led to its discontinuation, and the passing of a new Municipal Bill. The powers of the Commissioner were so extensive that he was practically irresponsible and, in an age so fertile with great and costly works, he was tempted to spend the money of the rate payers in a far too lavish manner. Protests grew. Moolji Thakersey, a Bhatia leader, Sorabji Shapurji Bengalee (later to champion the medical education of women), and a young Pherozeshah Mehta (appointed Justice of the Peace in 1869) moved for radical change. The need for involvement of the public in decision-making and implementation was a serious consideration. Officials had to prove their merit and stand for re-election.

The Government felt compelled to create a new municipality, in which the rate-payers themselves should, through their representatives, have an authoritative voice.

Consolidation

The first real experiment in municipal government in India was made by the Municipal Act III which was passed by the Legislative Council of Bombay and received the sanction of the Government of India in 1872. It incorporated many of the items outlined by Pherozeshah Mehta. An electoral college was constituted with all members holding office for just two years.

The first municipal elections were held in 1873; and there came into existence from that date a Municipal Corporation, consisting of 64 persons, all of them rate-payers and residents of Bombay, of whom 16 were nominated by Government, 16 were elected by the Justices of the Peace (residents of Bombay), and 32 were elected by the rate-payers.

The first meeting of the Corporation constituted under the Act of 1872 was held on 4 September 1873. Meanwhile, a committee comprising Kashinath Trimbak Telang, Pherozeshah Mehta, Vishvanath Narayan Mandlik, Naoroji Furdunji, R.N. Khote, T. Blaney, P. Peterson, R.M. Sayani, J.U. Yajnik, Badruddin Tyabji, Grattan Geary (of Times of India), and J.H. Grant, recommended an increase in the number of elected members, to reduce Government nominees, and to further extend local self-government.

Viceroy Lord Ripon's memorable pronouncement (1882) on local self-government increased the quest of the leaders of society for a larger share in the city administration. The Government was forced to introduce a Bill in the Legislative Council on 16 July 1887. Kashinath Trimbak Telang, Pherozeshah Mehta and Kazi Shahabuddin helped modify the bill to secure greater public

participation. The Act of 1888 gave the citizens of Bombay a charter of local self-government which proved successful. It had been the first experiment of its kind in India. Three co-ordinate authorities were set up—Municipal Corporation, Standing Committee, and Municipal Commissioner. The Act gave independent power to the Commissioner within his own specified sphere of activity subject to general supervision and control by the Corporation and special and direct supervision and check by the Standing Committee.

Whilst the Commissioner was nominated by the Government, the Deputy Commissioner, Chief Accountant, Executive Engineer, and Health Officer were appointed by the corporation.

This Act also increased the number of councilors from 64 and 72, of which 36 were elected by rate-payers and graduates from Indian and British Universities. It created, for the first time, territorial constituencies by dividing the city in seven wards for purposes of election. It also granted special representation to the Bombay University and the Bombay Chamber of Commerce (two seats each). 16 councilors were elected by the Justices and a similar number was nominated by the Government.

The designation of the presiding authority in the Corporation was changed from Chairman to President and, in 1931–32, to 'His Worship the Mayor'.

A further constitutional change was effected in 1922 which abolished the representation of the Justices of Peace, and liberalized the franchise of rate-payers. In 1928, four seats were granted to the representatives of trade unions.

The Municipal Corporation building with domes and minarets, designed by F.W. Stevens, belongs to the early Gothic style, while the many domes which rise above gabbled roofs, impart an oriental flavor to the design. It was commenced in July 1889 and completed in July 1893. Bhatia Baug, the small circle of greenery in front of Victoria Terminus, was once the northernmost gate of the Fort, the Bazar Gate.

Changes between 1888 and 1925 were analyzed by Masani in Chapter XXIX and principally pertained to the plague epidemic, the first case being reported by Dr R.N. Ranina from Bhandup Street. A Special Plague Administration was set up under the control of the Municipal Commissioner. Another outcome of this epidemic was the setting up of the Bombay City Improvement Trust.

The Municipal Act of 1865 had divided the cost of the police to maintain order in the city between the Government and the Corporation. In 1873, the Government sopped paying its share. This liability was a source of friction between the Government and the Corporation. Lord Ripon's despatch of 1882 sought to put an end to this by stating: '… the only function which the Municipalities discharge in regard to police is the provision of funds for the purpose of meeting the cost of the police force. They exercise no control over the police and cannot therefore be expected

to take any special interest in the efficiency of the force... The Governor-General in council would therefore be glad to see municipal bodies relieved altogether of the charge for police, an equal amount of expenditure on education, medical charity and, if possible, public works of local interest being transferred to them with as full control as may be expedient over the details of such expenditure...' However, the vacillation of the Government of Bombay ensured that the status quo prevailed till the Police Charges Bill was introduced in the Legislative Council on 4 September 1907.

Among other conditions, the Government agreed to relieve Municipal Corporation of Bombay of the Police Charges of the city on the understanding that the Corporation will undertake certain liabilities of corresponding extent hitherto devolving on Government. Corporation would, in future, give a grant-in-aid to certain existing medical institutions and make full provision for public vaccination along with expansion of medical relief and primary education.

Sir Steyning Edgerley I.C.S. Chief Secretary to the Government of Bombay, called it 'a Bill to settle the outstanding differences between the Corporation and the Government'. He congratulated Pherozeshah Mehta, 'the hero of all the battles fought by the Corporation for an equitable adjustment of the police charges. He has been connected with the question, I think, for very nearly forty years and I think it must be a source of great satisfaction to him to see the conclusion of the matter.'

Eminent Corporators

In July 1875, Dadabhai Naoroji was elected as a member of Bombay's Municipal Corporation and, in January 1885, he became the vice-president of the Bombay Presidency Association. His stint in the Corporation was brief as he left the next year for England.

Pherozeshah Mehta was called the Father of Municipal Government in Bombay. Masani pays fulsome tribute to him. 'The position which Pherozeshah occupied in the Corporation was without parallel in the whole of India…' He and his colleagues changed the constitution of the Corporation by nominating justices to a democratic body. It was through his incessant effort that the work of medical relief was entrusted to the Municipal Corporation in 1907 under the Police Charges Act. His towering figure dominated the stage for more than a generation. He died at Nepean Sea Road in Bombay on 5 November 1915. The Municipal and University offices and many other institutions observed mourning. His statue adorning the Municipal Corporation Building was erected in 1923.

Amongst the other eminent citizens who served the Corporation was Sir Chimanlal Setalvad. He had the unique distinction of occupying the Vice-Chancellorship of the University of Bombay for 12 consecutive years (1917–29), the longest period for which any one has hitherto been privileged to serve the University. He was on the Senate from 1895 till his death in 1947, and on the Syndicate from 1899 up to 1929. He represented the University in the Municipal

Corporation for 20 years and in the Bombay Legislative Council for 12 years.

The Municipal Corporation election held on 29 January 1923 resulted in newly elected members including Sarojini Naidu, K.F. Nariman, Jamnadas Mehta, Joseph Baptista, Dr G.V. Deshmukh, V.J. Patel, Mia Mohammed Chotani, V.L. Napoo, Dr M.B. Velkar, H.P. Thackersey, B.N. Motiwalla, L.R. Tairsee, Dr Sathe, S.L. Silam, A.H.S. Khatri, V.A. Desai, P.G. Sahasrabuddhe, F.J. Ginwala, Avantikabai Gokhale, and Umar Sobani. Other Indians who have served the Corporation include Cowasji Jehangir, Homi Mody, Vithalbhai Patel, Vithal Chandavarkar, Yusuf Meherali, Dr M.D.D. Gilder, Dr Bhalchandra Bhatwadekar, V.N. Mandlik, Rahimtulla Mohamed Sayani, Ibrahim Rahimtoola, Dinshaw Wacha, Vithaldas Thackersey, M.R. Masani and S.K. Patil.

Presidents of Bombay Municipal Corporation 1873–1932

1873 – 1873	Captain George F. Henry
1874 – 1874	Captain George F. Henry, Mr J.A. Forbes
1875 – 1875	Mr J.A. Forbes, Mr. Dossabhoy Framji
1876 – 1876	Mr Dossabhoy Framji
1877 – 1877	Col H.F Hancock, R.E.
1878 – 1878	Col H.F Hancock, R.E.
1879 – 1880	Rao Saheb Vishwanath Narayan Mandlik, C.S.I.
1881 – 1881	Mr Thomas Blaney
1882 – 1883	Sir Frank H. Souter, KT. C.S.I.
1883 – 1884	Mr Raghunath Narayan Khote, C.I.E.
1884 – 1885	Mr Pherozeshah Merwanji Mehta, M.A., LL.B., Barrister-Of-Law
1885 – 1886	Mr Pherozeshah Merwanji Mehta, M.A., LL.B., Barrister-Of-Law
1886 – 1887	Deputy Surgeon General H. Cook, M.D., F.R.C.P., F.M.S., F.G.S., Capt Sir Henry Morland, H.M.I.M., F.R.G.S., F.R.A.S., Assoc., C.I.C.E.
1887 – 1888	Capt Sir Henry Moland, KT., H.M.I.M., F.R.G.S., F.R.A.S., Assoc., C.I.C.E.
1888 – 1889	Mr Rahimtulla Mahomed Sayani, M.A., LLB
1889 – 1890	Mr Grattan Geary
1890 – 1891	Mr Muncherji Cowasji Murzban, F.K.I.B.A., Asso., M.I.C.E.
1891 – 1892	Mr George Cotton
1892 – 1893	Mr Javerilal Umiashankar Yajnik
1893 – 1894	Mr Thomas Blaney, J.P
1894 – 1895	Mr Abdulla Meherali Dharamsi, B.A. LL.B., J.P
1895 – 1896	Mr G. W. Roughton, J.P

1896 – 1897	Mr Cowasji Hormusji, G.G. M.C., J.P
1897 – 1898	Sir George Cotton, KT., J.P.
1898 – 1899	Mr Bhalchandra Krishna Bhatwadekar, L.M., J.P.
1899 – 1900	The Hon'ble Mr. Ibrahim Rahimtoola, J.P.
1900 – 1901	Mr C.T Burke, B.E., M.I.C.E, J.P. Mr. S. Rebach, M.I.C.E., J.P.
1901 – 1902	Mr Dinshaw Edulji Wacha, J.P.
1902 – 1903	Mr Mulji Bhawanidas Barbhaya, J.P.
1903 – 1904	Mr Fazalbhai Vishram, C.I.E., J.P. Mr. Jamesh Macdonald, J.P.
1904 – 1905	Mr Jamesh Macdonald, J.P.
1905 – 1906	The Hon'ble Sir Pherozeshah Merwanji Mehta, K.C.I.E., M.A., LL.B., Barrister -At -Law, J.P.
1906 – 1907	Dr Accacio G. Viegas, L.M. & S., J.P.
1907 – 1908	The Hon'ble Mr. Vithaldas Damodar Thackersey, J.P.
1908 – 1909	The Hon'ble Mr. G.O.W. Dunn, M. INST., C.E., M.R. San. Inst., J.P.
1909 – 1910	Mr Jaffer Rahimtoola, B.A., Barrister -At -Law, J.P.
1910 – 1911	Dr Kawasji Edulji Dadachanji, L.M. & S., J.P.
1911 – 1912	The Hon'ble Sir Pherozeshah Merwanji Mehta, K.C.I.E., M.A., LL.B. Barrister -At -Law, J.P.
1912 – 1913	The Hon'ble Mr. Manmohandas Ramji, J.P.
1913 – 1914	Mr A.M. Tod, J.P.
1914 – 1915	The Hon'ble Sir Fazulbhoy Currimbhoy Ebrahim, Kt, J.P.
1915 – 1916	Mr Phiroze Cursetji Sethna, J.P.
1916 – 1917	The Hon'ble Mr. Chunilal V. Mehta, M.A., LL.B., J.P.
1917 – 1918	Mr J.A.D. McBain, C.I.E., J.P.
1918 – 1919	Mr Rahimtoola Currimbhoy, B.A.
1919 – 1920	Mr Cowasji Jehangir Readymoney, O.B.E., B.A. (Cantab.), J.P.
1920 – 1921	Mr Vasantrao Anandrao Dabholkar, O.B.E., J.P.
1921 – 1922	Sir Sassoon David, BART., J.P.
1922 – 1923	Mr Mirza Ali Mohamed Khan, M.A., LL.B., J.P.
1923 – 1924	Mr H.P Mody, M.A., LL.B
1924 – 1925	Mr Vithalbhai J. Patel, Barrister -At -Law
1925 – 1926	Mr Joseph Baptista, L.C.E. (Bom.), B.A., LL.B.(Cantab.), Barrister-At-Law
1926 – 1927	Mr Rahimtoola Meherally Chinoy, J.P.
1927 – 1928	Dr Shiavax Sorabji Batliwalla, F.C.P.S., L.M. & S.,J.P.
1928 – 1929	Dr G. V. Deshmukh, M.D. (Lond.), F.R.C.S. (Eng.)

1929 – 1930	Mr Meyer Nissim, M.A., J.P.
1930 – 1931	Mr Hooseinbhoy Abdullabhoy Lalljee
1931 – 1932	J.B. Boman-Behram, B.A., LL.B., J.P.

Mayors of Bombay Municipal Corporation 1931–1948 (President was redesignated as His Worship the Mayor, Bombay Municipal Corporation, from November 1931)

1931 – 1932	Mr J.B. Boman-Behram, B.A., LL.B., J.P.
1932 – 1933	Mr Vithal Narayan Chandavarkar, B.A. (Cantab.), Barrister-At-Law, J.P.
1933 – 1934	Dr Moreshwar Chintaman Javle, J.P.
1934 – 1935	Mr Hoosenally M. Rahimtoola, B.A., M.L.C., J.P.
1935 – 1936	Mr Khurshed Framji Nariman, B.A., LL.B.
1936 – 1937	Mr Jamnadas M. Mehta, M.A., LL.B., Barrister-At-Law, M.L.A.
1937 – 1938	Dr Elijah Moses, M.D., J.P.
1938 – 1939	Mr Sultan M. Chinoy, LP.
1939 – 1940	Mr Behram N. Karanjia, J.P.
1940 – 1941	Mr Mathuradas Tricamji, B.A.
1941 –1942	Dr J.A. Collaco, L.M. & S., M.L.C.
1942 – 1943	Mr Yusuf J. Meherali, B.A., LL.B.
1943 – 1944	Dr Manchershah D.D. Gilder, M.D. (Lond.), F.R.C.S. (Engl.), M.L.A.
	Mr Minocheher R. Masani, B.A. (Bom.), LL.B. (Lond.), Barrister-At-Law
1944 – 1945	Mr Nagindas T. Master, B.A., LL.B., M.L.A.
1945 – 1946	Dr Jos. Alban D'Souza, B.A., L.M. & S.
1946 – 1947	Mr Mohamedbhoy I.M. Rowies
1947 – 1948	Mr A.P. Sabavala, B.A., Barrister-At-Law

Suggested Reading

- Masani R P: *Evolution of local self-government in Bombay*. Bombay: Oxford University Press 1929
- Chaudhari K K (Editor): *Maharashtra State Gazetteers. Greater Bombay District. Volume 1.* Bombay: Gazetteers Department, Government of Maharashtra. 2nd edition. 1986

3

Formative Years (1925–1942) from the Lens of Annual Reports

Late Dr Sunil Pandya's Remarks

1. The Dean submitted annual reports on the progress of these institutions. It appears that the format was dictated by the requirements of the Municipal Corporation and the Committee of the Superintendents of Hospitals in Bombay. Each report starts with the number of meetings held during the year by the Advisory Medical Board and Staff. (I have been unable to determine the constitution of this board or obtain minutes of their deliberations and decisions made. I presume that the Board consisted of the Dean, Assistant Dean and senior members of the Honorary and Professorial staff.)

2. Since the early formative years were crucial, we have analyzed the annual reports during Dr Jivraj Mehta's stewardship serially. The last two reports are especially valuable as they contain his own assessment of the progress over the past 17 years.

3. Honorary and professorial staff members were often referred to as 'G. M. Kurulkar, Esq., M.B.B.S. and C. C. Merchant, Esq., M.B.B.S.' Esquire was a title added by the British after a man's name on envelopes and official documents. If 'Esq.' was used, 'Mr.' was not used before the name. The use of the title 'Esquire' has its origins in the Middle Ages. An esquire was a candidate for knighthood, acting as attendant and shield bearer for a knight. The word was derived from the Latin 'scutum'—a shield. Over time, the title became one denoting respect, rather than a specific occupation.

4. Dr Mehta provided details on the qualifications of individual staff members referred to in the report. Thus we note 'Dr Homi Darasha Gandhi M.B.&B.S., F.R.C.S. (Edin)' and 'Dr Mrs Dossibai J.R. Dadabhoy M.D. (Lond), M.R.C.P. (Lond)'.

5. Dr Mehta was especially particular to provide details of expenses and income, highlight attempts at lowering costs and show that everything possible was being done to ensure efficiency at the lowest possible cost. The rupees–annas–pice format was used, a rupee being equal to 16 annas, an anna being equal to four pice and a pice (or paisa) being equal to three pies.

6. 'Financial stringency' was often the reason provided by the Corporation for not meeting the requirements of the college and hospital. An especially striking example was keeping the newly created venereal disease wards empty for years.

7. Examination results–of nurses, medical students, postgraduates–were presented without analysis of the causes of success or failure. Equally unfortunate is the fact that we are not provided the names of individuals who passed examinations with distinction. An interesting exception is found in the reports of nurses but this was provided for just a few years.

8. When the womens' hostel was opened in 1938, 9 students from the Grant Medical College were admitted there as well. (Other examples of the cooperation between the two medical colleges was the coaching of students appearing for the Primary F.R.C.S. examination in 1939 and the ill-fated refresher course for family physicians.)

9. Dr Mehta's reports from 1934–1935 have an account based on a social survey of newly admitted students. We are told their average age at the time of admission and when they matriculated. We are also told how many were single, married, or betrothed. The final nugget was the source of income of their parents in general terms—service, business, medical profession, legal profession, pension, landed property, or agriculture.

10. Dr Mehta was aware of the fundamental importance of research by staff members of the college and hospital. It was a goal he focused on even as the institutions were being formed. As Dean, he made many efforts towards securing adequate funds for the institute. Drs P.C. Bharucha, M.D.D. Gilder, N.A. Purandare and R.N. Cooper responded overwhelmingly to his appeal for financial donations to the college research corpus. However, similar requests to the Indian Research Fund Association were initially disregarded. He persuaded Sir Walter Morley Fletcher to visit KEM Hospital on his visit to Bombay. He showed him the commendable research going on and also impressed upon Sir Walter the acute need of Government support for such research programs. The result was Government sanction of funds within a few weeks for the same projects through the Indian Research Fund Association (IRFA). Eventually, Dr Mehta became a member of the Board of IRFA. His later reports feature details on each project being studied and of publications resulting from them.

11. It would be interesting to learn how mention of Dr Jivraj Mehta's arrest and detention in 1938 was avoided, his absence being treated as 'on leave'.

12. Dr Mehta was also particular in listing all donations to the institutions and thanking the donors in the annual reports. In the earlier years, we find references to *The Lightfoot Refrigeration Company Limited.* This company had its origins in Hampshire, Britain. It was established in 1885 by Mr Thomas Lightfoot. His original chemical refrigeration plants were made for warships. Dry air refrigeration was later replaced by ammonia and carbon dioxide compressors. The company

was dissolved in 2011. Oxygen was a byproduct during their operations. This was supplied free of cost to the hospital.

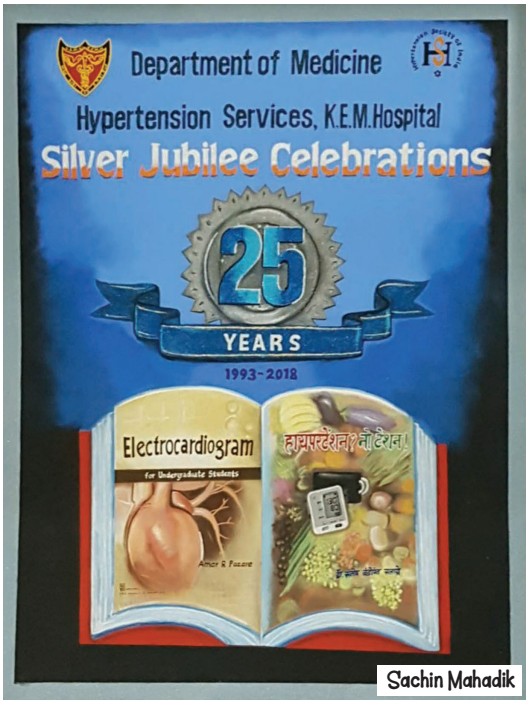
13. Other donors, especially to the Nursing School, featured included:

    Jam-e-Jamshed is a weekly Mumbai newspaper published in Gujarati and in English. It is the second oldest newspaper in Asia. The paper was originally published as a weekly from 12 March 1832 by P.M. Motiwala. In 1853, it was converted into a daily but because of financial pressures in the 1960s, it yet again became a weekly.

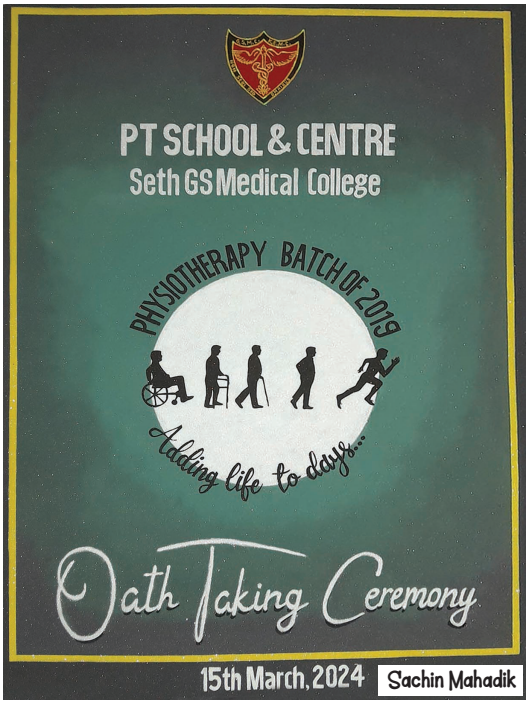
    Kaiser-i-Hind was also a newspaper published in Gujarati and English. It was started in 1882 by Framji Cowasji Mehta.

    The Times of India and *The Illustrated Weekly of India* were publications of Bennett Coleman & Co. *The Bombay Times and Journal of Commerce* was published from 1838 onwards and was replaced by *The Times of India* in 1861. *The Illustrated Weekly of India* was published initially as the weekend edition of *The Times of India*. The new name was adopted in 1923. The last issue was published in 1993.

    Each report incorporated tables providing relevant details. A series of appendices following the report are invaluable for the data provided in them.



Rangoli greeting at the entrance of JMLT.



Rangoli adorning the entrance of JMLT.

4

The First Year: Annual Report 1925–1926

Municipal Officers

During the year 1925–1926, Mr Joseph Baptista was the President of the Municipal Corporation, Mr C.W.E. Arbuthnot was the Chairman of the Standing Committee and Mr H.B. Clayton was Municipal Commissioner.

The death of Mr George Wittet, at the age of 47 years, on 10 September 1926 at the Byculla Club was recorded with sadness. It was noted that he had been ill for a considerable period but the death was unexpected.

Some Statistics

There were in all 7 endowments and a donation of Rs. 20,000 and of 2 sets of books for the library. The Standing Committee recorded their grateful acknowledgments for the same. The Hospital did some good work in spite of its nascent stage. The number of in-patients treated was 274 and that of out-patients 1,311. Police cases, roadside accidents or those involving Medicolegal work were not admitted but arrangements were being made to admit them.

Functioning of the Institutions

Dr Jivraj Mehta and the senior medical consultants framed the rules and regulations for the working of the College and Hospital.

Dr Rustam Cooper explained:

To ensure smooth working, some departures from accepted policies were instituted. It was the usual practice in hospitals to have surgeons in order of seniority. The senior surgeon became *ipso facto* professor of surgery. The surgeons at the KEM Hospital decided differently. It was resolved to drop the high sounding title of professor and call the surgeons just lecturers. It must be said to the credit of Drs G.V. Deshmukh and A.P. Bacha that, though they had a senior standing in the profession, they agreed to this arrangement. This plan was accepted by all the other departments and has been responsible for the great fellow-feeling that has always prevailed. Many heartaches and petty jealousies were thus averted.

Part of the success was also due to the extraordinary qualities of Dr Jivraj Mehta.

'I must tell you of a deep conviction that I hold. Discipline can only be expected of others when you are completely disciplined yourself. Unless you put in all the work that you are expected to do and more, you cannot hope to make others put in their due effort. Much discipline comes about not by word of mouth but from example. I would come over to the hospital in the middle of the night, keep my car outside the hospital compound

so that no one knew in advance of my presence, and moved about the hospital, entering the wards through the servants' staircase to check for myself that no one on duty misused his time. I preferred using the small, winding staircases near the toilet blocks so that I could check on the sanitary facilities. Call books were checked regularly and doctors not attending within a reasonable period were disciplined. I would taste the patient's food from time to time and walk into the student's hostel and resident's quarters at midnight to see how they lived and worked.'

Dr Mehta also paid tribute to his colleagues.

'I was fortunate enough to have as my colleagues on both hospital and medical staff, individuals of the highest capability and deepest integrity. There was also a great bond of striving towards a common aim—ensuring a brilliant success for these newly founded institutions. Remember, these were the first medical institutions in the country staffed by Indians at the professorial level and there was a great sense of pride in the staff members. You will realize the extent of feeling for the institute when I tell you a little incident. In the early years with a view to stimulate research, I requested those honoraries having lucrative practices to donate part of their income to constitute a research fund. I was not disappointed. On the contrary, I was overwhelmed by the response displayed by Drs P.C. Bharucha, M.D.D. Gilder, N.A. Purandare, and R.N. Cooper.

I will tell you of another incident. The senior most physicians and surgeons insisted on teaching the junior clinical batches as they felt that the foundation of the clinical training imparted to the junior medical students was of paramount importance. The students in turn reciprocated the keen interest displayed in their welfare by their teachers and were equally enthusiastic about making good…'

The College

The college opened on 1 June 1925 as the monsoon set in. Though the building was ready, much of the equipment needed by the various departments had not yet arrived. Work started with very scanty apparatus, furniture, and without library or gymkhana. 46 students, including 6 women, joined the college at its opening. The construction of the hostel buildings with an accommodation for about 100 students was taken up during the year and the work was done as expeditiously as possible with a view to make it available for occupation by June 1926.

A small office was created and the work of equipping and managing of the college and the hospital, which had hitherto been done through the Health Department, was taken up.

Although the college was constructed with a view to provide for the admission of 80 students each year, in the first year, the admission was restricted to 46 students, six of whom were women. This was done to give the teachers time to organize the schedules of lectures and practicals, prepare specimens for the anatomy, pathology, pharmacy, toxicology, medical jurisprudence, and public health sections.

The donation from the trustees of the late Sir Jamnadas Lallubhai for the construction of a separate museum building connected to the college building by a corridor was of great help. Professor V.R. Khanolkar developed the splendid museum.

Merit scholarships were introduced to attract the best students to the college. Funds were sought and obtained to help poor but deserving students meet expenses. Often Honorary staff members paid the tuition fees of their students.

The Hospital

The hospital was opened for the reception of patients on 15 February 1926. In April, the standing committee of the Municipal Corporation reviewed its progress. Four pavilion wards, two maternity and gynecology wards, and one eye ward with the total accommodation of 125 beds had been opened so far. With the exception of the X-ray and orthopedic departments, the equipment for which had not yet arrived, all outpatient departments had been opened. All the operation theaters except the main theaters were also in use. The number of patients was 105 and the demand for further admissions was growing rapidly. The nursing and support staff was fully employed in the wards and outpatient departments and it was necessary to strengthen them immediately to cope with the growing number of patients. The Dean of the hospital had pointed out that it will not be possible to admit more than 150 patients with the present staff. (*The Times of India* 14 April 1926)

Problems had to be dealt with and Dr Jivraj Mehta noted,

'The apparatus ordered for the hospital and the college was found, on actual working, to be inadequate and additional apparatus and furniture for some of the departments at least was felt necessary. This has been ordered after consultation with the staff concerned and it is expected that during the next year, the hospital and the college will be fairly well equipped.'

The application for the affiliation of the college and hospital for the fall courses of studies for its degrees of M.B.B.S. was made on 20 November 1925 and the Inspection Committee of the University made their evaluation on 30 January 1926 and 13 March 1926.

The hostel, gymkhana, and a well equipped library were expected to be made available during the next year.

Appendix C and D summarized the clinical data in the hospital during the first year.

Separate buildings were constructed on the plot of land to the East of what is now Dr SS Rao Marg for the Dean's Quarters, the residence of the Assistant Dean, and a multi-storeyed Nurses' Quarters. The original Nurses' Quarters, which were located towards the south of the hospital and attached to it by a covered corridor, was now used to house resident doctors. The new Nurses' Quarters included facilities for a college of nursing.

APPENDIX "C & D."

Summary of patients treated at the K. E. M. Hospital according to nature of Diseases, 15th February to 31st March 1926.

Nos.		Infective Diseases.															Other General Diseases.						Systematic Diseases.																														General and local.		Labour.		
		Cholera.	Dysentery.	Enteric Fever.	Gonorrhœa.	Kala-Azar.	Leprosy.	Malaria.	Plague.	Pneumonia.	Pyrexia of uncertain origin.	Rheumatic Fever and Rheumatism.	Small-pox.	Syphilis (Primary and Secondary).	Tubercle of the lung, other tubercular diseases.	All other infective diseases.	Anæmia.	Diabetes.	Scurvey.	New growth. Non-Malignant.	New growth. Malignant.	All other general diseases.	Dis. of the Nervous System.	Dis. of the Eye.	Dis. of the Ear.	Dis. of Nose.	Dis. of Circulatory System.	All diseases of the respiratory system except pneumonia and tubercular of the lungs.	Dyspepsia.	Diarrhœa.	Abscess of the liver.	All other diseases of the liver.	Appendicitis.	All other diseases of the digestive system.	Inflammation and suffocation of lymphatic glands.	Goitre.	Bright's disease.	All other diseases of urinary system.	Hydrocele.	Other diseases of the generative system.	Diseases of the organs of locomotion.	Diseases of the connective tissue.	Ulcers.	Other diseases of skin.	All other local diseases.	Injuries (General or local).	Poisoning. By opium.	Poisoning. By other poisons.	Normal.	Abnormal.	Total.
1	Admitted In-patients	...	9	5	..	...	...	11	.	6	5	3	...		38	2	6	...	...	6	11	9	7	7	2	2	4	25	2	6	1	1	8	18	3	...	5	6	12	5	6	.	3	5	7	...	...	25	3	274
2	Admitted Out-patients	...	14	5	1	2	2	173	...	9	5	8	1	25	56	4	25	..	...	11	12	56	31	76	5	13	15	72	15	21	1	3	9	109	13	...	...	11	7	45	37	23	24	41	272	25	...	1	83	...	1,811
3	Discharged cured In-patients ...		5	1	...	...	...	7	...	2	...	...	...	...	4	...	2	...	...	3	2	5	...	2	2	2	1	6	1	5	...	.	1	2	3	...	...	1	5	3		3	...	...	...	3	...	...	20	...	91
4	Relieved In-patients	...	...	...	...	...	.	1	..	1	..	...	...	...	7	...	...	...	...	...	2	...	2	...	..	...	2	2	1	1	...	...	...	...	..	...	..	...	3	...	...	...	...	...	...	.	...	...	...	...	22
5	Discharged otherwise or absented ... } In-patients..	...	...	...	...	...	.	1	...	...	4	...	...	...	5	...	..	..	...	...	5	1	...	1		...	...	1	..	..	...	...	2	1	...	...	...	..	1	1	...	..	...	...	...	...	...	...	...	...		23
6	Died In-patients	.	2	..	...	...	...	...	..	1	...	...	...	...	5	...	1	...	.	...	...	...	...	...	..	...	...	6	...	...	...	..	1	1	...	...	.	...	...	...	..	..	...	1	...	..	...	...	...	...	18
7	Remaining In-patients	...	2	4	...	...	...	2	...	2	1	3	...	...	17	2	3	...	...	3	2	3	5	4	...		1	10	...	...	1	1	4	14	...	...	...	4	...	5	5	3	...	2	5	4	...	...	5	3	120

From 1926, all resident doctors had to join the Resident Medical Officers' Mess–a feature that did not exist in any other teaching hospital in the country. Dr Mehta's goal was to foster an *esprit de corps* among them and enable them to be in constant touch with one another. When they were housed in the southern building, connected to the hospital by a covered corridor, it was much easier for them to attend to emergencies and seriously ill patients. Dr Mehta ensured discipline by visiting the wards in the early hours of the morning, climbing up the spiral staircase and going from ward to ward, studying call books, noting whether the resident had come and seen the patient and the promptness with which this was done. The lackadaisical resident who prescribed from his room without coming to the ward was summoned to the Dean's office the next morning.

Dr Vatsala Samant has described the frequent presence of the Dean and senior teachers at lunches in the Residents' Mess and the salutary effects of their presence.

Staff Society

Soon after the main organisation tasks of hospital and college had been attended to, Dr Mehta and the senior teachers set up the Staff Society where all members of the teaching staff and resident doctors met in the evening once a month. Dinner was followed by presentation of a paper and discussion of patients with interesting diseases. This provided an additional impetus for research studies. Dr Rustam Cooper also presented papers on the history of medicine at these meetings in an attempt to awaken interest in residents.

In addition, fortnightly meetings were held in departments such as medicine and surgery where patients were discussed.

Poor Box Charity Fund

Dr Mehta also focused on the needs of poor patients.

Right from the start, a record was kept of the names and addresses of all people who had referred patients for treatment or admission at the hospital. On auspicious occasions such as their respective New Year's Day, a letter was sent to each of them requesting contributions to the Poor Box Funds

Boxes for the collection of donations from grateful patients and relatives were placed in various sections of the outpatient department and in each ward.

Dr Mehta also met senior personnel in the various textile mills, engineering establishments, and factories around the hospital and requested donations from them as their workers came to the hospital as patients.

Collections in these funds were used to purchase expensive drugs, injections, artificial limbs, hernia trusses, crutches and other items needed by poor patients. They were also used to meet the travelling expenses back to their villages and towns after discharge from the hospital. It was thus possible to provide additional facilities over and above those available from municipal funds. Sums obtained as

donations were also set aside each year to provide a corpus that was to be used for the construction of a convalescent home. Patients needing prolonged rehabilitation such as those with paraplegia and fractures were to be housed there. When Dr Mehta retired in 1942, this corpus was handed over to the Municipal Corporation who used it to build the convalescent home near King Edward VII Memorial Hospital–later utilized as the orthopedic center.

Research

Emphasis was placed on research right from the start. Dr Mehta encouraged teachers and postgraduate students to apply to the Indian Research Fund Association (IRFA). This organisation metamorphosed into the Indian Council of Medical Research (ICMR). Funds were obtained not only from IRFA but also from the Medical Research Council of England.

He also requested senior consultants such as Drs P.C. Bharucha, N.A. Purandare, M.D.D. Gilder, and R.N. Cooper for assistance to pay stipends to Research Associates in the college and hospital and they responded generously. Heads of pharmaceutical companies were also approached for such grants.

After a few years, the Municipal Corporation agreed to levy a contribution of Rs. 500 per year for every student admitted to the college from the state of Central Provinces and Berar (which later became Madhya Pradesh). Five such students were admitted each year. Since the course lasted five years, the levy was on 25 students each year. The Dean was thus provided Rs. 12,500 each year for a number of years for setting up a Research Fund in the institution itself.

Some of these students (from CP and Berar) later held high positions such as Superintendent, Sir Jamsetjee Jejeebhoy Group of Hospitals; Dean, Grant Medical College; and Surgeon-General, Government of Bombay, Rajasthan, Madhya Pradesh and Mysore.

Cooperation of Municipal Authorities

Municipal Commissioners, elected members of the Bombay Municipal Corporation in the Standing Committee and the Medical Relief Committee, and officers such as the Chief Accountant and the City Engineer were kept informed of the progress in the college and hospital. Needs were conveyed to them as they arose in the form of detailed proposals backed by data. Dr Mehta recorded that they always attended to requirements in good time and expedited work.

Other Bodies

Interactions were necessary with the University of Bombay, the Medical Research Council, the Indian Medical Association and professional organizations concerned with the various sub-specialties. Dr Mehta and senior teachers were either founder-members or on Boards and Committees in several of these agencies.

Art of Administration: The Role of the Dean

Dr Mehta pointed out that the art of administration of the college and hospital

needed a cool temperament and the capacity of going fully into the essentials of relevant matters. Although he did not refer to it, the Dean had to be like the proverbial pioneer Indian Civil Service (ICS) Officer. The Service had modified the statement common to the Bible and the Quran to formulate a cardinal principle–not a leaf must fall from a tree without the officer knowing it.

The Dean had regular productive meetings with members of the Advisory Medical Board and senior members of the teaching staff, the residents, and students–singly and in groups. Some of these meetings were devoted to formulate the teaching program during each term; learn the needs of departments–especially for equipment and apparatus; and monitor the nature and quality of teaching and learning and other such tasks. Data collected was used when assessments were to be made for appointments and promotions.

As described vividly in his interview, D. Mehta went around all sections of the college and hospital on stated days and also unannounced–the wards, the general stores, medical stores, food and milk sections, residents' and students' hostels. He would stop food trolleys for the patients in corridors and sample the food being sent to them. He lunched with resident doctors. Most impressive (and feared) were his rounds during what are termed the witching hours (midnight to 3 a.m.).

Dr Mehta emphasized that it was possible to get these institutions off on a flying start because of his eminent colleagues who spared no effort. He also pointed that the fact that he remained in charge for 18 years gave him the ability to initiate practices and modify them as required over time, forge contacts which enabled development and brought in donations, and enable smooth and progressive administration. 'Those who can hold such posts for a few years only suffer from a great handicap.'

Analysing the components of the art of hospital administration, he felt that a deep analysis of problems as they arose, 24-hour devotion to the institution, and a constant effort to keep in touch with patients and their families was of great importance. Students and staff (medical, nursing, administrative, support) needed discipline tempered by friendly counsel. He strove to solve their difficulties as they arose whilst ensuring that there were no conflicts of interest between the different categories.

Economics

Dr Mehta felt that economics was a very important point in hospital administration. 'An effort should be made to see that every rupee spent on maintenance brings in sixteen annas worth of return.' He took great care when tenders were prepared for every item–hospital equipment; apparatus in laboratories; drugs; surgical dressings; general stores; dietary requirements for patients, residents, and nurses; and other necessities. Constant care was also exercised in checking receipt of items in the various stores and their disbursement to the various departments. He checked statements every week, fortnight, month, or quarter to assure smooth and efficient working.

Since college and hospitals had to function smoothly, Dr Mehta also ensured prompt payment of every bill. Delay in payment was investigated. Registers showed receipt of each bill, the value, and when the payment was made. A remarks column was provided for explanations.

Almost fifty percent of the cost in the hospital was on account of salaries and allowances. Every request for additional staff was studied carefully. Dr Mehta acknowledged the valuable help provided by Assistant Dean Dr Rustomji E. Dadachanji in this matter and in keeping the hospital, college premises, and gardens in excellent trim. He compared the costs of his institutions with those in similar institutions in the city and was gratified to find them satisfactory.

Need for a Spirit of Social Service

In 1955, some years after he left these institutions, Dr Mehta, then Minister for Finance and Prohibition in the Government of Bombay, emphasized the need for all physicians, especially those in teaching institutions, to imbibe the spirit of social service and make the health and welfare of the people their primary concern. Such an outlook is best instilled whilst the physician is a medical student.

Professionals in public service must be enabled to make comfortable living and meet social obligations. At the same time, they must eschew money-making as the motive behind their professional efforts. This is facilitated by prohibiting private practice to teachers in medical colleges. He pointed to the All India Institute of Medical Sciences in Delhi, where this was practiced successfully. Freed from the need to cater to private patients, teachers could excel in teaching and research as well.

He envisaged preventive and curative medical care in villages and small towns through health units, maternity and child care centers, cottage hospital, and mobile medical units manned by committed and competent persons.

Permanent Affiliation for M.B.B.S.

An application was made on the 20 November 1925 for the permanent affiliation of the College for the full course of M.B.B.S. and the Inspection Committee of the University visited the College on the 30 January and the Hospital on 13 March 1926. The University has since been pleased to affiliate the College under the conditions stated in the Committee's Report. The remark of the Inspection Committee that 'the system of having Honorary Medical staff is quite the rule in the United Kingdom but it is quite new to India and the results of the working of the King Edward VII Memorial Hospital will be watched with interest by all' is significant and it was hoped that this experiment will prove a success and serve as a model to all of India.

The Committee's Report

Report of the committee appointed by the syndicate to make the local inquiry prescribed by the Indian universities act in respect of the application for affiliation of the Seth Gordhandas

Sunderdas medical college.

We visited the Seth Gordhandas Sunderdas Medical College on Saturday, January 30th,1926 and the King Edward VII Memorial Hospital on March 13th, 1926. On both the occasions we were met by the Dean and several members of the staff, who took us round, showed us the records, and discussed with us the questions relating to the organisation and equipment of the College and Hospital, and the number of students to be trained there.

At the time of our first inspection in June 1925, the hospital was still under construction, the equipment of the library and the laboratories was not complete as the books and the apparatus had not arrived and the number of bodies available for dissection was uncertain. Since then very rapid progress has been made. The hospital building is now complete and ready for occupation; the college library contains a good number of reference and text books; the laboratories are thoroughly equipped, and an adequate supply of dead bodies for dissection has been ensured.

The Hospital has a total accommodation for 300 beds. Out of these 100 are now equipped and available for patients. The remaining 200 beds are also being equipped and the Dean assured us that they will be ready before June this year.

The buildings are palatial, well-ventilated and well-kept. The sanitary arrangements are satisfactory. There are separate Operation Theaters for surgical, obstetrical, gynecological, ophthalmic, septic and minor Surgery cases. With the exception of the X-ray department, all the departments of the Hospital have commenced to work. The X-ray department is expected to start work at an early date.

While discussing the question of the number of students to be trained at the institution, the Dean told us that he was prepared to admit students for Hospital training from June next, as all the departments were practically in working order. By that time there will be enough clinical material for the training of about 60 students and we recommend that the Dean may be permitted to admit students who have passed the Intermediate M.B., B.S. Examination for their hospital training. This step will materially help to relieve the congestion at the J.J. Hospital and more clinical material will be available for individual students.

The hospital staff consists of a large number of well qualified medical men, who have agreed to work on an honorary basis. An adequate staff of paid assistants has been entertained to help the Honorary Medical Officers in their work. The system of having Honorary Medical Staff is quite the rule in the United Kingdom but it is quite new to India and the results of the working of the King Edward VII Memorial Hospital will be watched with

interest by all.

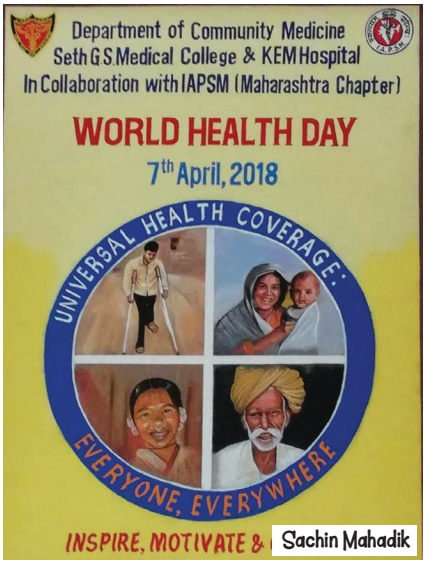
We are satisfied that the Gordhandas Sunderdas Medical College fulfils all the requirements of the Indian Universities Act and we recommend that it may be permanently affiliated to the Bombay University for the purposes of all the Examinations of the M.B., B.S., degrees subject to the following conditions;—

1. The number of fresh students to be admitted to the First Year Class should not exceed 60 annually.
2. The number of admissions to the Third Year Class should not exceed 30.
3. The number of casual students attending the Hospital for clinical training; should be limited to 30 this year.
4. The total number of regular students attending the final M.B., B.S. classes should not exceed 120 at any time.

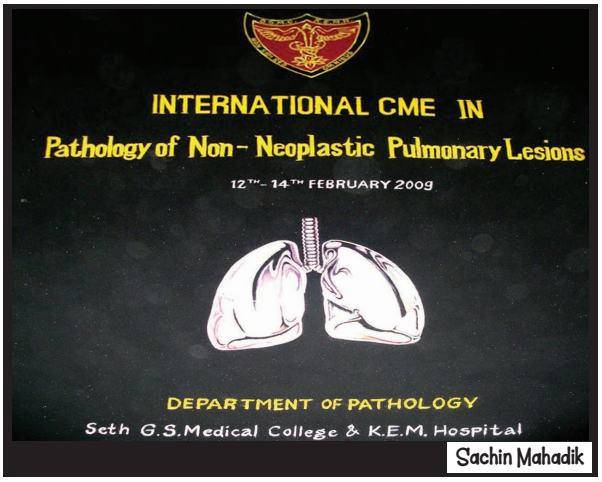
As regards the recognition of the institution for Post-graduate training for the higher degrees and diplomas, we are of opinion that this question may be considered at a later date when the Institution has been in full working order for some time. A special inspection should be held for that purpose.

(Signed by) R. ROW, S. L. BHATIA, Y. G. NADGIR, K. N. RANINA.

[Dr Raghavendra Row was a senior physician who was instrumental in establishing the Department of Pathology at the Grant Medical College using the generous donation from the house of Tatas. Dr S. L. Bhatia was the Dean of the Grant Medical College. Dr Y. G. Nadgir was the first Indian to be appointed Professor (of Anatomy) on the staff of the Grant Medical College. Dr R. N. Ranina (Fellow, University of Bombay, member of the Syndicate of the University).

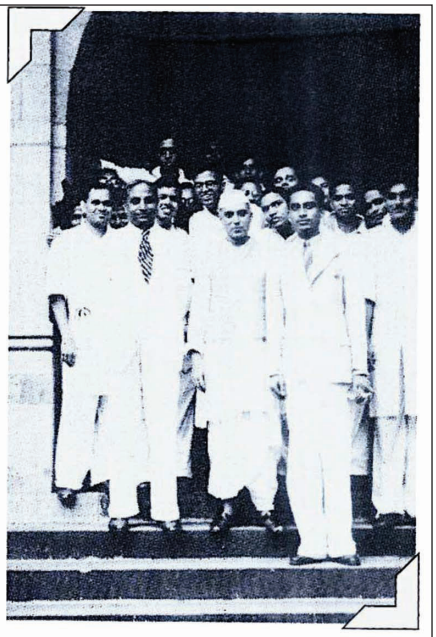


Rangoli at the entrance of JMLT.

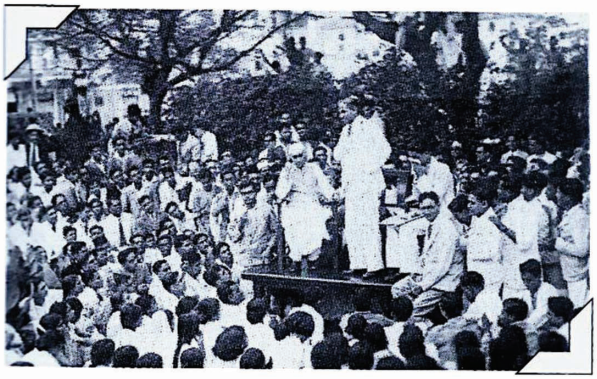


Rangoli greeting at the entrance of JMLT.

Visit by Mr. Jawaharlal Nehru



Pandit Jawaharlal Nehru and Dr. Jivraj Mehta, on Panditji's right, at the SGS Medical College, Bombay.



Pandit Jawaharlal Nehru and Dr. Jivraj Mehta on a make-shift dais at the SGS Medical College campus in Bombay.

Suggested Reading

- Mehta Jivraj: Administrative reports of the King Edward VII Memorial Hospital and the Seth Gordhandas Sunderdas Medical College, Bombay
- Mehta Jivraj: Medical men must imbibe spirit of social service. *The Times of India* 28 November 1955.
- Mehta Jivraj: The art of administration of a medical college and teaching hospital. *Souvenir: St. John's Medical College, Bangalore. Dedication Ceremony. 29 September 1968* Pages 54-61
- Pandya Sunil K: An interview with the Founder-Dean. In Bhatnagar SM, Kothari ML (Eds): *Golden Jubilee Souvenir Seth G. S. Medical College and K. E. M. Hospital*. 1976.

5

Annual Report (1926–1927)

Much of the information in this chapter has been obtained from the annual reports prepared by the Dean. These were also published in full in the annual administrative reports issued by the Municipal Commissioner. We have provided details for each of the formative years.

Municipal Officers

President: Dr S.S. Batliwala F.C.P.S., L.M.&S., J.P.

Chairman of the Standing Committee : Mr Hoosenally M. Rahimtoola B.A., M.L.C.

Municipal Commissioner: Mr H. B. Clayton, C.I.E., I.C.S.

Advisory Medical Board

It was felt necessary to have such a board to formulate rules, regulations for the smooth and efficient functioning of the various departments, drawing up the syllabus for the college, and deal with equipping and furnishing the college and hospital.

Although the names of the members of the board are not mentioned in the annual reports, it appears that they were senior members of the teaching staff, headed by Dr Jivraj Mehta. It is possible that the members included Dr G.V. Deshmukh, Dr M.D.D. Gilder, Dr A.S. Erulkar, Dr R.N. Cooper, and Dr N.A. Purandare.

Among the topics dealt with were rules and schedules of the resident medical, nursing and menial staff at the hospital; rules for inpatients and outpatients; define the diet to be served to patients; create various forms to use in the institutions; select books and journals for the college library and the method by which they could be issue to staff and students; compilation of the hospital pharmacopoeia; drafting rules for the gymkhana; fixing various courses of instruction in college and hospital and determining fees for them; and the training of probationer nurses.

Changes In the Staff

Dr V.L. Parmar, surgeon resigned as he had secured an appointment at the Grant Medical College and Sir J.J. Hospital. Dr M.G. Kher, anesthetist, resigned due to personal reasons. Dr M.N. Desai was appointed in his place.

Permanent Affiliation

Permanent affiliation of the college and hospital to the University of Bombay and retrospective affiliation for postgraduate medical degrees and diplomas were secured in 1926.

The Bombay Presidency Nursing Association recognized the institution as

a training center for probationer nurses.

The Hospital

The hospital had been sanctioned adequate staff for using 310 beds.125 beds were in use at the start of the year but the influx of patients was such that by the end of the year 267 beds were in use.

	Male	Female	Children	Total
Medical	62	24	6	92
Surgical (including ENT)	62	24	6	92
Gynecology		33		33
Ophthalmic	16	11		27
Skin and venereal diseases	4	2		6
Casualty	6	3		9
Isolation	6	2		8
	156	99	12	267

Equipment

Dr Mehta found this a most exacting task as the numbers of instruments and apparatus ran into thousands, had to meet the specifications of those using them, of the best possible make, and obtained at the least expense!

At the start of the year all the equipment ordered had not arrived but all departments except the X-ray and electrotherapy sections started work nonetheless. These sections started work on 31 May 1926. Fresh orders were being placed for complete the requirements of the other departments. Apparatus needed for ultraviolet therapy, electrocardiography, radium therapy, and deep X-ray therapy would be obtained in 1927–28.

Redistribution of Beds

The Nowrosjee Wadia Maternity Hospital (130 beds) opened nearby on 13 December 1926. An agreement was made between the Municipal Corporation and the Board of the Wadia Hospital to transfer all maternity cases to that hospital, appoint both Honorary Lecturers at K.E.M. Hospital as Honorary Obstetricians at Wadia Hospital, and instruct students of the Seth G.S. Medical College in antenatal and maternal care.

Medicines reserved for maternity care were redistributed between gynecology and pediatrics.

Alterations in this block of the building and in the ophthalmic department permitted an increase in the number of beds from 310 to 334 without encroaching on the capacious verandas of the pavilion wards.

The need for separate male and female venereal wards was felt. Plans were made and sanctions sought to construct these wards to accommodate 8 men and 4 women over the existing isolation block.

Number of Patients Treated and Expenditure

Dr Mehta provided a detailed breakdown of inpatients, outpatients, operations and compared statistics in 1926–27 and 1927–28.

	15-2-26-31-3-26	1926-27
Inpatients		
1. Number of beds available	125	267
2. Average number of beds occupied	65	205
3. Inpatients at the beginning of the year	...	120
4. Admitted during the year	274	4378
5. Number at the end of the year	120	241
6. Average stay of each patient in days	...	16.7
7. Average number of patients to each bed	...	20.7
Outpatients		
1. Total number of new outpatients	1311	26267
2. Total outpatient attendance	3337	79823
3. Casualty patients included in 1 above	118	3116
Operations		
1. Total operations on inpatients	84	1687
2. Total operations on outpatients	31	1106

Expenditure

The total expense on the hospital, including maintenance, treatment of inpatients, outpatient department, resident medical, nursing and menial staff, administration, maintenance and repair of buildings was Rs. 3,41,000. The cost per outpatient worked out to Rs. 0-7-2 and that per inpatient Rs. 3-14-1. (The cost was in rupees, annas, and pice.)

Problems In the Buildings

It appears that construction by the Public Works Department then was not much different that it is today. Dr Mehta moaned: 'Trouble has been experienced with the flooring in the wards and operation theaters throughout the year... The difficulty was considerably increased by the absence of any engineering staff to look after the repairs of these extensive buildings.' At the end of the year some maintenance staff was sanctioned but Dr Mehta considered this a stopgap arrangement.

Poor Box Charity Fund

The standing committee's sanction had been obtained for the creation of this fund, which was necessary in order to provide for such expenses as on artificial limbs, spectacles, costly injections, and the cost of railway journey to a patient without means. During the year, important donations were received, one of Rs. 5,000 from Mr Mansukhlal Chhaganlal to be kept as a permanent fund, interest therefrom being utilized for the objects for which the fund had been started. Mr Dawood Habib had donated ₹500 and H.H. the Thakore Saheb of Limbdi had donated Rs. 200. The sum of Rs. 188-9-0 were spent.

The College

This year, the total number of students was 183, of whom 53 were admitted in the 1st year. Four were admitted after passing their 1st M.B.B.S. examination and three got themselves transferred to the college prior to their appearance in the Inter-M.B.B.S. examination. The remaining 124 students, 21 of whom were women, were admitted as casual students in the winter and spring terms for hospital practice. A

special course of clinics was organized for them to prepare them for the final M.B.B.S. and L.C.P. & S. examinations. The number of regular students on the college roll at the end of the year was 100, with 5 women among them.

40 medical graduates (of whom two were women) joined for hospital practice for periods varying from one to eight months.

There was obviously scope for *ad hoc* admissions.

Examinations

The first batch of 35 students was sent for the Inter-M.B.B.S. examinations held in December 1926. 28 were successful. The only student securing the first class was a woman who won two college and two University scholarships–Sir James Fergusson Scholarship in medicine (Rs. 25/month) and Lady Reay Silver medical scholarship (Rs. 10/month.)

Frustratingly, Dr Mehta does not give us the name of this woman!

Fees and Free-Studentships

The scale of fees for the various courses and charges for the students' hostel was set up. Five percent of regular students were entitled for free education after ascertaining that they were poor and deserving.

Cost

The total cost was Rs. 1,79,839-15-3 excluding the amount spent of loan works grants for the purchase of initial equipment. The revenue from the college was Rs. 32,682. This was expected to rise when classes for the full course over four and a half years were in operation.

Library

The Bombay Branch of the Royal Asiatic Society had donated 1,345 valuable old medical books to the college library.

The grant for the nucleus of the library was almost used up in purchasing the latest editions of the most authoritative books in the different branches of medicine. It was not yet possible to purchase the past issues of important scientific and medical journals, which were a valuable and necessary part of the library.

Museum

Considerable progress had been made in preparing specimens for display in the Anatomy and Pathology Museums and they had won the approbation and admiration of European, American and Indian visitors. The professors of these departments and their staff deserved full credit for these. Surgeons too had sent interesting specimens removed in the operation theaters to the pathology museum. These clinical specimens were to be supplemented by wax models illustrating skin diseases and those for a medicolegal museum, which would be ordered as soon as possible.

The Materia Medica Museum was practically complete. Mr E. Merck of Darmstadt, Germany had presented a valuable collection of crude drugs. The Forest Department of Kashmir State had

gifted a dozen medicinal herbs growing in that province.

Special Departments

Anatomy, Physiology, Pathology, and Bacteriology Departments were now almost fully equipped. Orders had been placed for the requirements of the Hygiene Department which would receive students from June 1927. The Pharmacological and Toxicological Sections were scantily equipped thus far. Provisions were being made to obtain what was needed by them.

Research

The need to equip and organize departments, train laboratory assistants, prepare specimens for museums, and performing laboratory examinations on specimens sent from the various sections of the hospital left little time for the professors to carry out research on any significant scale. Even so, the following studies were under way:

1. Standardisation of the percentage of hemoglobin in the blood of healthy persons in Bombay
2. Composition, digestibility and rate of absorption of the some of the indigenous foodstuffs
3. Investigation of the action of *Terminalia arjuna* and *Terminalia tomentosa* ('Arjuna' and 'Arjuna Sadara') used by Ayurvedic practitioners as cardiac tonics and the antipyretic properties of the drug *Nyctanthus arboritrisies* (Parijatak). This study was being carried out by the professor of pharmacology with Dr K.S. Mhaskar of the Haffkine Institute.

Students' Hostel

The hostel building was completed by May 1926 and rooms were allotted to students in June. The hostel could accommodate about 100 students. Four different clubs conducted by the students had been formed in the hostel.

It was necessary to construct a hostel for women students. The absence of this infrastructure put them at a considerable disadvantage compared with men. Accommodation close to the hospital and college saved students time and effort in the early mornings and late evenings. It also ensured time for studies and recreation.

Gymkhana

Our students competed in intercollegiate tournaments in tennis, cricket, badminton, and hockey. Mr N.R. Suvarna was able to keep for the college the singles championship cup in tennis which he had won the previous year. In the Doubles tournament, Messrs Suvarna and Pandya were the runners-up. A fair show was made in hockey although the team had few facilities for practice.

Since students were keen on joining the University Training Corps (UTC), a requisition for the necessary facilities to organize a medical platoon within the hospital had been made to the university authorities.

Arrangements were made to hand over control of the Gymkhana to staff and students of the college. The Corporation

had agreed to make a grant to the Gymkhana.

General

In this section, Dr Mehta made far-sighted suggestions.

Dr Mehta had observed that, in England, a considerable part of the hospital expense was met through voluntary contributions and arrangements with factory owners and workmen. Workers were assured definite facilities, service, and treatment by the hospital on payment of a regular weekly or monthly payment.

Likewise, income was derived in Europe and America from sums donated by philanthropists either anonymously or having wards or beds named after them or in memory of those near and dear to them. Dr Mehta estimated that, in this hospital, a bed cost about Rs. 1200 a year. He sought commitments for Rs. 25,000 a year.

He also sought contributions of the order of Rs. 2,50,000 to Rs. 3,00,000 from Sir Leslie Wilson's Hospital Fund, the Corporation, and the public to provide an additional 60–70 beds in the hospital by utilizing the first floor of the administrative block, then occupied by the resident medical staff. Wards could also be constructed on the terraces over the stores and kitchens of the hospital.

Dr Mehta pointed out that medical education was expensive. It would be a great encouragement for middle and lower class families if students provided an adequate number of scholarships and prizes. The Corporation had already offered some free-studentships for deserving students but much more remained to be done. Support was sought from philanthropists in the form of endowments.

It was equally important to create a Research Fund to utilize the clinical and pathological material provided by the hospital. It was important to study illnesses and diseases common in Bombay, ascertain the composition and medicinal properties of indigenous drugs, and carry out other studies. Just as large donations were being made for research of cancer in western countries, we needed funds to study tuberculosis and diabetes.

He ended his report with this statement: 'The hope of those interested in medical relief, education and research in this city is that the flow of charity for which Bombay is so well renowned will now turn in this direction.'

Appendices

14 appendices were attached to the report. We have reproduced some of them below. Similar appendices are appended to each annual report and provide fascinating facts. I urge you to study them to gain a perspective on diseases common at that time and the capabilities for their investigation and treatment.

APPENDIX. I.

The Hospital and College Staff.

Dean.

Jivraj N. Mehta, M.D., M.R.C.P., (London).

Hony : Physicians and Lecturers in Medicine.

M. D. D. Gilder, M.D. (Lond.), F.R.C.S. (Eng.)
P. C. Bharucha, M.D. (Lond.)
A. S. Erulkar, M.D. (Lond.)
P. T. Patel, M.D. (Lond.), D.T.M. &. H. (Cantab.)
L. D. Dhawale, B.A., M.D. (Bom.)
Jivraj N. Mehta, M.D., M.R.C.P. (Lond.)

Hony : Surgeons and Lecturers in Surgery.

G. V. Dehsmukh, M.D. (Lond.), F.R.C.S. (Eng.)
A. P. Bacha, F.R.C.S. (Eng.)
R. N. Cooper, M.B., M.S. (Lond.)
T. O. Shah, F.R.C.S. (Eng.)
R. D. Shirwalkar, B.A., M.B., M.S. (Lond.)

Hony : Gynæcologists and Lecturers in Gynæcology & Obstetrics.

N. A. Purandare, M.D. (Bom.), F.C.P.S.
H. D. DeSa, M.D. (Bom.), F.C.P.S.

Hony : Gynæcologist.

Dr. (Mrs.) Dossibai J. R. Dadabhoy, M.D., M.R.C.P. (Lond.)

Hony : Ophthalmic Surgeons and Lecturers in Ophthalmology.

R. P. Ratnakar, D.O. (Oxon), D.O.M.S. (Eng.)
G. T. Mody, D.O. (Oxon.)

Hony : Dental Surgeons and Lecturers in Dentistry.

H. G. Moghe, L.D.S., R.C.S. (Eng.)
D. M. Desai, L.D.S., R.C.S. (Eng.)

Hony : Dermatologist and Lecturer in Dermatology and Venereology.

A. C. Rebello, M.B., B.S., D.T.M.&.H. (Lond.)

Hony : Radiologist and Lecturer in Radiology and Electro-Therapy.

J. L. Desai, M.B., B.S., D.M.R.E. (Cantab.)

Hony : Anaesthetist and Lecturer in Anaesthetics.

M. N. Desai, M.B., B.S.

Hony : Lecturer in Hygiene and Preventive Medicine.

J. S. Nerurkar, B.Sc., L.M.&.S., D.P.H. (Cantab.)

Hony : Lecturer in Medical Jurisprudence and Toxicology.

Khan Bahadur A. K. Turner, L.M.&.S.

Professor of Pathology and Bacteriology.

V. R. Khanolkar, M.D., B.Sc. (Lond.)

Professor of Anatomy.

R. P. Koppikar, M.S. (Bom.)

Professor of Physiology.

S. P. Niyogi, M.Sc., M.B. (Cal.)

Professor of Pharmacology and Materia Medica.

A. S. Paranjpe, M.D. (Heidelberg), D.T.M., Ch.B.

APPENDIX 4.

Summary of patients treated according to nature of diseases.

Diseases.	Remained in-patients	Admitted in-patients	Admitted out-patients.	Total treated in-patients.	Total treated out-patients.	Discharged cured in-patients.	Relieved in-patients.	Discharged otherwise in-patients.	Died in-patients.	Remaining in-patients.
Infective Diseases.										
Dysentery	1	163	464	164	464	60	48	14	32	10
Enteric Fever	4	58	64	62	64	34	2	5	20	1
Gonorrhœa	2	22	302	24	302	5	14	2	2	1
Kala Azar	..	..	1	..	1	..	..	..	..	..
Leprosy	..	..	22	..	22	..	..	..	..	..
Malaria	2	275	3,704	277	3,704	135	99	26	11	6
Plague	..	2	2	2	2	..	..	1	1	..
Pneumonia	2	160	181	162	181	84	9	6	52	11
Pyrexia of uncertain origin ..	3	98	28	101	28	5	46	41	9	..
Rheumatic Fever and Rheumatism	3	32	168	35	168	17	10	3	..	5
Small-pox	..	..	4	..	4	..	..	..	..	..
Syphil s (Primary and Secondary)	1	50	348	51	348	12	26	5	1	6
Tubercle of the lung other tubercular diseases	13	374	680	387	680	95	102	99	56	36
All other infective diseases ..	2	75	272	77	272	28	6	6	32	5
Other General Diseases.										
Anæmia	1	74	151	75	151	6	27	17	20	5
Diabetes	..	15	19	15	19	3	4	6	2	..
Scurvy	..	4	9	4	9	3	..	1	..	..
Non-malignant, new growth ..	2	53	93	55	93	30	13	5	3	4
Malignant, new growth	3	101	105	104	105	28	29	20	17	10
All other general diseases ..	3	119	1,004	122	1,004	45	30	18	23	6
Systemic Diseases.										
Diseases of the nervous system ..	5	174	566	179	566	21	66	57	26	9
Diseases of the eye	6	351	2,090	357	2,090	183	118	37	1	18
Diseases of the ear	..	17	368	17	368	13	4	..	..	..
Diseases of the nose	..	64	321	64	321	29	28	2	..	5
Diseases of the circulatory system	2	88	131	90	131	13	39	12	22	4
All diseases of the respiratory system except pneumonia and tubercle of the lungs	11	192	1,241	203	1,241	60	51	23	56	[illegible]
Dyspepsia	..	8	353	8	353	3	4	..	..	..
Diarrhœa	2	63	366	65	366	22	18	5	20	..
Abscess of Liver	1	55	69	56	69	14	21	10	9	2
All other diseases of the Liver ..	..	10	47	10	47	7	3	..	..	..
Appendicitis	3	66	114	69	114	33	18	10	3	5
All other diseases of the digestive system	12	342	2,194	354	2,194	205	68	38	27	18
Inflammation and suppuration of lymphatic glands	1	18	232	19	232	14	2	2	1	..
Goitre	..	2	7	2	7	1	1	..	..	..
Bright's disease	..	20	17	20	17	3	9	3	4	1
All other diseases of the urinary system	6	87	202	93	202	37	24	18	10	4
Hydrocele	..	95	199	95	199	81	5	5	1	3
Other diseases of the generative system	6	222	867	228	867	130	54	19	5	18
Diseases of the organs of locomotion	4	54	492	58	492	20	29	6	..	3
Diseases of the connective tissues	6	152	555	158	555	99	21	11	13	14
Ulcers	..	29	812	29	812	14	11	3	1	..
Other diseases of the skin ..	2	19	514	21	514	11	8	..	2	..
All other local diseases	..	79	5,887	79	5,887	6	65	1	5	2
Injuries—general and local ..	2	145	1,013	147	1,013	78	31	10	13	16
Poisoning by opium	..	4	..	4	..	1	..	..	3	..
Do. by other poisons ..	..	34	68	34	68	28	2	3	1	..
Labour.										
Normal	7	313	271	320	271	252	51	6	11	..
Abnormal	..	..	..	..	..	..	..	..	..	..
Total	118	4,378	26,627	4,496	26,627	1,968	1,216	556	515	241

APPENDIX 6.

Classification of Operations in the Surgical Department.

Nature of Operation.	In-door.			In-door. Results.					Out-door.
	Principal.	Secondary.	Total.	Cured.	Relieved.	Discharged otherwise.	Died.	Remaining under treatment.	
Tumours—									
Removal by Excision	31	..	31	23	4	1	1	2	8
" Diathermy	8	..	8	2	3	2	1	..	..
Cysts—									
Removal by Excision	4	..	4	4	..	..	..	..	13
" by Enucleation	2	..	2	2	..	..	..	..	..
Abscess—									
Acute-Incision & Drainage	64	..	64	55	2	1	1	5	209
Chronic " "	4	..	4	2	2	..	..	..	..
Chronic Aspiration	17	..	17	8	9	..	..	..	4
Foreign Bodies—									
Removal in the natural passage ..	5	..	5	5	..	..	..	..	1
Removal in the tissues (impacted) ..	2	..	2	2	..	..	..	..	2
Arteries—									
Inj. of Alcohol into arterial sheath ..	5	..	5	2	3	..	..	..	..
Veins—									
Excision of vericose veins	4	..	4	4	..	..	..	..	..
Inj. of Soda Salicylas into veins ..	2	..	2	1	1	..	..	..	..
Lymphatics—									
Incision & drainage of Lymph. glands	2	..	2	2	..	..	..	..	..
Removal of Lymph glands for T. B.	42	..	42	35	2	1	..		26
Removal of Lymph. glands for other purposes	4	..	4	4	..	..	..	..	..
Nerves—									
Souttar's Operation	2	..	2	..	2	..	..	..	..
Stoffel's Operation	2	..	2	..	1	1	..	..	..
Skin and Subcutaneous Tissues Plastic-Skin grafting by Thierch's method	6	..	6	4	2	..	..	..	..
Skin and Subcutaneous Tissues Plastic-Skin grafting by Thierch's (Pedicle).	4	..	4	4	..	..	..	..	..
Boils and Abscesses	..	..	..	..	..	..	..	..	18
Ulcers or sinus—scraping	8	..	8	5	2	..	1	..	14
Suture of wounds	6	..	6	6	..	..	..	..	3
Cellulitis, Incisions	17	..	17	12	2	..	1	2	17
Guinea Worm incisions	4	..	4	4	..	..	..	..	5
Carbuncle Worm Incisions	2	..	2	2	..	..	..	..	4
Excision of nail	1	..	1	1	..	..	..	..	1
" corns, warts etc.	2	..	2	2	..	..	..	..	12
" Ganglion	5	..	5	5	..	..	..	..	2
T. B. Sinus-Scraping	14	..	14	11	3	..	..	..	4
Witlow-Incision & drainage	..	..	..	..	..	..	..	..	49
Muscles, Tendons, Fascia etc.									
Adherent cicatrix Excision	2	..	2	2	..	..	..	..	..
Elephantiasis-Kondolian's Operation..	5	..	5	1	4	..	..	..	..
Bones—									
Osteotomy	5	..	5	3	2	..	..	..	..
Sequestrotomy	9	..	9	6	2	1	..	..	..
Osteomyelitis-Incision	2	..	2	1	1	..	..	..	..
Abscess-Incision and drainage ..	1	..	1	1	..	..	..	..	..
Sinus scraping	4	..	4	2	1	..	1	..	3
Tuberculosis-removal of	24	..	24	12	10	..	..	2	..
Correction of deformity by Fracture..	9	..	9	7	2	..	..	..	1
Reduction of Fracture and splint application	..	..	..	..	..	..	..	..	4
Bone grafting	5	..	5	..	..	..	1	4	..
Talipes-operation for	2	..	2	2	..	..	..	..	..
Bone scraping	10	..	10	7	..	..	..	3	..
Plaster of Paris application	..	..	..	..	..	..	..	..	10

Classification of Operations in the Surgical Department.

Nature of Operation.	In-door.			In-door. Results.					Out-door.
	Principal.	Secondary.	Total.	Cured.	Relieved.	Discharged otherwise.	Died.	Remaining under treatment.	
Joints—									
Reduction of shoulder	1	..	1	1	..	..	..	..	..
,, other dislocations	..	..	..	..	..	..	..	..	5
,, dislocation by operation shoulder	3	..	3	3	..	..	..	..	..
Excision of Joints—									
(a) Clavicle	3	..	3	3	..	..	..	..	..
(b) Shoulder joint	2	..	2	1	..	..	..	1	..
(c) Elbow	1	..	1	1	..	..	..	..	..
(d) Knee	1	..	1	..	..	..	..	1	..
(e) Metacarpal	1	..	1	1	..	..	..	..	..
(f) Temporo-Mandibular joints ..	1	..	1	..	..	..	..	1	..
Tapping or Aspiration	1	..	1	1	..	..	..	..	..
Breaking down adhesions for Ankylosis	7	..	7	7	..	..	..	..	3
Arthrectomy	2	..	2	2	..	..	..	..	..
Skull—									
Trephining	1	..	1	1	..	..	..	..	..
Decompression of skull	2	..	2	1	..	..	..	1	..
Spine and Spinal Cord—									
Laminectomy	2	..	2	..	..	..	..	2	..
Epidural injection of saline for incontinence of urine	3	..	3	3	..	..	..	..	..
Amputations—									
(1) Arm	2	..	2	1	..	..	..	1	..
(2) Finger	6	..	6	6	..	..	..	..	..
(3) Thigh	3	..	3	2	1	..	..	..	..
(4) Leg	9	..	9	9	..	..	..	..	..
(5) Foot (Symes)	3	..	3	3	..	..	..	..	..
(6) Toe	4	..	4	4	..	..	..	..	..
(7) Forearm	2	..	2	2	..	..	..	..	..
(8) Hip	1	..	1	1	..	..	..	..	..
Face—									
Rhinoplasty	2	..	2	1	..	..	..	1	..
Hare lip	2	..	2	2	..	..	..	..	..
Breast—									
Abscess—Incision and drainage ..	2	..	2	2	..	..	..	..	5
Cyst—Removal	1	..	1	1	..	..	..	..	..
Amputation of breast	3	..	3	3	..	..	..	..	..
,, ,, with Lymphatic glands for carcinoma	8	..	8	5	..	..	3	..	..
Thorax-Empyema—Incision and drainage	3	..	3	2	..	..	1	..	..
Resection of rib and Incision	1	..	1	..	..	..	1	..	..
Abdomen—									
Laparotomy—Tuberculosis	11	..	11	3	3	..	2	3	..
,, —Exploratory Purposes ..	3	..	3	2	..	..	1	..	..
,, —Replacement of Intestines	1	..	1	1	..	..	..	..	..
Extra Peritoneal Incision and drainage Iliac abscess	2	..	2	..	..	..	..	2	..
Mucuos Fistula—Excision	2	..	2	..	1	..	1	..	..
Stomach and Intestines—									
Gastro—Enterostomy	6	..	6	4	1	..	1	..	..
Gastrostomy	2	..	1	1	..	..	1	..	..
Intestinal Anastomosis	3	..	3	1	1	..	1	..	..
Intestinal Obstructions	1	..	1	1	..	..	..	..	..
Appendicectomy	26	..	26	19	1	..	2	4	..

APPENDIX 6—*contd.*

Classification of Operations in the Surgical Department.

Nature of Operation.	In-door.			In-door. Results.					Out-door.
	Principal.	Secondary.	Total.	Cured.	Relieved.	Discharged otherwise	Died.	Remaining under treatment.	
Appendicular Abscess Incision and drainage	4	..	4	3	..	..	1	..	..
Hernia—Inguinal—Radical cure	68	..	68	62	..	1	1	4	..
,, Strangulated ,,	11	..	11	6	..	..	5	..	..
,, Ventral ,,	4	..	4	4	..	..	..	..	..
,, Femoral ,,	2	..	2	2	..	..	..	..	..
,, Umbilical ,,	1	..	1	1	..	..	..	..	..
Sigmoidoscopy	7	..	7	5	2	..	..	..	..
Colotomy	3	..	3	..	1	..	..	2	..
Fæcal Fistula	1	..	1	1	..	..	..	..	..
Gastropexy	1	..	1	1	..	..	..	..	..
Duodenal Ulcer perforated—Suture	1	..	1	..	..	..	..	1	..
Rectum and Anus—									
Imperforate Anus	2	..	2	2	..	..	..	..	..
Fistula-in-ano—Excision	27	..	27	23	3	1	..	..	2
Fissure-in-ano Excision	20	..	20	20	..	..	..	..	..
Piles Internal—Radical Cure	33	..	33	31	2	..	..	..	..
Piles Internal Inj. Carbolic	4	..	4	2	8	..	..	..	4
Piles External-Excision	8	..	8	8	..	..	..	..	2
Ischio-Rectal Abscess Incision	4	..	4	3	1	..	..	..	7
Pancreas—									
Cyst-Marsupialisation	1	..	1	..	1	..	..	..	..
Liver—									
Abscess-Incision and drainage	7	..	7	6	..	..	1	..	..
Hydatid Cyst—Marsupialisation	1	..	1	..	1	..	..	..	..
Congenial Cysts	1	..	1	..	..	..	1	..	..
Cirrhosis of Liver Ascites Omentopexy.	4	..	4	..	1	2	1	..	..
Suture of wounds	1	..	1	..	..	..	..	1	..
Removal Splenic Abscess—									
Incision and drainage	1	..	1	..	1	..	..	..	..
Kidneys and Ureters—									
Nephro Lithotomy	4	..	4	1	1	..	2	..	..
Pyonephrosis—Incision and drainage	2	..	2	2	..	..	..	..	..
Pyelography	7	..	7	4	3	..	..	..	..
Bladder—									
Suprapubic Cystotomy	2	..	2	1	1	..	..	..	..
Perineal Cystotomy	1	..	1	..	..	..	1	..	..
Suprapubic Lithotomy	10	..	10	9	1	..	..	..	..
Lithelopexy	8	..	8	8	..	..	..	..	..
Cystoscopy	21	..	21	15	4	1	1	..	..
Prostate—Suprapubic—									
Removal	2	..	2	1	..	..	1	..	..
Urethra—									
Stricture Urethra, Wheelhouse's Opr.	1	..	1	..	..	..	..	1	..
Urethroplasty	2	..	2	2	..	..	..	..	..
Dilatation of stricture	6	..	6	3	2	1	..	..	2
Internal Urethrotomy	4	..	4	2	1	..	..	..	..
External Urethrotomy	2	..	2	2	..	..	..	..	..
Urethral Fistula Repair	1	..	1	1	..	..	..	..	..
Cock's operation of Perineal section	1	..	1	..	..	..	1	..	..
Stone removal	1	..	1	1	..	..	..	..	..
Urethroscopy	3	..	3	3	..	..	..	..	..
Peri Urethral Abscess	1	..	1	1	..	..	..	..	..

APPENDIX 6—*concld.*

Classification of Operations in the Surgical Department.

Nature of Operation.	In-door.			In-door.					
				Results.					
	Principal.	Secondary.	Total.	Cured.	Relieved.	Discharged otherwise.	Died.	Remaining under treatment.	D
Male Generative Organs—									
Orchidopexy	2	..	2	2	..	..	..	..	..
Circumcision	5	..	5	5	..	..	..	..	38
Amputation of Penis partial	9	..	9	7	..	..	1	1	..
Amputation of Penis complete	1	..	1	1	..	..	..	..	..
Paraphimosis—Incision	..	..	..	..	..	..	..	..	16
Hydrocele—Tapping	..	..	..	..	..	..	..	..	17
Hydrocele—Radical Cure	78	4	82	69	8	1	..	..	..
Pyocele—Incision and drainage	8	2	10	6	2	..	..	..	..
Hœmatocele	5	1	6	5	..	..	..	..	..
Castration	8	..	8	8	..	..	..	..	..
Steneck's Operation	1	..	1	..	1	..	..	..	..
	900	7	907	692	107	14	38	49	511

About 50 per cent. of the operations performed on in-patients were done under general Anæsthesia, about 20 per cent. under Spinal and about 20 per cent. under local Anæsthesia; the rest of the cases having been done under combined Anæsthesia, *i.e.*, either Spinal and General or Local and General. There were two deaths on the operation table, one in the case of chronic Osteomyelitis of the lower jaw with sinuses under general anæsthesia and the other case of Empyema under local anæsthesia; both the cases being markedly low and asthenic.

16

APPENDIX 7.

Classification of Maternity Cases and Obstetric Operations.

After the opening of the Nowrosji Wadia Maternity Hospital, maternity cases ceased t admitted at this Hospital from 1st March 1927.

During the 11 months of the year 313 maternity patients were treated as under :—

Delivered at or near full term	213
Admitted after delivery	6
Discharged undelivered	65
Died undelivered	2
Abortions	27

Of the 213 patients delivered at or near term, there were :—

Normal Labours	172
Abnormal ,,	41

Of the 41 abnormal labours, there were :—

Twin Labours	3
Persistant Occipito-Posterior Positions	3
Breech presentations	2
Transverse lies	8
Prolapse of the Funis	3
Prolapse of the arm	1
Brow and face presentation	1
Placenta Praevia	4
Contracted pelvis (Forceps)	2
External Podalic Version	1
Internal Podalic version	6
Bipolar Podalic version	2
Impacted shoulder presentation	1
Eclampsia	2
Retained placenta	1
Adherent placenta	1

Maternity Mortality.

Puerperal sepsis (admitted after delivery)	2
Eclampsia	1
Pregnancy (full term) & Anæmia—undelivered	2
Obstetric shock—natural forces—anæmia	2
Instrumental delivery—decapitation	2
Pregnancy & anæmia—after delivery	4

Obstetric Operations.

Forceps delivery.

Indication	*No. of cases.*	*Result to mother.*	*Result to child.*
Contracted pelvis	4	L	L
Occipito-Posterior	3	L	2L. 1D.
Delayed vertex	2	L	L.

Version.

Placenta Praevia	3	L	2L. 1D.
Transverse Lie	6	L	4L. 2D.
Mento-Posterior	1	L	L.

Decapitation.

Impacted shoulder presentation	1	Mother D.

Craniotomy.

Transverse Lie—after coming Head	1	Mother L.

APPENDIX 8.

Classification of Operations in the Gynæcology Department.

Nature of Operation.	In-Door.			In-Door. Results.					Out-Door.
	Principal.	Secondary.	Total.	Cured.	Relieved.	Discharged otherwise.	Died.	Remaining under treatment.	
Oophorectomy (ovarian cyst)	7	..	7	7	..	..	..	..	..
Removal of Broad Ligament Cyst ..	3	..	3	3	..	..	..	..	..
Salpingo-Oophorectomy	24	8	32	19	1	..	2	2	..
Salpingostomy	..	3	3	..	..	..	..	..	..
Draining of Pyosalpinx	2	2	4	..	2	..	..	..	..
Ventrisuspension Uteri by Gilliam's method	3	..	3	3	..	..	..	..	..
Ventrisuspension modified Gilliam's ..	2	..	2	1	1	..	..	..	..
Ventrisuspension Dudley's method ..	4	..	4	2	..	..	..	2	..
Ventrifixation Uteri	1	1	2	1	..	..	..	..	..
Myomectomy	1	..	1	1	..	..	..	..	..
Hysterectomy-subtotal	9	..	9	7	..	..	..	2	..
Hysterectomy-total	3	..	3	2	..	..	..	1	..
Wertheim's Operation	1	..	1	1	..	..	..	..	..
Ectopic Gestation Salpingectomy for ..	6	..	6	4	..	..	1	1	..
Salpingectomy	1	3	4	1	..	..	..	..	..
Removal Uterine Polypus	3	..	3	2	..	..	1	..	..
Removal Cervical Polypus	2	..	2	2	..	..	..	..	..
Amputation of cervix	..	8	8	..	..	..	..	..	..
Dilatation and Curettage	38	6	44	22	12	2	..	2	..
Repair of Vesico cervical Fistula ..	1	..	1	1	..	..	..	..	..
Repair for vaginal atresia	1	..	1	1	..	..	..	..	..
Dilatation cervix	2	1	3	2	..	..	..	..	..
Cauterisation cervix	2	1	3	2	..	..	..	..	..
Colporrhaphy	13	..	13	13	..	..	..	..	..
Colpoperineorrahaphy	6	10	16	5	..	..	..	1	..
Perineorrhaphy	3	..	3	1	..	..	..	2	..
Colpotomy	1	..	1	..	1	..	..	..	..
Dilatation of vagina	..	1	1	..	..	..	..	..	..
Incision of septum	..	..	..	..	..	..	..	..	..
Vaginitis	2	..	2	2	..	..	..	..	..
Enucleation of cervical Fibroid	1	..	1	1	..	..	..	..	..
Removal of Bartholinian Cyst	1	..	1	1	..	..	..	..	..
Appendicestomy	1	2	3	1	..	..	..	..	..
Exploratomy Laparotomy for T. B. Peritonitis	5	..	5	..	4	..	..	1	..
Scraping of Post Operative sinuses ..	1	..	1	1	..	..	..	..	..
Cystoscopy	1	..	1	..	..	..	..	1	..
Scraping and suturing of septic Abdominal wound	1	..	1	1	..	..	..	..	..
Removal Urethral Caruncle	1	..	1	1	..	..	..	..	..
Total ..	153	46	199	111	21	2	4	15	..

APPENDIX 8.

Classification of Operations in the Gynæcology Department.

Nature of Operation.	In-Door.			In-Door. Results.					Out-Door.
	Principal.	Secondary.	Total.	Cured.	Relieved.	Discharged otherwise.	Died.	Remaining under treatment.	
Oophorectomy (ovarian cyst)	7	..	7	7	..	..	..	..	..
Removal of Broad Ligament Cyst	3	..	3	3	..	..	..	..	..
Salpingo-Oophorectomy	24	8	32	19	1	..	2	2	..
Salpingostomy	..	3	3	..	..	..	..	..	..
Draining of Pyosalpinx	2	2	4	..	2	..	..	..	..
Ventrisuspension Uteri by Gilliam's method	3	..	3	3	..	..	..	..	..
Ventrisuspension modified Gilliam's	2	..	2	1	1	..	..	..	..
Ventrisuspension Dudley's method	4	..	4	2	..	..	..	2	..
Ventrifixation Uteri	1	1	2	1	..	..	..	..	..
Myomectomy	1	..	1	1	..	..	..	..	..
Hysterectomy-subtotal	9	..	9	7	..	..	..	2	..
Hysterectomy-total	3	..	3	2	..	..	..	1	..
Wertheim's Operation	1	..	1	1	..	..	..	..	..
Ectopic Gestation Salpingectomy for	6	..	6	4	..	..	1	1	..
Salpingectomy	1	3	4	1	..	..	..	..	..
Removal Uterine Polypus	3	..	3	2	..	..	1	..	..
Removal Cervical Polypus	2	..	2	2	..	..	..	..	..
Amputation of cervix	..	8	8	..	..	..	..	..	..
Dilatation and Curettage	38	6	44	22	12	2	..	2	..
Repair of Vesico cervical Fistula	1	..	1	1	..	..	..	..	..
Repair for vaginal atresia	1	..	1	1	..	..	..	..	..
Dilatation cervix	2	1	3	2	..	..	..	..	..
Cauterisation cervix	2	1	3	2	..	..	..	..	..
Colporrhaphy	13	..	13	13	..	..	..	..	..
Colpoperineorrahaphy	6	10	16	5	..	..	..	1	..
Perineorrhaphy	3	..	3	1	..	..	..	2	..
Colpotomy	1	..	1	..	1	..	..	..	..
Dilatation of vagina	..	1	1	..	..	..	..	..	..
Incision of septum	..	..	..	..	..	..	..	..	..
Vaginitis	2	..	2	2	..	..	..	..	..
Enucleation of cervical Fibroid	1	..	1	1	..	..	..	..	..
Removal of Bartholinian Cyst	1	..	1	1	..	..	..	..	..
Appendicestomy	1	2	3	1	..	..	..	..	..
Exploratomy Laparotomy for T. B. Peritonitis	5	..	5	..	4	..	..	1	..
Scraping of Post Operative sinuses	1	..	1	1	..	..	..	..	..
Cystoscopy	1	..	1	..	..	..	..	1	..
Scraping and suturing of septic Abdominal wound	1	..	1	1	..	..	..	..	..
Removal Urethral Caruncle	1	..	1	1	..	..	..	..	..
Total	153	46	199	111	21	2	4	15	..

APPENDIX 9.

Classification of Operations in the Ophthalmic Department.

Nature of Operation.	In-Door.			In-Door. Results.					Out-Door.
	Principal.	Secondary.	Total.	Cured.	Relieved.	Discharged otherwise.	Died.	Remaining under treatment.	
Entropion	1	..	1	1	..	..	..	..	47
Trachoma Expression	..	..	..	..	..	..	..	..	24
Removal Meibomion Cyst	..	..	..	..	..	..	..	..	29
Stye	..	..	..	..	..	..	..	..	4
Tarsectomy	..	..	..	..	..	..	..	..	1
Pterygium	2	..	2	2	..	..	..	..	5
Lacrymal Abscess-incising	1	..	1	1	..	..	..	..	8
Lid Abscess	..	..	..	..	..	..	..	..	3
Washing the Anterior chamber	2	3	5	2	..	..	..	..	..
Extirpation, Lacrymal Sac.	14	5	19	14	..	..	..	..	..
Scheiomich's Section	17	..	17	..	16	..	..	1	2
Weiber's operation	1	..	1	1	..	..	..	..	1
Peritomy	6	2	8	5	1	..	..	..	1
Iridectomy	68	3	71	36	29	..	1	2	..
Cauterisation-Corneal Ulcer	6	13	19	1	2	..	..	3	71
Cauterisation-Iris	..	1	1	..	..	..	..	..	..
Paracentesis	15	..	15	5	10	..	..	..	1
Needling	26	56	82	12	12	1	..	1	..
Extraction-Cataract	150	..	150	107	18	10	..	15	..
Extraction Foreign Body	..	..	..	..	..	..	..	..	64
Evisceration of Eyeball	5	4	9	5	..	..	..	..	..
Cyanide injections	..	..	..	..	..	..	..	..	103
Saline Injections	..	..	..	..	..	..	..	..	1
Neosalversan injections	..	..	..	..	..	..	..	..	18
Trephining	19	..	19	2	15	1	..	1	..
Lagrange's Operation	1	..	1	..	1	..	..	..	..
Enucleation of Eyeball	10	4	14	10	..	..	..	..	..
Sclerotomy	1	..	1	1	..	..	..	..	..
Descemetocele-removal of	..	..	..	..	..	..	..	..	2
Tenotomy	1	..	1	1	..	..	..	..	..
Tumor	1	..	1	1	..	..	..	..	..
Canthoplasty	1	..	1	..	..	1	..	..	..
Skin Grafting	1	..	1	..	1	..	..	..	..
Operation for Symblepheron	1	..	1	..	1	..	..	..	..
Total ...	350	91	441	207	106	13	1	23	385

APPENDIX 10.

Classification of Operation in the Ear, Nose and Throat Department.

Nature of Operation.	In-Door.								Out-Door.
				Results.					
	Principal.	Secondary.	Total.	Cured.	Relieved.	Discharged otherwise.	Died.	Remaining under treatment.	
Mouth—									
Excision of Uvula	...	...	..		...	...	...	..	5
Tonsils and Adenoids Removal ..	8	..	8	8	..	..	..	..	159
Nose and Accessory Sinuses									
Deviated Septum—Resection ..	43	..	43	41	..	..	..	2	..
Polypus—Removal	1	..	1	1	..	..	..	..	1
Maxillary Sinus—Puncture of ..	1	..	1	1	..	..	..	..	..
Antrostomy—Single	13	..	13	12	..	..	..	1	..
Antrostomy—Double	7	..	7	6	..	..	..	1	..
Turbinectomy	..	..	..	..	..	..	..	..	2
Turbinal's Cauterisation	..	..	..	..	..	..	..	..	20
Ethmoid Cells—Curetting	3	..	3	..	3	..	..	..	2
Naso-Pharynx—									
Removal of new growth—Benign ..	..	..	..	..	..	..	..	..	4
Ear—Mastoid Abscess—									
Radical cure—Stakes' operation ..	8	..	8	8	..	..	..	..	..
Mastoid Abscess—Schwartze's operation	3	..	3	3	..	..	..	..	..
Myringotomy	3	..	3	3	..	..	..	..	11
Plastic Operation	3	..	3	3	..	..	..	..	..
Tracheotomy	3	..	3	1	1	..	1	..	...
Removal of Malignant growth—Larynx	1	..	1	..	1	..	..	..	..
Pharynx and Oesophagus—									
Pharyngitis—Cauterisation ..	..	..	..	..	..	..	..	..	6
Dilatation of stricture Oesophagus ..	1	..	1	..	1	..	..	..	..
Oesophagoscopy	1	..	1	..	..	..	1	..	..
	99	..	99	87	6	..	2	4	210

APPENDIX No. 11.

X-Ray and Electro-Therapy Report.

1,511 Skiagrams (including 30 of patients from the Maratha Hospital) were taken in the year as under :—

Barium meals	91
Barium Enema	5
Pyelography	12
Inflation of Fallopian tubes	3
Inflation of stomach	1
Pneumoperitoneum	2
Cholecystography (Graham's Method)	3
Stones in gall bladder	9
Pregnancy	14
Stone in urinary tract	108
For Fractures, chest complaints, &c.	1,263

Screening of chest was done to 326 patients.

Screenings in cases of Fractures is resorted to as often as possible with a view to saving expenditure on films. These cases as well as those screened by the Hony. Staff on their outdoor days are not included in the figures given above.

X-Ray treatment has been resorted to in several cases of Tubercular Glands and in a few cases of Keloids Eczemas, Carcinomata, &c. Diathermy has been also used in the treatment of Gonorrhœa (44 cases) and of Rheumatoid Arthritis along with the other lines of treatment, and Surgical Diathermy was tried in 13 cases of Cancer and 2 of Piles. Galvanic and Faradic currents and different Ionisations have also been used in some cases.

APPENDIX 12.

Clinical Laboratory Report.

2,021 laboratory investigations were carried out in the Central Clinical Laboratory (as apart from ward laboratories) of the Material sent from the Hospital as under :—

Tissue Examinations	179
Blood and other cultures, Wasserman Tests and Widal Reactions	1,092
Blood Examinations	270
Urine Examinations	211
Stool Examinations	156
Puncture fluids	9
Cerebro-spinal fluids	14
Gastric Analysis	116
Sputum Examination	63
	2,108

Autopsies and Preparation of Museum Specimens.

166 Autopsies were performed during the course of the year, of whom 30 were from Maratha and Arthur Road Hospitals. In the case of every post-mortem, a record of findings in each organ is kept. The Bacteriological Investigations, wherever necessary, and Microscopical Investigations in all cases are carried out.

Total number of Museum Specimens prepared in this department for the Pathology Museum is 261, of whom 121 were from Autopsis, 63 from Operation Theatres, K. E. M. Hospital, and 77 by courtesy of outside doctors.

APPENDIX 14.

REPORT OF THE LOCAL INQUIRY COMMITTEE IN RESPECT OF AN APPLICATION FOR THE RECOGNITION OF THE SETH GORDHANDAS SUNDERDAS MEDICAL COLLEGE AND THE KING EDWARD VII MEMORIAL HOSPITAL, PAREL, BOMBAY,

FOR POST-GRADUATE MEDICAL DEGREES AND DIPLOMAS.

At the invitation of the Syndicate we formed ourselves into a Committee to make the local inquiry prescribed by Section 21 (2) (*a*) of the Indian Universities Act, in respect of an application for the recognition of the Seth Gordhandas Sunderdas Medical College and the King Edward VII Memorial Hospital, Parel, for post-graduate medical degrees and diplomas.

2. We visited the Institutions on the 25th instant where we were met by Dr. J. N. Mehta, who showed us what arrangements existed for post-graduate study and answered all our inquiries with regard to the number of patients and the time the members of the staff devote to the work.

3. We are satisfied that sufficient clinical and laboratory facilities are available at the Hospital and the College. A good beginning has been made to collect useful pathological specimens in the museum.

4. We recommend that Seth Gordhandas Sunderdas Medical College and the King Edward VII Memorial Hospital be recognised for post-graduate medical degrees and diplomas as from 15th February 1926. We beg to suggest to give this retrospective effect to our recommendations because some graduates holding the approved appointments have already completed their terms of appointment before the inspection could be made.

(Signed) Y. G. NADGIR.
(„) A. F. HAMILTON.
(„) R. ROW.
(„) S. R. MOOLGAOKAR.
(„) S. S. VAZIFDAR.
(„) R. N. RANINA.

BOMBAY, 29*th January* 1927.

Rangoli adorning the entrance of JMLT.

6

Annual Report (1927–1928)

Staff

The term of the Dean was extended up to 31 March 1931. Dr Jivraj Mehta was on leave from 21 February – 17 March 1928. During this period, Dr V.R. Khanolkar officiated.

The sudden and premature death of Dr R.D. Shirwalkar, Honorary Surgeon at the hospital and Honorary Lecturer in Surgery at the college, was mourned. He had played an active role in the organization of these institutions and had been a popular surgeon with patients and students. His clinics and classes were always well-attended. Just before his death he had initiated the organization of postgraduate courses in surgery for the M.S. Examination.

Dr A.C. Rebello, M.B.B.S. (Bom), D.T.M. & H. (Lond), Honorary Dermatologist and Venereologist, was granted leave for 11 months starting in October 1927. He traveled to Europe to study modern methods of treatment in his field.

Advisory Medical Board

The important topics discussed were:

i. Constitution of a Medical Society for the college

ii. Scale of fees for medical certificates given to patients

iii. Recommendations for filling in posts of Honorary Aural Surgeon and Honorary Surgeons

iv. Scale of fees for well-to-do patients using the hospital

Affiliation

The Senate of the University of Bombay granted retrospective affiliation from 15 February 1926 to the institutions for postgraduate courses in the medical faculty. The college and hospital were also affiliated for examinations held by the College of Physicians and Surgeons, Bombay.

An application was made to the University of Bombay for affiliation of the college for courses of study leading to B.Sc. examinations in physiology and microbiology.

The Hospital

As the number of patients kept increasing, more wards were opened and, by the end of September 1927, all 334 beds were in use as follows:

	Male.	Female.	Children.	Total.
Medical	78	26	10	114
Surgical	78	26	14	118
Gynæcological	..	35	..	35
Ophthalmic	16	16	..	32
Aural	6	2	2	10
Skin and Venereal.. ..	6	2	..	8
Casualty	6	3	..	9
Isolation	6	2	..	8
Total ..	196	112	26	334

Equipment

Surgical, gynecological, ophthalmic, and aural departments were now fully equipped. The ultra-violet ray therapy equipment had been installed in the electro-therapy department at a cost of Rs. 2,912.

Proposals had been made for the purchase of a vertical Roentgenoscope at a cost of Rs. 2,320 in for use by the X-ray department in casualty cases. Arrival of the deep X-ray therapy machine and of radium were awaited.

Dr Rebello had sent from Paris a list of equipment needed by the venereology department. Rs. 1,990 had been sanctioned for this purchase.

An electrocardiograph unit was being purchased from Messrs. Boulittle.

Proposal For Venereal Wards

As there was need for additional beds for patients with venereal disease needing indoor treatment, Dr Mehta proposed an additional floor over the isolation block. The cost of providing 16 beds (10 male, 6 female) was Rs. 48,000. The Medical Relief Committee of the Corporation sanctioned it. Allocation of funds was awaited.

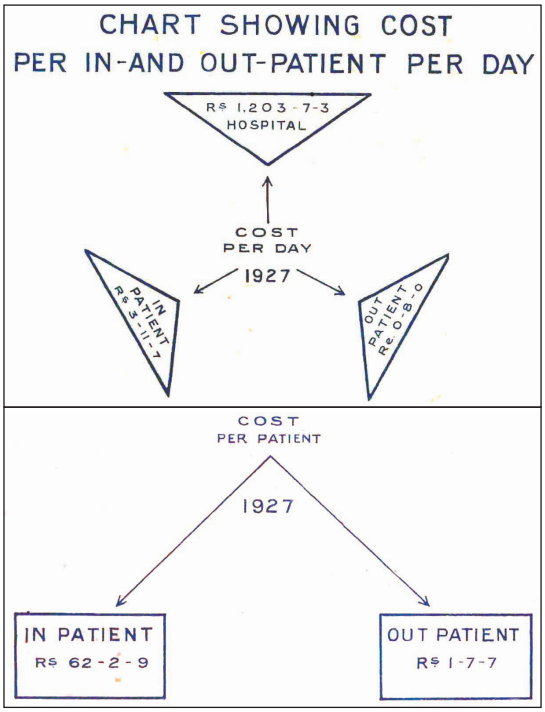
Inpatients During 1927

Of the total of 4,839 patients (including 241 patients in residence on 1 April 1927), 2,005 were discharged as cured. 1,409 were deemed to have been relieved of their symptoms. 618 absconded or left against medical advice. 512 died, 82 within 24 hours of admission, and 154 within 3 days of admission. 295 patients remained in the wards at the end of the year.

	Figures for nine months from 1-4-27 to 31-12-27.	Figures for Calendar year 1927.
(a) *Inpatients.*—		
1. Daily average number of beds available	313.1	301.6
2. Daily average number of beds occupied	278	266.6
3. Number of inpatients admitted	4,598	5,923
4. Average number of days each patient was resident...	16.8	15.9
(b) *Outpatients.*—		
1. Total number of new outpatients	31,774	39,698
2. Total number of outpatient attendance	92,323	1,16,375
3. Number of casualty patients included in No. 1 above	5,370	6,620
(c) *Operations.*—		
1. Total number of operations on inpatients	1,482	1,947
2. Total number of operations on outpatients	882	1,650

Expenditure on Patients

Rs. 4,39,261 were spent during the year 1927–1928. The cost for medicines, surgical dressings, skiagrams, establishment charges worked out to Rs. 3-11-7 per day on inpatients and Rs. 0-8-0 on outpatients. The cost of diet was Rs. 0-12-4 per inpatient per day.



Buildings

The roofs leaked during the monsoon. Floor tiles burst off and on in the wards. The tiled flooring in the gynecology operating theater had to be replaced by marble. The kitchens had been separated out into one for vegetarian food and the other for non-vegetarian food at the cost of Rs. 18,695.

Nurses

The hospital was recognized by the Bombay Nursing Association. Regular classes by nursing sisters and staff members of the college and hospital were helpful for probationer nurses. 20 probationers appeared for the examination in September 1927. 16 passed. Of the 16 who appeared for the examination on March 28, 8 passed.

Dr N.A. Purandare M.D., F.C.P.S., Honorary Gynecologist and Lecturer in Gynecology and Midwifery donated Government Promissory Notes of the value of Rs. 300 to provide an annual prize for the probationer getting the highest number of marks in surgery and surgical nursing at the senior examination for nurses held by the Association.

Nurses were provided two badminton courts and a ping-pong table. Rao Bahadur Manaji Rajooji Kalewar J.P. had donated a perophone (high quality British gramophone) to the nurses home.

The proprietors of *Jam-e-Jamshed* and *Kaiser-i-Hind* supplied one copy of each of these publications for use by nurses.

The future of nurses trained here was kept in mind. Some would continue as Staff Nurses in the hospital. Others would prefer appointments in other hospitals or private practice. In view of dearth of trained nurses in Bombay, Dr Mehta suggested creation of a separate wing of private nursing staff in the hospital. The advantage to the hospital would be in the form of earning and the formation of a reserve that could be drawn upon whenever extra nurses were required in the hospital.

A fête called the '5th week' was held in the Cooperage in February 1928 in aid of the Sir Leslie Wilson's Hospital Fund. 18 nurses from the hospital participated in it under the direction of the Matron and the Sisters. Dr Mehta praised their work especially as, whilst collecting a good sum for the Fund, they had not benefited personally in any way.

Poor Box Charity Fund

In addition to the donations referred to under 'Remarks', Dr Mehta expressed his gratitude to the Lightfoot Refrigeration Co. Ltd. which had been giving a free supply of oxygen to the hospital since May 1927.

APPENDIX 16.

Poor Box Charity Fund—Statement of Account for the year 1927-28.

Receipts. Particulars.	Amount. Rs. a. p.	Payments. Particulars.	Amount. Rs. a. p.	Remarks.
Balance ..	2,601 14 6	Surgical Department (supply of splints, crutches, Hernia belts, &c.)	233 8 0	
Skin Department	577 13 9	Warm clothing to poor patients	15 10 0	
X-Ray Department	335 0 0	For funeral expenses to the poor relatives of poor patients.	25 0 0	
Ophthalmic Department	91 4 0	Blood transfusion charges	336 0 0	
Out-patient (Medical)	128 0 0	Travelling expenses paid to poor patients	43 0 0	Mr. K. M. Javeri, M.A., BL.B., presented on behalf of Mrs. Javeri a Rocking Horse, which has added greatly to the pleasure of the tiny tota in the Children's Wards.
" (Surgical)	383 0 0	Purchase of brass pad-locks for poor box Charity Fund Boxes	128 8 0	
Casualty Department	820 4 4	Printing	118 0 0	
Aural Department	52 0 0	Miscellaneous	21 0 0	
Ward No. I	47 0 0	Balance	7,298 13 1	Mrs. A. Mothawalla who was treated as an in-patient in this Hospital presented an "Operophone," for the recreation of the women patients in Ward 1.
" II	114 0 0			
" III	100 0 0			
" IV	30 5 6			
" V	540 0 0			
" VI	505 0 0			
" VII	402 0 0			
" VIII	134 0 0			
" IX, X, XI	652 5 0			
" XII, XIII	84 8 0			
" Isolation	16 0 0			
Other collections	614 0 0			
Total ..	8,229 7 1	Total ..	8,229 7 1	

NOTE :—Out of the balance of Rs. 7,298-13-1, Rs. 5,520 have been deposited in Fixed Deposit Account with the Central Bank of India, Rs. 1,575-3-0 are in Current Account with the same Bank and Rs. 203-10-1 is the cash in hand.

Over and above the balance of Rs. 7,298-13-1, Securities of the face value of Rs. 5,700 in 4 per cent. 1960-1970 Loan (Mansukhlal Chhaganlal Fund) are in Safe Custody with the Chief Accountant of the Bombay Municipality, the interest accruing thereon being credited to the Current Account of the Fund.

29

The College

Fifty new students were admitted in June 1927. The number of regular students on the rolls was:

1st	Year Intermediate M.B., B.S.		.. .. ..	44
2nd	" " "		.. .. ..	32
3rd	" Final "	(Junior)	.. ..	26
3rd	" " "	(Senior)	.. ..	37
		Total	..	139

Of these, six were women.

Examinations

6 of 9 students were sent for the Intermediate M.B.B.S. examinations in April 1927 and 22 of 48 in December 1927 were declared successful.

The first batch of students admitted to the college in June 1925 would be ready to appear in Part 1 of the Final M.B.B.S. examination in September 1928 and for Part 2 in December 1929.

Dr R.G. Dhayagude obtained his M.D. degree in pathology with distinction in June 1927. He was awarded the Prince of Wales Gold Medal and the Hansraj Pragji Thackersey Prince of Wales Fellowship of the University of Bombay for the year 1927–1928.

Annual Cost and Revenue

The total expense on college and hospital apart for the amount spent under Loan Works Grants for the purchase of equipment was Rs. 2,06,804-7-3. The revenue from fees, hostel rent, and miscellaneous receipts was Rs. 41,311.

Museums

The total number of specimens in the anatomy museum was 460 and in the pathology museum 440. Increased numbers of specimens necessitated allocation of extra space in these museums.

Attempts were being made for better

methods of preservation with a view to preserving natural colour.

The professor of pathology was preparing a catalogue with a brief descriptions of macroscopic and microscopic appearances of the specimens in the clinical museum for the benefit of students.

The Materia Medica and Toxicological Museums were almost complete.

Wax models showing skin lesions, an epidiascope, and apparatus needed for anthropomorphic study and the Embryological laboratory were awaited.

Research

The lack of endowments to encourage full-time workers in laboratories was keenly felt. Research on composition, digestibility, and rate of absorption of indigenous food stuffs had to be stopped for this reason.

Work on standardization of the percentage of hemoglobin in the blood of health persons was progressing under the direction of Dr V.R. Khanolkar. Dr R.G. Dhayagude was conducting a study on malaria. (Dr Dhayagude was to continue these studies and publish a paper with Dr N.M. Purandare as his co-author in 1943. They analyzed 97 autopsied patients with cerebral malaria, 55 of whom showed malarial parasites in the cerebral capillaries. See Arch. Path.; 36:550–558 for details.)

Postgraduate Instruction

Three Assistant Surgeons deputed by the Government of Central Provinces and Berar and one deputed by the Bharatpur Darbar were undergoing training in clinical pathology and bacteriology. The honorary ophthalmic surgeon in conjunction with the professors of anatomy, pathology, and physiology had started postgraduate courses in ophthalmology. Similar courses in other subjects were under consideration.

Students Hostel and Gymkhana

The hostel was already overflowing so the construction of an additional floor had been made and submitted to the Corporation.

A plot of land to the east of the college and hospital compound had been acquired with a view to constructing a playground for students. Two new tennis courts were under completion. Proposals for the construction of a pavilion attached to the gymkhana had been submitted to the Corporation.

The college entered the intermediate tournaments in tennis, cricket, hockey, football, and athletics. Mr N.R. Suvarna, General Secretary of the College Gymkhana and Mr N.M. Pandya represented the college and won the championship cups in singles and doubles in tennis. The Hockey team did well and, had they been provided a suitable playground, would have easily been the runners-up in the tournament. Mr R.P. Dwivedi and Mr Marshall D'Souza won the championship in wrestling and boxing respectively. H.H. the Thakore Saheb of Limbdi presented to the College Gymkhana the Limbdi All-round Championship Cup. He also presented to Drs Shirwalkar and Cooper

cups for lawn tennis singles and doubles named after them.

General

Visitors

Members and delegates to the 7th Congress of the Far Eastern Association of Tropical Medicine visited our institutions.

The Indian Research Committee, presided over by Sir Walter Fletcher F.R.S., visited our laboratories and discussed with the Dean and Professors the provision of facilities for research here. Dr Jivraj Mehta made an important statement here: 'It is to be hoped that much money will not be sunk in stone and mortar for the proposed Medical Research Institute and that in proportion more considerable grants will be available for institution where facilities exist for investigation … (of) clinical material and laboratory equipment for their further development.' The claims of Bombay were impressed on the committee. The location of a Central Institute for Research here would bring considerable return on money spent. (Sir Walter Fletcher was Secretary to the Medical Research Committee of the Medical Research Council of Britain from 1914–1933. He visited India in 1928 as chairman of a government committee for the organization of medical research. Despite Dr Mehta's urging, Fletcher advocated siting the Medical Research Institute in Dehradun. Eventually, the Central Research Institute was set up in Kasauli, the existing Pasteur Institute, founded in 1904–5 by Major David Semple, being merged into it. For details, see Chakrabarti P: 'Signs of the times' Medicine and nationhood in British India. *Osiris* 2009; 24:188–211.)

The League of Nations Interchange Health officials also visited our institutions.

Members of the Nagpur Medical College Committee visited on 16 February to collect information that would help in the establishment of the Medical College in Nagpur. (The medical school in Nagpur, in the state of Central Provinces (CP) and Berar, had been sending students and patients to our institutions and to Nil Ratan Sircar Medical College, Calcutta. In June 1948, after the end of the Second World War, the Government of CP and Berar requested Dr Jivraj Mehta to suggest a suitable location for the proposed Medical College. He studied various locations around Nagpur and selected an open ground (the present premises) opposite Rajabaksha. While justifying the selection of present site, he said he had especially considered the population of needy and the poor residents around the area, which in turn would become the clinical material for the students of Medical College. The land belonged to Lt Col K.V. Kukdey, the then chairman of Nagpur Improvement Trust. He immediately offered the land. Construction was started on 2 January 1948. See https://gmcnagpur.org/about-gmc-nagpur)

Inspection

The first triennial inspection by the committee appointed by the Syndicate of the University of Bombay occurred in March 1928.

In response to an invitation from the Syndicate, a memorandum on the report by Sir Norman Walker, Director-General of the General Medical Council, Britain and Col R.A. Needham, I.M.S. (official inspector of the General Medical Council in India) on 'Medical Education in India' was submitted. It stated that medical education in Bombay was well developed and the medical colleges and hospitals were well equipped. These justified the continuation of the recognition of the medical degrees in Bombay by the General Medical Council, London. (Sir Norman Walker was elected President of the General Medical Council from 1931–1939. This visit and report were especially important as, over the preceding few years, there was conflict between the General Medical Council and the Universities in India over the amount of experience gained by undergraduates in midwifery especially in Lucknow and Lahore. A threat to de-recognize all Indian medical degrees loomed in the early 1920s. Corrective measures resulted in the favorable report noted above. Recognition of Indian medical degrees by the Council was finally stopped in 1975.)

Development In Postgraduate Education and Research

A proposal was made to obtain two research studentships in Seth Gordhandas Sunderdas Medical College, each of Rs. 150 per month, granted by the University of Bombay. These would place our college on par with the leading institutions in the country.

Important Visitors

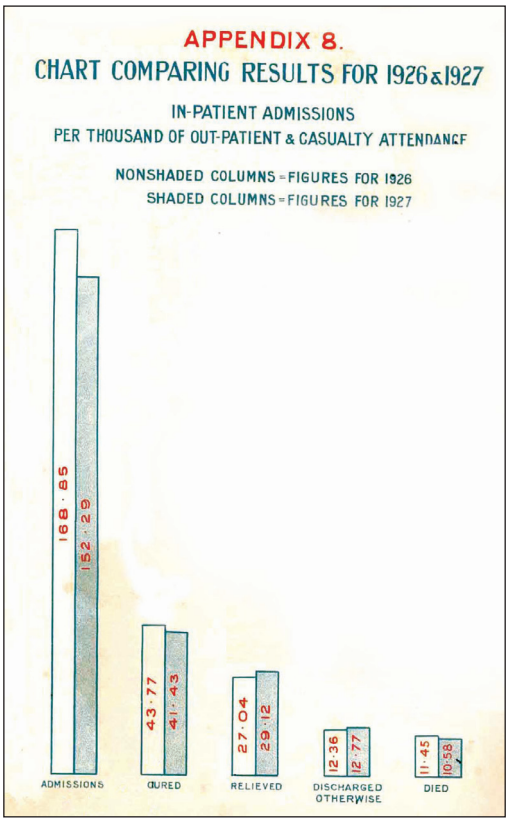
They included the Nawab of Palanpur; the Chief of Sawantwadi; Mr M.K. Gandhi; the Prime Ministers of Bikaner and Mysore; the Minister of Education; Director-General, Indian Medical Services; Surgeon-General with the Government of Bombay and Justice K.M. Javeri. (Note: In the chronology of Mahatma Gandhi's visits to Bombay, there is no mention of a visit to King Edward VII Memorial Hospital https://www.gandhi-manibhavan.org/about-gandhi/gandhi-in-bombay.html)

Appendices

These are listed in the following table:

1. Hospital and college staff
2. Summary of inpatients and classification as per departments
3. Summary of outpatients and classification as per departments
4. Cost per inpatient and outpatient and per day
5. Inpatient and outpatient admissions by months
6. Summary of patients according to sex, age and caste with summary
7. In-patient and out-patient admissions with results
8. Comparison of results for 1926 and 1927
9. Patients according to nature of disease
10. Operations in the surgical department
11. Operations in the gynecological department
12. Operations in the ophthalmic department
13. Operations in the ear, nose and throat department
14. X-ray and electro-therapy report
15. Clinical laboratory report
16. Poor box charity fund, statement of accounts

I have reproduced appendices 8 and 16:



APPENDIX 16.

Poor Box Charity Fund—Statement of Account for the year 1927-28.

Receipts. Particulars.	Amount. Rs. a. p.	Payments. Particulars.	Amount. Rs. a. p.	Remarks.
Balance ..	2,601 14 6	Surgical Department (supply of splints, crutches, Hernia belts, &c.)	233 8 0	
Skin Department	577 13 9	Warm clothing to poor patients	15 10 0	
X-Ray Department	335 0 0	For funeral expenses to the poor relatives of poor patients.	25 0 0	
Ophthalmic Department	91 4 0	Blood transfusion charges	336 0 0	
Out-patient (Medical)	128 0 0	Travelling expenses paid to poor patients	43 0 0	Mr. K. M. Javeri, M.A., Bl.D., presented on behalf of Mrs. Javeri a Rocking Horse, which has added greatly to the pleasure of the tiny tots in the Children's Wards.
" (Surgical)	383 0 0	Purchase of brass pad-locks for poor box Charity Fund Boxes	128 8 0	
Casualty Department	829 4 4	Printing	118 0 0	
Aural Department	52 0 0	Miscellaneous	31 0 0	
Ward No. I	47 0 0	Balance	7,298 13 1	
" II	114 0 0			Mrs. A. Mothawalla who was treated as an in-patient in this Hospital presented an "Operophone," for the recreation of the women patients in Ward I.
" III	100 0 0			
" IV	30 5 6			
" V	540 0 0			
" VI	508 0 0			
" VII	402 0 0			
" VIII	134 0 0			
" IX, X, XI	652 5 0			
" XII, XIII	84 8 0			
" Isolation	16 0 0			
Other collections	614 0 0			
Total ..	8,229 7 1	Total ..	8,229 7 1	

NOTE :—Out of the balance of Rs. 7,298-13-1, Rs. 5,520 have been deposited in Fixed Deposit Account with the Central Bank of India, Rs. 1,575-3-0 are in Current Account with the same Bank and Rs. 203-10-1 is the cash in hand.

Over and above the balance of Rs. 7,298-13-1, Securities of the face value of Rs. 5,700 in 4 per cent. 1960-1970 Loan (Manukhlal Chhaganlal Fund) are in Safe Custody with the Chief Accountant of the Bombay Municipality, the interest accruing thereon being credited to the Current Account of the Fund.

29

7

Annual Report (1928–1929)

Governor's Visit

Major-General Sir Frederick Sykes, Governor of Bombay, accompanied by Lady Sykes visited the hospital and college on 20 February 1929.

Advisory Medical Board

The Board in consultation with the Dean made recommendations on:

1. Rules for the appointment of the tutorial staff in the college and resident medical officers and externes in the hospital
2. Reorganization of the casualty department
3. Mode of appointment of the honorary staff
4. Establishment of a central clinic for school children at King Edward VII Memorial Hospital
5. Bill to establish a Medical Council of India and to provide for the maintenance of an Indian Medical Register
6. Proposal to establish a library for patients

Item 5 is of special interest. At the instigation of the General Medical Council of Britain, the Government of India proposed a Commissioner of Medical Qualifications and Standards which would, in effect, dictate policies to the Universities in India. As can be expected, this move was denounced. Sir Purshottamdas Thakurdas, Sir Phiroze Sethna, Sir Manmohandas Ramji, and members of the medical profession such as Sir Nusserwanji Choksey, Dr Jivraj Mehta, Dr G.V. Deshmukh, Dr M.D.D. Gilder, Dr A.S. Erulkar, Dr R.N. Cooper, and Dr N.A. Purandare defended the autonomy of Universities, which owed no allegiance to the General Medical Council. To thwart further attempts of this kind, it was proposed to create what was provisionally termed All India Medical Council, independent of the General Medical Council which would conserve and advance medical education and practice in India.

Changes in the Staff

Dr Homi Darasha Gandhi M.B.&B.S., F.R.C.S. (Edin) was appointed Honorary Aural Surgeon in the hospital and Lecturer in Ear, Nose and Throat Diseases at the college.

Dr Mrs Dossibai J.R. Dadabhoy M.D. (Lond), M.R.C.P. (Lond), Honorary Gynecologist at the hospital resigned her appointment from 1 February 1929.

Captain F.A. Khan M.B.&M.S., Assistant

Dean, resigned his appointment on 29 March 1928. Captain R.E. Dadachanji M.B. & B.S. replaced him on that date.

The Hospital

The full complement of 334 beds was utilized as shown:

Department	Male.	Female.	Children.	Total.
Medical	78	26	10	114
Surgical	78	26	14	118
Gynæcological	..	35	..	35
Ophthalmic	16	16	..	32
Aural	6	2	2	10
Skin and Venereal.. ..	6	2	..	8
Casualty	6	3	..	9
Isolation	6	2	..	8
Total ..	196	112	26	334

Equipment

The X-ray Department was provided with a vertical Roentgenoscope at a cost of Rs. 2,320. It was hoped that the radium and deep therapy apparatus would be provided soon. The electro-cardiograph was installed and in use from December 1928.

Venereal Wards

Two skin and venereal disease wards had been sanctioned with 16 beds in all. The Governor's Hospital Fund offered to bear half the cost of construction of these wards (Rs. 27,500). It was expected that they would be ready by 1930.

An additional floor was to be constructed at a cost of Rs. 21,000 above the Nurses' Annexe to provide quarters for additional nurses.

Number of Patients Treated and Cost

Of the total of 8,141 patients (7,846 new admissions and 295 in residence on 1 January 1928), 3,665 were discharged cured, 2,657 were discharged relieved. 1,281 patients absconded of left the hospital against medical advice. 828 died, 124 within 24 hours of admission and 249 after 24 hours but within 3 days of admission. Dr Mehta pointed out that patients continued to seek treatment late in the course of disease.

	Figures for the year 1928.	Figures for the year 1927.
(a) *In-patients.*—		
1. Daily average number of beds available	334	301·6
2. Daily average number of beds occupied	330·1	278
3. Number of patients admitted	7,846	5,923
4. Average number of days each patient was resident...	15·3	15·9
(b) *Out-patients.*—		
1. Total number of new out-patients	48,160	39,698
2. Total number of out-patient attendance	1,44,416	1,16,375
3. Number of casualty patients, included in No. 1 above	7,173	6,620
(c) *Operations.*—		
1. Total number of operations on in-patients	2,810	1,947
2. Total number of operations on out-patients	2,268	1,650

The total expense on the maintenance of the hospital, excluding amount spent out of loan funds, was Rs. 4,81,492. The sum included cost of maintenance and treatment of inpatients, cost of the outpatient department, resident medical staff, nursing staff, and the maintenance and repair of buildings. The cost per patient is shown in the following table:

	1928-29.			1927-28.		
	Rs.	a.	p.	Rs.	a.	p.
(a) Average cost, per In-patient, per day ..	3	6	7	3	11	6
(b) Average cost of diet, per In-patient, per day.	0	11	4	0	12	4
(c) Average cost per In-patient admission .	52	3	2	62	2	9
(d) Average cost, per Out-patient attendance..	0	7	11	0	8	0
(e) Average cost, per Out-patient admission ..	1	7	7	1	8	6

Additional tables provided breakups of the cost.

It was pointed out that the actual number of inpatients often exceeded 334, the largest on a single day being 399. The need to admit more deserving patients was complicated by the fact that families of paralyzed patients and those with incurable diseases could not or would not take them home. The Helpless Beggar's Camp, which hitherto took over some of these patients could not do so any more. The Corporation was requested to provide grants to enable the Helpless Beggar's Camp to once again take charge of patients referred by the Dean.

There was a great need for an infirmary with 250 to 400 beds for the chronically ill in the city. The cost per bed in such an institution would be much less than in a general hospital. Another proposal was to transfer patients to a salubrious convalescent home outside the city.

Increasing numbers of outpatients necessitated the provision of a separate Casualty Department and an extension of the surgical dressing section of the outpatient department.

The hospital needed a few separate rooms to house mentally ill patients.

Nurses

The increasing number of patients posed problems for the limited number of nurses on the staff. For several hours, especially in the evenings and nights, there was just one nurse looking after 30–40 patients per ward, some of them seriously ill. There was a need to strengthen the nursing staff.

The suggestion for private nursing staff was reiterated. Probationer nurses were being trained in Infectious Diseases at Arthur Road and Maratha Hospitals. [The latter was earlier the Maratha Plague Hospital and was situated to the north of the Victoria Gardens.]

Results of nursing examinations held by the Bombay Presidency Nursing Association were as follows:

Examination.	Held in September 1928.		Held in March 1929	
	Appeared.	Passed.	Appeared.	Passed.
First Examination	12	10	7	6
Final ,, ...	4	4	13	8

Miss Ruby Rodgers was awarded the Savitribai Purandare prize at the senior examination held in September 1928.

The proprietors of the *Times of India* and *Jam-e-Jamshed* continued to supply a copy

each of these journals free of cost to the Nurses' Club.

Hospital Pharmacopoeia

Thanks to the efforts of Dr A.S. Erulkar and the Professor of Pharmacology, Dr C.C. Merchant, Tutor and their staff, the hospital pharmacopoeia was published.

Central Clinical Laboratory and Research Studies

The Professor of Pathology and Bacteriology undertook a comparative study of the Wasserman reaction and the Kahn test. The results were identical in 94.92% of 965 specimens examined. It was decided to use the Kahn Test in the diagnosis of syphilis, reserving the Wasserman test for special cases. This would result in a considerable saving.

Strains of gonococci were being isolated with a view to preparing vaccines. Four strains had been identified thus far.

A report by the Delegation of the British Social Hygiene Council highlighted the high incidence of venereal disease in Bombay. A systematic study of patients in our hospital was being organized.

Drs A.S. Erulkar and V.R. Khanolkar were studying the causes of severe anemia in patients. 80 patients had been studied and another 20 were being analyzed.

Under Dr Mehta's direction, 101 cases of tetanus treated over the two-and-a-half years since the inception of the hospital were studied by Dr P.G. Shukla, M.S. Cure was documented in 45.5% at a cost of approximately Rs. 15 per patient per day. A full-time worker was being considered for this project.

Dr M.D. Abraham M.B.B.S., medical registrar, was studying patients with burns under Dr Mehta's direction. A similar study was in progress on patients with pneumonia.

Scale of Fees For Well-To-Do-Patients

This was under the consideration of the Corporation. Dr Mehta pointed out that a study of the economic conditions of patients treated in the hospital would be the most fruitful field of research for the student of social and civic economy. This was being brought to the attention of the University and the Corporation.

The Riots

At the beginning of the year, unrest was seen in the wholesale cotton industry resulting in a strike. This lasted six months. There was a large increase in the number of patients seeking treatment in our hospital. On 12 December 1928, there was a serious disturbance. 32 people including 14 members of the police force sought treatment for injuries. 15 needed admissions. Four of them succumbed to their injuries.

In February 1929, large-scale civic disturbances broke out. Part of the outpatient department was converted into a casualty unit and a medical ward into a surgical ward. 144 patients were seen, 72 admitted. Of these, 11 died. 3 were discharged against medical advice.

Details on the disturbance in February can be found in *The Times of India* 30 July 1929. Dr Mehta's letter (page 12) challenged the statement of Mr J.E.B. Hotson, Home Member, Government of Bombay that the hospital was never in danger at any time: '…you had not the faintest idea of the state of affairs in the immediate neighborhood of this hospital during the fatal days of 4th and 5th February 1929….' He then provided the facts regarding five assaulted patients who died in the hospital and referred to others who died before they could be brought to the hospital. On 4 February, over 2000 persons had gathered around the hospital. There were scuffles between them and the Pathans. Over a thousand people rushed into the hospital to see the wounded. 'It was with the greatest difficulty that I could persuade these people to let the quietness of the hospital not be disturbed. The hospital and college gates had to be closed, except that leading to the Casualty…Two of our students almost got assaulted…but were saved in time by some Pathans who recognized them…' Mr Hotson was forced to backtrack and ended up stating, '…the most valuable work which you and your staff did during the troubles of February… the way in which you and your staff stuck to your work through everything was most admirable…'

Over the next few days, the outpatient attendance dropped as patients found it difficult to travel through the disturbed areas. Dr Mehta paid tribute to the resident medical staff, nurses and menial staff for rising to the occasion and for forming an ambulance squad to bring in patients injured in the vicinity of the hospital.

Poor Box Charity Fund

This received steady support from patients who benefited from it and from the public. The Lightfoot Refrigerating Co. continued their free supply of oxygen to the hospital.

APPENDIX 13.

Poor Box Charity Fund—Statement of Account for the year 1928-29.

Receipts. Particulars	Amount. Rs.	a.	p.	Payments. Particulars	Amount. Rs.	a.	p.	Remarks. (Gifts other than monetary gifts.)
Balance ..	7,298	13	1	Appliances such as Crutches, Hernia belts, spectacles, Artificial eyes, artificial limbs, etc., supplied to poor patients ..	1,277	2	0	Mr. V. S. Shirsat presented a Gramaphone (primaphone) for the recreation of patients in Ward No. II.
Out-patient Casualty Department	2,239	4	0	Clothing to poor patients	31	8	9	
" (Medical)	47	0	0	Blood transfusion charges	270	0	0	
" (Surgical)	118	4	0	Travelling expenses paid to poor patients	97	13	9	Dr. R. K. Dhuru, L.R.C.P., L.R.C.S., presented a one-wheeled chair.
Skin Department	177	9	0	Expenses incurred in giving comforts to In-patients of the Hospital	900	6	0	Rao Saheb J. B. Amriti presented one comet motor for the recreation of Children in Ward No. XII-XIII.
X-Ray Department	103	0	0	Printing of Hospital Pharmacopœia	529	1	0	
Aural Department	174	6	3	Printing ..	11	4	0	
Dental Department	12	5	0	Sundries	84	3	9	
Ward No. I	165	0	0	Cost of purchase of Government Securities of the face value of Rs. 21,000 ..	16,155	15	1	Rao Saheb Chunilal G. Munim presented to this Hospital, one negative and one positive copy of the film taken by him of the Hospital day pageant, in aid of Sir Leslie Wilson Hospital Fund.
" II	95	4	0	Balance with the Central Bank of India in current account ..	1,080	13	7	
" III	114	0	0	Cash in hand ..	159	3	7	
" IV	285	12	0					
" V	702	0	0					
" VI	234	12	0					
" VII	498	12	0					
" VIII	324	4	0					
" IX, X, X'	977	8	0					
" XII, XIII	508	8	0					
" XIV-XV	287	0	0					
" XVI	150	8	0					
" XVII	103	0	0					
Other collections	3,365	0	0					
Collection on account of Issue of Medical Certificates	1,699	0	0					
Interest ..	916	9	8					
Total ..	20,597	7	6	Total ..	20,597	7	6	

Other donations and gifts were listed as follows:

44. The following donations and gifts were also acknowledged with thanks during the period under report :—

		Rs.
1.	Choonilal Bhaichand Mehta, Esqr.	1,000
2.	Cawasji Jamshetji Petigara, Esqr.	200
3.	Dr. S. J. Nadkarni L. M. & S., on behalf of Sitaram Ganesh Paranjpye, Esqr.	100
4.	D. V. Sant, Esqr.	100
5.	G. K. Nariman, Esqr.	375
6.	The Managing Director, Burmah Shell Oil Storage and Distributing Co., Ltd., Bombay	300
7.	Merwanji Edulji Kandawalla, Esqr.	101
8.	Mrs. Jerbanoo Mothwalla	1 Gramaphone
9.	Mr. Vishnu Sakaram Shirsat	1 Primaphone
10.	Dr. R. K. Dhuru, L.R.C.P., L.R.C.S.	1 Wheeled chair

45. A sum of Rs. 285-12-0 was also spent for providing warm clothing to the poor patients of the Hospital out of the amount of interest accrued on the anonymous donation of Rs. 28,000 received through Messrs. Ardeshir Hormusji and Dinshaw and Company, Solicitors, for this purpose. A further sum of Rs. 5,934 out of the amount of interest realized, has been invested in purchasing 4 per cent. Government Loan, 1960-70, of the face value of Rs.6,800, reserving the balance for further purchases of warm clothing for patients.

The College

Admissions and Total Number of Students

Examinations

Intermediate M.B.&B.S.: 20 of 27 students sent up in April 1928 and 23 of 42 sent up in December were declared successful.

Final M.B.&B.S.: 12 of 30 candidates sent up in September 1928 passed.

M.D. examination: Two (M.D. branch 1—general medicine); one (M.D. branch 2—pathology); and 1 (M.D. branch 3 – midwifery and gynecology) were sent up. One each passed in branches 2 and 3. The candidate in branch 3, Dr Piroja Cooverji Daroowala was, the first woman student to obtain the M.D. in Bombay University. (*Bombay University Calendar 1928-1930* Bombay: Kamat Printing Press 1931).

M.S. examination: One of two candidates sent up obtained this degree.

(The annual report provides no analysis of the performances of candidates at the University examinations.)

Affiliation

Additional affiliation to the University of Bombay from June 1929 was ensured for the B.Sc. course in Animal Physiology (principal and subsidiary); Microbiology (subsidiary); Microbiology (Principal) with group III.

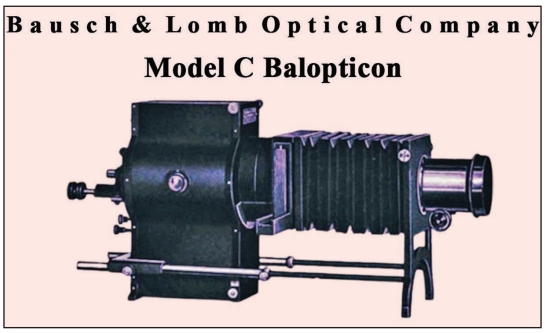
Applied Microbiology was available only medical students.

Cost and Revenue

The total expenditure on the college and hostel excluding the amount spent out of Loan Funds was Rs. 2,17,668-7-9 (previous year 2,06,804-7-3). The revenue in the form of fees, hostel fees and other receipt from undergraduate students was Rs. 56,017-0-0 (previous year 41,311-0-0-7-3). The fees from postgraduate students came to Rs. 1,245-0-0.

Equipment

A large Balopticon (slide projector) made by Messrs. Bausch and Lomb had been purchased at the cost of Rs. 2,407 for use in the main lecture theater. Arrangements were being made to darken the theater when it was in use.



The annual report goes on to state: 'The necessary cinema outfit has been ordered at a cost of Rs. 1,600 to facilitate the taking of motion pictures for demonstration to students.' Equipment for anthropometric measurements had been ordered for the anatomy department. This was a requisite for the B.Sc. course of study in anatomy.

Museums

146 new specimens had been added to the pathology museum and 90 new specimens to the anatomy museum. Some old specimens were discarded.

26 wax models illustrating venereal diseases had been imported from Paris and an equal number were on order in 1929. Models of skeletons and skulls, wax models for the embryological section had been purchased for the anatomy department. Obstetric models were also added to the museum.

The total number of specimens in the anatomy department now numbered 550 and in the pathology department 586.

The professor of pathology was in the process of creating a catalogue explaining and illustrating the pathological specimens.

Library

115 new books and 92 volumes of journals were added during the year. The corresponding figures for the previous years were 103 and 33.

Sir Nusserwanji Choksey M.D., C.I.E. presented 225 books and a number of reprints from his collection to our library.

Various publishers and some members of the staff also presented books.

The library now held 2,783 books, 177 volumes of bound journals and 1,779 old books (including 1,345 books from the Royal Asiatic Society donated in 1926).

2,020 books were issued to students for reading in the library and 890 books to the professorial honorary staff and junior medical staff during the year, figures for the previous year being 2,142 and 834. Senior and junior medical staff and postgraduate students reading for the higher examinations were permitted to take borrowed books home.

Postgraduate and Special Instruction

Special classes were organized by the honorary ophthalmic surgeons along with the professors from the anatomy, physiology and pathology departments for postgraduate students preparing for the D.O. examination.

A special course of instruction in clinical pathology and bacteriology was organized over three months for the three medical officers deputed by the Government of the Central Provinces and Berar.

A course of instruction was organized for postgraduates appearing for the M.S. examination next June. A similar course was planned for those appearing for the M.D. examination but could not be held for want of a sufficient number of students.

A course in medical photography was organized for the benefit of the staff with the help of Mr K.S. Herlekar of Agfa Photo Co. Professor G.M. Jadhav of Baroda College conducted a class in German without charging any fee.

On the recommendation of Sir Nusserwanji Choksey, Secretary to the Indian Council of the British Empire Leprosy Association, Dr S.H. Gokhale M.B.B.S., demonstrator in the Department of Pathology and Bacteriology and Dr M.V. Patwardhan M.B.B.S. were deputed for special training in leprosy at the School of Tropical Medicine in Calcutta.

Grant From the Indian Research Fund Association (IRFA)

Seven proposals were submitted to it by the professorial and honorary staff the previous December. The Governing Body of IRFA approved three of them despite shortage of funds at a total cost of Rs. 9,530:

1. Professor V.R. Khanolkar (pathology and bacteriology): Determination of hemoglobin in health and in anemias common in Bombay
2. Professor S.P. Niyogi (physiology): Investigation in the nutritive value of Indian vegetable foodstuffs
3. Dr H. DeSa (lecturer, obstetrics and gynecology): An investigation on neonatal mortality in Bombay

Drs Jivraj Mehta and V.R. Khanolkar were later elected to the Scientific Advisory Board of IRFA.

Municipal Funds

The Sub-Committee on Medical Relief reduced the hospital grant by Rs. 5,000 and the college grant by Rs. 2,000. It expressed satisfaction that 'both the King Edward VII Memorial Hospital and Seth Gordhandas Sunderdas Medical College were managed on as economic lines as possible'. The Test Audit Officer was satisfied that the methods of controlling the stores and diets was 'based on sound lines and needed no modification'.

Endowments

The following endowments were received during the year:

1. His Highness Shri Sir Daulatsinhji Gold Medal to the student of this college who stood first in the final M.B.B.S. examination. This was provided by the Thakore Saheb of Limbdi.
2. Bhavanagar State Entrance Scholarship of Rs. 20 per month provided by the Bhavanagar Darbar.
3. The Shirwalkar Memorial Fund provided a) a scholarship of Rs. 15 per month for the competitive examination in anatomy and physiology, b) four gold and four silver medals of the approximate value of Rs. 35 and 12 respectively to be awarded on the basis of clinical and oral tests in junior clinical medicine and junior clinical surgery.

Dr Raghunath Dadoba Shirwalkar M.S. (Lond), F.R.C.S.(Eng), had obtained his F.R.C.S. along with Dr Rustam

The Late Dr R. D. Shirwalkar,
M. S. (Lond.) F. R. C. S. (Eng.)

Nusserwanji Cooper and Dr Tribhovandas Oghaddar Shah in 1919. He passed away on 24 February 1928 after a brief illness. He left behind his widow, three children, and a large circle of friends and loving students.

18 students received scholarships either from the college or university endowments or from the Bombay and CP Governments. 12 were awarded free studentships in the college. Scholarships from private bodies were provided to 12 others.

Buildings

A photographic studio was constructed for recording images of patients.

A separate room was constructed for the storage of acids, alcohol, ether and other inflammable chemicals.

A shed was also built for the anatomy cart and bullocks.

The verandahs on the east and west of the first and second floors of the college were being enclosed with Crittall windows. (These were steel-framed windows of British origin, named after the company that manufactured them. The Houses of Parliament and Tower of London, along with thousands of other buildings in Britain, had them.)

The college and hospital roofs and domes had leaked during the monsoon and needed repairs at the cost of Rs. 2,794-4-0. Dr Mehta noted 'The trouble of the bursting of the tiles in the different wards and theaters of the hospital continues'. Provision was being made against the recurrent phenomenon.

Hostel and Gymkhana

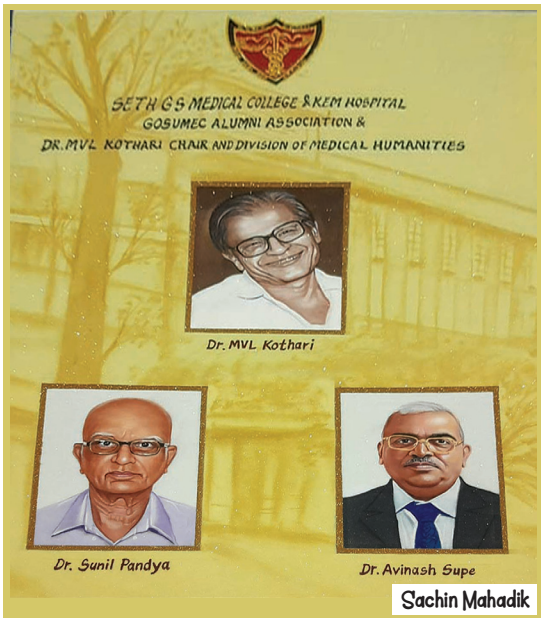
The proposed floor over the existing hostel building was still under the consideration of the Corporation and Dr Mehta fretted that this greatly felt want had yet to be met.

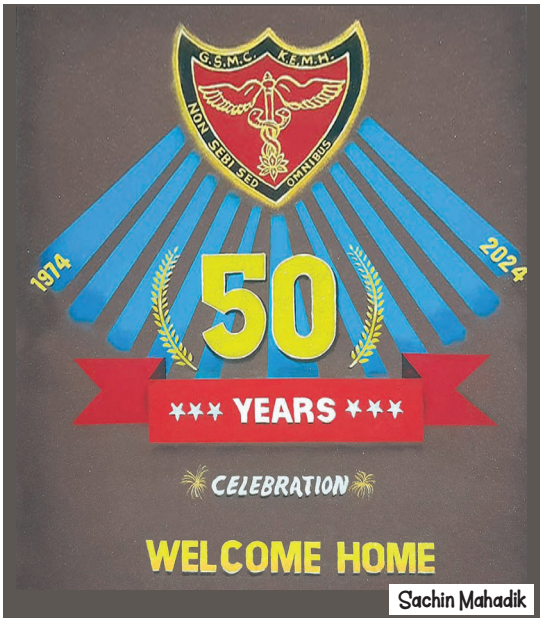
The plot of land acquired to the east of the hospital and college was being leveled for use as a playground by the students. The two tennis courts had been completed. Dr Mehta repeated his plaint in the previous report. 'The need for a gymkhana is much felt. It is to be hoped that funds will be made available for its construction next year.

The college entered the inter-collegiate tournaments in tennis, hockey, football, cricket, athletics and badminton. Mr N.R. Suvarna won successfully, for the fourth time, the championship cup in the singles

tennis tournament. The hockey team sent to Poona for the Poona Young Cricketers (P.Y.C.) Hockey Tournament was awarded two silver medals in special recognition of two players–Mr J.A. Sharma and Y.N. Ajinkya. Four of our players were included in the University team playing in the Aga Khan Tournament. Dr Ajinkya went on to be Professor of Obstetrics and Gynecology at the Grant Medical College and J. J. Hospital and established his own hospital on Hughes Road.

'The gardens are now looking up and add to the magnificence of these institutions.' Dr Mehta thanked Assistant Dean, Captain R.E. Dadachanji for this achievement.





Rangoli welcoming at the entrance of JMLT.

8

Annual Report (1929–1930)

Staff

Drs A.S. Erulkar M.D. (Lond) and P.T. Patel M.D. (Lond), M.R.C.P. (Lond.), D.T.M. &H. (Cantab.), Honorary Physicians, King Edward VII Memorial Hospital and Honorary Lecturers, Seth Gordhandas Sunderdas Medical College Physicians, were away on leave for 4 and 5 months respectively in the summer of 1929. They visited various teaching institutions in England and on the Continent.

The Hospital

6. The Hospital worked throughout the year in excess of the full complement of 334 which are distributed as follows :—

Department.	Male.	Female.	Children.	Total.
Medical	78	26	10	114
Surgical	78	26	14	118
Gynæcological	..	35	..	35
Ophthalmic	16	16	..	32
Aural	6	2	2	10
Skin and Venereal	6	2	..	8
Casualty	6	3	..	9
Isolation	6	2	..	8
Total ..	196	112	26	334

Due to the inflow of patients, the number of beds were increased to 354. The number of nurses and support staff was accordingly strengthened.

Particulars.	Figures for the year 1929.	Figures for the year 1928.
(a) *In-patients.*—		
1. Scheduled strength of beds	334	334
2. Daily average number of in-patients	362.8	330.1
3. Total number of in-patients admitted	8,265	7,846
4. Average number of days each patient was resident ..	15.2	15.3
(b) *Out-patients.*—		
1. Total number of new out-patients	51,760	48,160
2. Total number of out-patient attendance	1,50,180	1,44,416
3. Number of Casualty patients included in No. 1 above.	9,325	7,173
(c) *Operations.*—		
1. Total number of operations on in-patients	2,674	2,810
2 Total number of operations on out-patients ..	2,375	2,268

Of the 8,575 patients (8,265 new patients and 310 patients in residence on 1 January 1929), 3,690 were cured, 2,775 were discharged as relieved and 865 either absconded or were discharged against medical advice. 917 died, one a stillborn child, 270 within 24 hours of admission and 481 after three days of admission.

15. The following table illustrates the relative cost of in-patients and out-patients, per patient, per day, during the years 1929-30 and 1928-29, respectively :—

——	1929-30.	1928-29.
	Rs. a. p.	Rs. a. p.
(a) Average cost, per in-patient, per day	3 2 6	3 6 7
(b) Average cost of diet, per in-patient, per day ..	0 10 8	0 11 4
(c) Average cost per in-patient admission	48 1 10	52 3 2
(d) Average cost per out-patient attendance ..	0 8 0	0 7 11
(e) Average cost per out-patient admission ..	1 7 6	1 7 7

16. The details of the cost per in-patient, per day, for the years 1929-30 and 1928-29, respectively, will be seen from the following table :—

Year.	Diets.	Drugs, Dressings and Instruments.	Stores and Linen.	Heating and Lighting.	Miscellaneous.	Establishment.	Repairs to Buildings and Engineering.	Total cost.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1929-30	0 10 8	0 6 6	0 3 3	0 2 3	0 2 0	1 7 3	0 2 7	3 2 6
1928-29	0 11 4	0 6 8	0 3 5	0 2 6	0 2 0	1 9 6	0 3 2	3 6 7

17. The following table gives the average cost for every new out-patient admission completely treated during the year under report in comparison with that for the previous year :—

Year.	Diets.	Drugs, Dressings and Instruments.	Stores and Linen.	Heating and Lighting.	Miscellaneous.	Establishment.	Repairs to Buildings and Engineering.	Total cost.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1929-30	..	0 8 6	0 1 0	0 0 9	0 0 9	0 11 3	0 1 3	1 7 6
1928-29	..	0 8 11	0 1 2	0 0 8	0 0 9	0 11 0	0 1 1	1 7 7

The largest number of in-patients on a single day was 405 and the highest number of admissions in a day was 57, the average being 23.

An arrangement had been made between the Corporation and the Committee of

Helpless Beggars Camp. Helpless patients not claimed by relatives would be accepted by the Committee. The Corporation raised the annual grant of Rs. 6,000 to Rs. 10,000. Dr Mehta also proposed a convalescent home with 30 beds where patients recovering from fractured bone could be housed and an infirmary for patients with chronic and neurological illnesses. He pointed out that 200 of the 8,575 inpatients were kept in hospital for over two months as against the average stay of 15 days. If these patients had been transferred to an infirmary or convalescent home, four times that number could have been treated at no additional cost.

Arrangements were being made to transfer patients with advanced tuberculosis to the Maratha Hospital and those with early infection to the Turner Sanatorium. (The Maratha Hospital was near the Victoria Gardens at Byculla. It was created to house plague victims. The Turner Sanatorium was in Naigaon, near the present Tata Memorial Cancer Hospital.)

The growth in the number of outpatients was highlighted again. The highest number attending on a single day was 757, the highest number of new registrations was 289, and the highest number of old patients was 500. Funds had now been provided for extension of the Surgical Dressing Section.

Equipment

Shortage of funds disallowed purchase of radium and DRR therapy units. As a consequence, patients with cancer could not be treated. Dr Mehta renewed his plea for early purchase of these much-needed items.

New Works

Construction of venereal wards started in November 1929 and was in progress. Work on the additional floor over the Nurses' Annex had been delayed. The sum of Rs. 6,200 had now been made available from the Governor's Hospital Fund and Rs. 15,366 from the Municipal Loan Works Budget. The tender had been accepted and work started.

Nurses

Probationer nurses were sent to Arthur Road Hospitals every three months for training. The results of examinations conducted by the Bombay Presidency Nursing Association were as follows:

Examination.	September 1929.		March 1930.	
	Appeared.	Passed.	Appeared.	Passed
First Examination ..	7	6	8	5
Final Examination ..	13	7	13	7

The Savitribai Purandare prize for the nurse with highest marks in surgical nursing was awarded to Miss Maggie Shean.

The proprietors of *The Times of India* and *Jam-e-Jamshed* were joined by the proprietors of *Navakal* in supplying, free of charge, one copy of these journals daily to the Nurses' Club. The Manager of the Capitol Cinema provided passes for eight nurses to go there at a time. (Capitol Cinema, opposite the Victoria Terminus, was constructed in 1879 and was one of

Bombay's oldest theaters. Under the earlier names of *Tivoli* and *Gaiety*, it featured the performing arts.) The management of Messrs. Madon Ltd. provided a similar facility. (Jamsetjee Framjee Madon was one of the pioneers of Indian cinema. He owned over 120 cinema halls at one time.) Mrs Jamnabai Bhatia presented a Chesterfield set of a sofa and two chairs to the Nurses' Home in memory of her brother's daughter, Kasturbai Kalyanji Bhatia.

Poor Box Charity Fund

The Lightfoot Refrigeration Company Ltd. continued free supply of oxygen to the hospital. Other donations and gifts were tabulated:

		Rs.	a.	p.
1.	The Agent-General, Lloyds Triestino and Marittima Italiana Navigation Co.	1,000	0	0
2.	The Burma Shell Oil Storage and Distributing Co., Ltd., Bombay	600	0	0
3.	Mr. Sahu Jagadish Seral of Moradabad	501	0	0
4.	The Secretary and Treasurer, Bombay (City) Red Cross Executive, Indian Red Cross Society	268	9	0
5.	"X Y Z" through Dr. J. C. Chaya, M.B., B.S., Bombay	175	0	0
6.	Mrs. M. F. S. Talyarkhan, Convener, Sub-Committee, Women's Relief Committee	107	13	0
7.	The Bombay Union Dye Works	101	0	0
8.	H. H. The Maharaja of Dharampur	100	0	0
9.	The Agent, Gold Mohur Mills	100	0	0
10.	The Swedish Mills Co., Ltd.	100	0	0
11.	The Western India Match Co., Ltd.	100	0	0
12.	Mr. V. V. Vadhavkar, (on behalf of his aunt Mrs. Gangubai Trimbak Korde)	One Perambulator.		
13.	Rao Bahadur S. K. Bole (on behalf of Mr. V. K. Bole)	One Primaphone with records. 2 Doz. brass tumblers with covers, 2 Cups and Saucers.		
14.	Mrs. Ratanbai Mistry	One Gramophone with records.		
15.	Mr. W. D. Miller	One Gramophone with records.		
16.	Mr. Dawlatram Mohandas, Proprietor, Doulatram Dyeing and Bleaching Mills	Sixty-eight Bed-sheets.		

The College

60 new students were admitted in June 1929, two of whom were for the B.Sc. course in Anatomy. The number of students on the college rolls (including 12 women) was as follows:

First M.B., B.S.	First Year	57
First ,, ,,	Second Year	41
Second ,, ,,	Third Year	62
Final ,,	Fourth Year. Fifth Year.	72

Affiliation

The Academic Council and Syndicate had recommended affiliation of the college for the course of B.Sc. (Anatomy).

Recognition had been accorded by the University of London to certain tutorial and resident medical posts for the M.D. and M.S. degrees held in our college and hospital. The Conjoint Board recognized our diplomas in ophthalmology and E.N.T. surgery.

Examinations

Mr S.G. Joshi from our college passed in the first class with distinction in December 1929.

Final M.B.&B.S. examination (part 2): The college sent up its first batch of students for this examination.

Mr M.M. Pandya was awarded the Balkrishna Sundamji Prize in midwifery. Ms M.R. Nadkarni won all the scholarships and prizes meant for women students. The results for the M.D. examinations were tabulated:

		Students sent up.	Passed.
M. D. Branch	I (General Medicine)	4	1
,, ,,	II (Pathology)	1	.
,, ,,	III (Midwifery)	4	1

M. S. Examination.—Of the three post-graduate students sent up for this examination two were successful.

D. O. Examination.—Of the four candidates sent up for this examination, none was able to get through

Annual Cost and Revenue

The total expense on college and hostel, excluding the amount spent out of loan funds, was Rs. 2,23,241 (previous year: Rs. 2,17,668-7-9). This included all the liabilities for the year. The revenue in the form of fees, hostel rents, and miscellaneous receipts from students was Rs. 60,729-14-0 (previous year: Rs. 56,017). Fees from postgraduate students amounted to Rs. 2,565. The gross cost per student for the year was Rs. 958 (previous year: Rs. 1,139) and net Rs. 700 (previous year Rs. 842).

Museums

115 old specimens in the pathology museum were replaced by new specimens. New specimens were added to both anatomy and pathology museums. 48 more wax models illustrating various kinds of skin and venereal diseases had been ordered from Paris.

Complete catalogs of the pathological specimens and those in the clinical museum were under preparation. Part 1 of the catalogue dealing with the sections on the alimentary canal, liver, kidneys, heart, and blood vessels was published in 1929. Part 2 was in the press.

The trustees of the Seth Jamnadas Lallubhai Charities had donated Rs. 1,10,000 in Government Promissory Notes for the construction of a separate museum building. Plans were under consideration by the Medical Relief Committee of the Corporation.

Library

200 new books (115 in the previous year) and 60 bound volumes of journals (92 in the previous year) were added to the library. 23 books were presented by publishers and members of the staff. The library now held 3300 books and 2,000 old books.

3,470 books were issued to undergraduate students for reading in the library (2,020 in the previous year), 1,134 books were issued to professors, honoraries, junior staff, and postgraduate students (890 in the previous year).

Special Course of Lectures

In January 1930, a course of lectures on *Recent methods in the treatment of venereal diseases* was given to doctors from the Association of Medical Women in India (Western division) by Dr A.C. Rebello, Honorary Lecturer in Venereology and Dermatology.

Endowment of a Gold Medal

The Bombay Medical Union endowed a gold medal (3½ tolas in weight, 4½ inches in diameter) to be named Sir Nusserwanji Choksy Gold Medal. It was to be awarded after a competitive examination in the subject of medicine open to all medical graduates who had qualified from the University of Bombay during the previous year.

General

Grant From IRFA

Three research projects were being carried

out using these grants.

1. Physiology department: *Inquiry in the nutritive value of Indian vegetable foodstuffs.* The seeds of legumes such as *tur (Cajanus indicus), channa, watana* (*Pisum arvense*) were analyzed for their protein, ash, and carbohydrate contents. The principal protein was globulin. Ten different globulins were isolated and chemically analyzed. The biological value of these globulins were compared with that of casein when fed to white rats. The values were as follows:

Casein	88
Tur	65
Watana	41

The experiments were in progress. IRFA had provided a grant of Rs. 5,500 for the year 1930–1931.

2. Pathology Department: *An inquiry into the determination of hemoglobin in health and in the anemias common in Bombay*.

255 healthy subjects (122 males, 133 females) were tested. These included medical students, nurses, middle class residents in Matunga. Hemoglobin was estimated using the different methods commonly employed in Europe and America. Van Syke's and Sahli's methods were used to determine the oxygen content in these samples. A batch of three Hellige's hemometers were in use. The data is being analyzed. The next step will be the investigation of individuals with anemia. IRFA had provided a grant of Rs. 1,800 for the year 1930–1931.

3. Dr H. D'sa, Honorary Lecturer in obstetrics and gynecology: *An investigation on neonatal mortality* had been planned but since others were already working on this subject, *Causes of maternal and foetal dystocia in India* was taken up. The authorities of the Nowrosjee Wadia Maternity Hospital enabled study of patients in labor there. 1,825 female pelvises were studied. 1,293 of these were from women in labor. 892 fetuses were being studied. The inquiry was being continued. IRFA had provided a grant of Rs. 3,500 for the year 1930–1931.

Other Inquiries

The Pharmacology Department studied samples of Tincture digitalis, chloroform, and natural and synthetic adrenaline sent from the hospital with a view to assessing their efficacy. The study on adrenaline was published in the *Indian Medical Gazette* under the title '*A note on the action of synthetic adrenaline*'.

A drug named *Hermal* was being investigated. The project was made possible over three years by the donation of two members of the honorary staff. Dr G.K. Gokhale M.B.B.S. was appointed research assistant in the pharmacology department for this study.

A firm in Nagpur had sponsored an investigation by the Pharmacology Department on the vitamin content of an irradiated vegetable oil.

Hostel and Gymkhana

The construction of an additional floor over the existing hostel building would start after the rains. Once this was completed, 42 more students could be accommodated. The leveling of the large plot of ground towards the east of the hospital and college was in progress.

Our students participated in inter-collegiate tournaments in hockey, tennis, football, cricket, athletics, and badminton. The hockey eleven won the Dr Vijayker Challenge Cup and Bhulabhai J Desai Challenge Shield. Five of our players were selected to play in the Bombay University team in the Aga Khan Hockey Tournament.

Our student Mr Mohamad Mohi Uddin played in the Quadrangular Cricket Tournament on behalf of the Islam Gymkhana. Mr N.R. Suvarna did very well in the Bombay Presidency Hard Court Tennis Tournament, winning the gentlemen's doubles championship. He also reached the semi-final stage of the single championship event.

For the first time, the Gymkhana held an Annual Sports Day on 2 March 1930 under the presidentship of Mr Meyer Nissim, the President of the Municipal Corporation. The sports were held on the grounds of the Grant Medical College Gymkhana.

The students also organized the first Annual Social Gathering.

Retrenchment

In response to the incessant plaint against alleged extravagance of expenditure at these institutions, the sub-committee of the Medical Relief Committee carried out an exhaustive enquiry over several months. Their conclusion was, 'Both the King Edward VII Memorial Hospital and Seth Gordhandas Sunderdas Medical College were managed on as economical lines as possible.'

The general enquiry on retrenchment in the Municipal Corporation was carried out with Mr N.D. Mehta as the Retrenchment and Reforms Advisor. They found no scope for retrenchment at our institutions. In fact the committee noted that the cost per inpatient per day had been reduced by about 4 annas during the current year. The Dean thanked the Honorary Staff, Assistant Dean Captain R.E. Dadachanji, Matron Mrs McCarthy and other staff.

9

Annual Report (1930–1931)

Staff

Dr P.C. Bharucha, M.D. (Lon.), Honorary Lecturer in Medicine at the Seth Gordhandas Sunderdas Medical College and Honorary Physician, King Edward VII Memorial Hospital, had been granted four months' leave from 1 March 1931 on considerations of health. Dr S.G. Vengsarkar, M.D. (Bom.), Honorary Assistant Physician in this hospital, was appointed to look after his work during his absence.

Dr R.G. Dhayagude. M.D. (Bom.), Assistant Professor, Pathology Department in. the College, was granted six months' study leave combined with eight months' ordinary leave from the 19 May 1930 for advanced studies in pathology and bacteriology.

The Hospital

The Hospital worked throughout the year in excess of the full complement of 354 beds though a constant check was exercised on the admissions to the Hospital. The distribution of the beds was as shown in the table:

Financial stringency disallowed the purchase of radium and deep X-ray therapy apparatus. Fortunately, Trustees of Wadia Charities made a generous donation of Rs. 25,000 for the purchase of deep X-ray therapy apparatus. Purchase and installation of the necessary apparatus was expected by the next year. In gratitude, the department would be named the N.M. Wadia Deep X-ray Therapy Institute. For the purchase of radium, the hospital was looking for a generous donor. The minimum sum required was Rs. 25,000, though it would be far better to have a larger quantity of radium 'it is more effective when administered in large doses'.

An interesting proposal followed:

'It is proposed, as funds permit, to

Department.	Male.	Female.	Children.	Total.
Medical	83	31	10	124
Surgical	83	31	14	128
Gynæcological	....	35	....	35
Ophthalmic	16	16	....	32
Aural	6	6	2	10
Skin and Venereal	6	2	....	8
Casualty	6	3	....	9
Isolation	6	2	....	8
Total ..	206	122	26	354

replace the existing boilers for hot water in the wards by geysers as the stoves of the boilers make much noise in the early mornings and disturb the patients' sleep. Two geysers have already been fixed and it is proposed to fix two more in the course of the next year. Likewise, it has been thought necessary to replace, on funds permitting, the existing ice chests from the ward pantries by small electric refrigerators. Here also the Hospital looks forward to the public-spirited citizens to come to its assistance.'

Of the 9,445 inpatients, (9,117 new patients plus 328 patients in residence on the 1 January 1930) in the hospital, 3,997 were cured, 3,115 were discharged as relieved, 963 either absconded or left the hospital against medical advice and 1,012 died. 358 patients were left in the Hospital at the end of the year. Out of the 1,012 deaths, 140 died within 24 hours of admission, 297 after 24 hours and within three days and the remaining 575 after three days of their admission into the hospital.

The total expense on maintenance of the hospital (excluding the amount spent out of the loan funds) was Rs. 5,26,572. This sum included maintenance and treatment of inpatients, the cost of the outpatients department, resident medical, nursing and support staff as well as that of administration and maintenance and repairs of buildings. The cost per inpatient per day came to Rs. 3-3-9 and that for each out-patient, to Re. 0-8-1 per outdoor attendance, i.e., about Re. 0-2-8 per medicine day including the cost of drugs, surgical dressings, skiagrams, establishment charges, etc. The cost of diet including that of extras and. stimulants worked out at Re. 0-9-8 per inpatient per day. The average cost to the institution for every inpatient admitted worked out at Rs. 45-8-2; while that of every new outpatient admission worked out at Rs. 1-8-3.

Tables showing comparative figure for 1930–1931 and 1929–1930 for cost per inpatient per day, cost per new outpatient admission per day were provided.

This year, too, though the scheduled number of beds was 354, there were generally more inpatients than could be accommodated on the cots. The largest

Particulars.	Figures for the year 1930.	Figures for the year 1929.
(a) In-patients :—		
1. Scheduled strength of beds	354	334
2. Daily average number of in-patients	368.4	362.8
3. Total number of in-patients admitted	9,117	8,265
4. Average number of days each patient was resident ..	14.0	15.2
(b) Out-patients :—		
1. Total number of new out-patients	58,377	51,760
2. Total number of out-patient attendance	1,73,511	1,50,180
3. Number of Casualty patients included in No. 1 above ..	10,044	9,325
(c) Operations :—		
1. Total number of operations on in-patients	3,103	2,674
2. Total number of operations on outpatients	3,126	2,375

number of inpatients on a single day during the year 1930 was 411. The highest number of inpatient admissions on a single day was 43, the average number of daily admissions being 25.

Ruefully, Dr Mehta concluded,

'The congestion in the wards exists in spite of refusing admission to many patients whom the medical staff would like to admit. The demand for more hospital accommodation grows in spite of the addition of nearly a thousand beds in the city of Bombay during the last six years.'

An abnormal rush of patients from October to December necessitated employment of extra part-time staff during these months. The highest number of outpatients on a day was 898 and the highest number of new admissions was 315. The highest number of old patients treated in the outpatients department was 590. An independent Casualty Department and two extra consulting rooms for medical and surgical patients respectively was proposed.

Unclaimed patients from the hospital continued to be shifted to the Helpless Beggars' Camp on the contribution of Rs. 10,000 per year. This helped relieve congestion in the wards.

Aural and skin sections of the outpatient department were now functional, the former having its own operation theater. It was proposed to construct a small day care ward for patients with tonsil and adenoid disease in the open space next to the aural department.

Arrangements with the Maratha Hospital and the Turner Sanatorium for patients with tuberculosis continued, 316 patients with advanced disease being sent to the Maratha Hospital, often directly from the outpatients department.

New Works

The wards for patients with skin and venereal diseases had been completed. Financial stringency prevented sanction of staff and the purchase of necessary equipment. Half the cost of equipment of the wards was borne by the Governor's Hospital Fund.

An extra floor had been constructed over the Nurses' Annexe. This had reduced congestion in the Nurses' Home.

Relatives or friends who came to take away the dead bodies were put to much inconvenience for want of provision in the compound. A shed was under construction near the morgue and a special gate constructed near it.

Extension of the Surgical Dressing section in the outpatients department was progressing. The electrocardiography department also needed an extension at the cost of Rs. 1,339. It was also proposed to extend the hospital office to provide an office for the Assistant Dean.

Floods

Unusual flood waters poured down Golanji Hill 'and converted a portion of the hospital into a huge lake flooding knee deep some of the wards.' The City

Engineer was requested to submit plans and an estimate.

Another development which, to us, accustomed to skyscrapers, appears quaint, was the construction of a tall building right opposite the hospital compound. There was a congestion in the traffic from and to the outpatients department of the hospital. To relieve this, it was proposed to construct another gate, corresponding to the arrangement which is in existence at the main entrance of the hospital.

Civil Disobedience Movement

'As a result of this movement, heavy casualty work was expected at the Hospital, and arrangements were made from time to time to cope with it. But thanks to the work of the various Ambulance Corps and the zealous work of the various citizens who organized the Congress Free Hospital and the Congress Emergency Hospital, most of the victims of the Lathi charges were treated at these Hospitals with the result that there was not so much rush of patients at this hospital.'

Nurses

Results of the examination of probationer nurses held by the Bombay Presidency Nursing Association:

Examination.	September 1930.		March 1931.	
	Appeared.	Passed.	Appeared.	Passed.
First Examination	12	11	17	14
Final Examination	12	8	7	3

The following nurses were awarded prizes:

Mrs Abigail Eliza Moses Prize

Miss Christina Rozario

Mrs Savitribai Purandare Prize

Miss Minnie Rozier

Mrs Dhungowri Rangildas Desai Prize

Mrs Durgabai Pendse

Mrs Dhungowri Rangildas Desai Prize

Miss Mercy Edwards

As during earlier years, the Dean thanked the proprietors of the *Times of India*, the *Jam-e-Jamshed*, and the *Navakal* for the supply, free of charge, of one copy each of those journals to the Nurses' Club. The manager of Capitol theater continued issuing two complimentary passes which enables eight of the nurses to go at a time—a privilege much appreciated by the nursing staff. Messrs Madon Ltd. had extended a similar concession to the nursing staff.

Mr Vasant S. Velinkar, B.A., Bar-at-Law presented a fine carpet for the Nurses' Home of the Hospital. Dr P.C. Bharucha, M.D. (Lon.), gifted a fine radio set for the recreation of the nurses.

Fees for Well-To-Do Patients

The Corporation sought permission to amend the Municipal Act empowering the Commissioner to refuse admission of well-to-do patients to Municipal Hospitals as they had the means to pay for their treatment at other hospitals.

Poor Box Charity Fund

Steady support to this fund was

maintained. The Light-Foot Refrigeration Co., Ltd., continued the free supply of Oxygen to the Hospital. The following gifts and donations were acknowledged with thanks:

	Rs.	a.	p.
The Burma Shell Oil Storage and Distributing Co. of India, Ltd.	550	0	0
Mr. Sahu Jagadish Seral of Moradabad	251	0	0
The Agent-General, Lloyds Triestino and Marittima Italiana Navigation Co.	250	0	0
The Agents, Peninsular and Oriental Steam Navigation Co.	250	0	0
The Manager, Currimbhoy Mills Co., Ltd.	162	12	0
Capt. S. K. Phadake, M.B.B.S., B.M.S.	101	0	0
The Agents, Killick Nixon Co.	100	0	0
The Ambernath Factory Manager, Western India Match Co., Ltd.	100	0	0
The Swadeshi Mills Co., Ltd.	100	0	0
The Secretary, Central Bank of India, Ltd.	100	0	0
The Agents, Gold Mohur Mills, Ltd.	100	0	0
Mr. Jusab Mahomed	18 stools, wooden.		
Miss K. R. Samant	One Dressing Trolley.		

Poor Box Charity Fund—Statement of Accounts for the year 1930-31.

Receipts. Particulars.	Amount. Rs.	a.	p.
Balance in hand	142	12	½
Balance with the Central Bank of India in current account	2,073	1	2
Out-patient Casualty Department	389	7	5½
" Medical "	41	9	0
" Minor Surgery Department	82	13	4
" Surgical Dressings Department	87	12	3
" Skin Department	896	5	6
" X-Ray Department	50	10	9
" Aural Department	352	14	3
" Dental Department	58	1	4½
" Gynæcological Department	35	0	0
Ward No. I	263	9	3½
" II	111	2	2
" III	126	10	3
" IV	203	2	3
" V	540	4	9
" VI	429	4	0
" VII	705	12	4½
" VIII	353	8	6
" IX, X, XI	1,230	3	0
" XII, XIII	458	4	9
" XIV, XV	279	11	9
" XVI	174	11	0
" XVII	18	0	0
Other collections	2,834	6	9
Collection on account of issue of Medical Certificates	1,198	8	0
Interest	2,205	13	0
Proceeds from the sale of Hospital Pharmacopœia	413	3	3
Additions to supense account	229	5	6
Total	15,963	15	8½

Payments. Particulars.	Amount. Rs.	a.	p.
Appliances such as Crutches, Hernia belts, Spectacles, Artificial eyes, Artificial limbs, &c., supplied to poor patients	649	7	0
Blood transfusion charges	70	0	0
Travelling expenses paid to poor patients	143	14	0
Expenses incurred in giving comforts to patients of the Hospital	131	6	6
Printing and Stationery	76	4	0
Sundries	160	8	0
Purchase of Securities of the face value of Rs. 13,000	12,709	15	10
Dead-Stock	243	0	0
Radium treatment charges	25	0	0
Balance with the Central Bank of India in current deposit account	*1,617	14	9
Cash in hand	136	9	1½
Total	15,963	15	8½

* This includes the amount of Rs. 1,458-12-3 held in suspense for the following accounts:—

1. Resident Medical Officers, Mess Deposit Account	Rs. 1,417	0	0
2. Splint Deposit	" 30	0	0
3. Patients' money	" 11	12	3
	Rs. 1,458	12	3

The College

60 admissions were made in June 1930. Of the total of 263 students on the rolls, 17 were women.

First	M.B., B.S.	First Year	.. .. ..	60
		Second Year	.. .. ..	42
Second	M.B., B.S.	Third Year	.. .. ..	52
Final	M.B., B.S.	Fourth Year 39 / Fifth Year 70	.. ..	109
		Total	..	263

Affiliation

The college was now affiliated to the University of Bombay for courses of study in Human Anatomy (for 5 years), Embryology (for 5 years), Animal Physiology, and Microbiology (permanent) for the B.Sc. degree.

Annual Cost and Revenue

The total expenditure of the college and the hostel, excluding the amount spent out of Loan Funds, was Rs. 2,29,501 (previous year Rs. 2,23,241). The revenue of the college in the form of tuition fees, hostel rent and miscellaneous receipts, (including those from under-graduate students) amounted to Rs. 79,116 (previous year Rs. 60,729-14-0). Fees from post-graduate students (not included in the above figure) amounted to Rs. 1,965.

Museums

New specimens were added to the anatomy, biology and pathology museums. Part 2 of the catalogue of pathological specimens was nearing completion.

48 wax models, illustrating skin and venereal diseases had arrived and were now available for demonstration to students. There were thus now 74 wax models in the museum.

The Corporation had accepted the proposal for the construction of a new building for the museums using the government promissory notes valued at Rs. 1,10,000 provided by the Trustees of the Seth Jamnadas Lallubhai Charities. Construction would start in June 1932.

Library

261 new books, 70 volumes of journals were added, the corresponding figures for the previous year being 200 books and 60 volumes.

186 books were donated to the Library by various persons. Medical journals were transferred to the college library from the Municipal Health Department through the good offices of the Executive Health Officer. Attempts were under way for the transfer to the Library of some more books and journals from the corporation office. Mrs Dhanbai Yeshwant Gidh presented to the college library a complete set of the Encyclopedia Britannica, in memory of her late husband, Dr Y.D. Gidh, L.M. & S.

Books were being issued from the library to undergraduate students for reading in the library and professors, honorary and junior medical staff, and postgraduate students.

Dr Mehta specially thanked Sir William Hale White, consulting physician, Guy's

Hospital, London for his gift of Clinical Society's Transactions from 1868 to 1907, and of the Medical Society's Transactions from 1909 to 1930. These sets of old journals were particularly welcome, as the college library possessed very few back numbers of important journals or proceedings of important societies.

Hostel and Gymkhana

The additional floor over the hostel was nearing completion. Rooms in it would be allotted to students from June 1931.

The playground was almost complete and would be ready for use by students from June 1931.

The college teams participated in the Inter-Collegiate Tournaments in cricket, tennis, Badminton, hockey and football. One of the players in the Bombay University Team in the Aga Khan Hockey Tournament was selected from this college. A cricket team was sent to Poona by the college to play in the P.Y.C. Cricket Tournament but won only in the first round. Mr Mahomed Mohiuddin, a student of this college, was selected in the team for the Inter-University Tennis Match, played between the University of Bombay and the Punjab University. Dr N.R. Suvarna, an ex-student of this college, distinguished himself in the Western India Tennis Tournament and annexed the Western India Singles Championship Cup, during this year.

Hostel for Women Students

This greatly felt need was being met by obtaining a municipal bungalow near the college. An extension of the King Edward Road in the Parel village was being completed. This would enable the college authorities to utilize this bungalow for the women students.

Medical Examination of Students

For the first time in its history, the University of Bombay undertook the medical examination of all college students. If one or more ailments were found, the Honorary Staff members were requested to treat them.

Inquiries

Details of research studies undertaken during the year were provided.

Three studies funded by the Indian Research Fund Association were under progress:

1. *The nutritive value of Indian vegetable foodstuffs.*

   The investigations of the following 10 pulses including Tur, Chana and Watana, which were investigated in the preceding year, had been completed during the course of the year:

Botanical Name	Local Name
Cajanus indicus	Tur Dal
Lens esculenta	Masur Dal
Phaseolus aconitifolius	Matagi
Cicer arietinum	Chana Dal
Phaseolus radiatus	Mug Dal
Dolichos lablab	Pavta
Dolichos biflorus	Kulith
Phaseolus mungo	Udid Dal
Vigna catiang	Chavali
Pisum arvense	Hirwa Watana

   The detailed results of the above

investigations had been submitted for publication in parts. (See the paper by Niyogi S. P., Narayana N, Desai P.G. *Indian Journal of Medical Research* 1931;18:1217–1229) Another study on the nutritive value of minor millets of India was planned during the year 1931–32, for which the Indian Research Fund Association had allotted a further grant of Rs. 5,100.

2. *Determination of hemoglobin in health and in anemias in Bombay*.

   This study was extended to study anemias during pregnancy and after confinement. It was proposed first of all to find out if there was a so-called 'physiological' anemia of pregnancy and, if so, to what extent and severity it is observed in patients attending the antenatal clinic at the Nowrosjee Wadia Maternity Hospital. Only primipara were chosen for the study. Details of the income of their families and diet were also recorded. It was difficult to ensure regular attendance at the clinic even after postcards were sent to remind them. Indian Research Fund Association had allotted a grant of Rs. 1,800 for the study.

3. *Maternal and foetal dystocia in Bombay: The shape and size of the Indian pelvis, the development of the fetus, and the common types of dystocia in Bombay*

   The study was initiated in 1929. 6,274 female pelvis, 3,556 normal labor cases, 360 abnormal labor cases, and 3,115 fetuses had been studied up to 31 March 1931. During the study, attempts were made to compare the development of the pelvis and fetus in different Indian communities. These studies were carried on at the Gynecological Department of the K.E.M. Hospital, Wadia Maternity, and Bai Motlibai Hospitals, thanks to the facilities offered by Dr M.V. Mehta, Principal Medical Officer of the Wadia Maternity Hospital, and Lt Col A.F. Hamilton, Superintendent of the Bai Motlibai and Petit Hospital. Indian Research Fund Association had allotted a grant of Rs. 3,500 for the study.

Three additional studies were sanctioned by the Indian Research Fund Association. Dr Mehta provided details on other studies being carried out:

1. *Anthropometric Measurements in Bombay*, conducted under the direction of Dr G.M. Kurulkar, Associate Professor of Anatomy. It had started last year. Students and nurses had volunteered for the study.

   38 head measurements and 60 bodily measurements along with body weight, foot and hand prints, colour of the eye, skin and hair, age, nationality, caste, sub-caste, native place, and other necessary details were recorded in specially printed books. 100 men and 100 women were measured up till this year.

   The Indian Research Fund Association had provided Rs. 940 for the study.

2. *A systematic survey of Bombay dietary*

   The objective was to determine the diet of various classes of people inhabiting Bombay and ascertain whether the different proximate principles

occurred in adequate amounts and proportions in the different diets. It was hoped that the study would show whether an ill-balanced diet was one of the factors causing malnutrition and consequent ill-health prevalent among the laboring classes in Bombay. The Indian Research Fund Association had sanctioned Rs. 3,750 for the year 1931–32.

3. *Protozoal parasites in vitro*

   The Pathology Department was investigating their prevalence and the reactions of different substances on these cultures. The Indian Research Fund Association had sanctioned Rs. 1,650.

4. *The estimation of vitamin contents in samples of irradiated vegetable oil* was continued in the Pharmacology Department. A report was submitted indicating that it contained no vitamin A and that vitamin D, though present, was in much smaller quantity in comparison with that in cod liver oil.

5. A study of the action of *Peganum harmala* had to be held back as the alkaloids could not be obtained in their pure form. Donations from two Honorary Consultants had enabled the employment of full-time chemist in the department. It was hoped that the project could now progress. The *Peganum harmala* plant was a plant used in several cultures. The Persians used it as a hallucinogen. It was also used as an analgesic, emmenagogue and abortifacient. In India it was also used to treat intestinal parasites and to kill body lice.

6. The anthelmintic value of embellic acid or embelin.

   This was being studied by the Pharmacology Department, thanks to the supply of this substance by Prof D.D. Kanga, M.A., A.I.C., of Gujarat College, Ahmedabad.

7. Tagar (*Tabernaemontana coronaria*) and *Hidyotis auricularia* were being studied.

8. Dr S.G. Vengsarkar continued his study on *blood pressure in health and disease*, the pressure being recorded at the basal metabolic rate before the individual got out of bed in the morning. He was also studying the changes in blood pressure in patients with pneumonia.

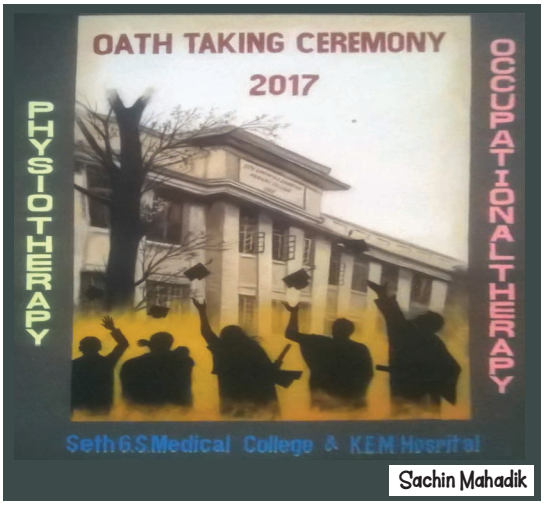
9. Dr D. Abraham, medical registrar, was awarded the Ratanji Ranchodji Desai Research scholarship by the University of Bombay for his *investigation of intestinal tuberculosis.*

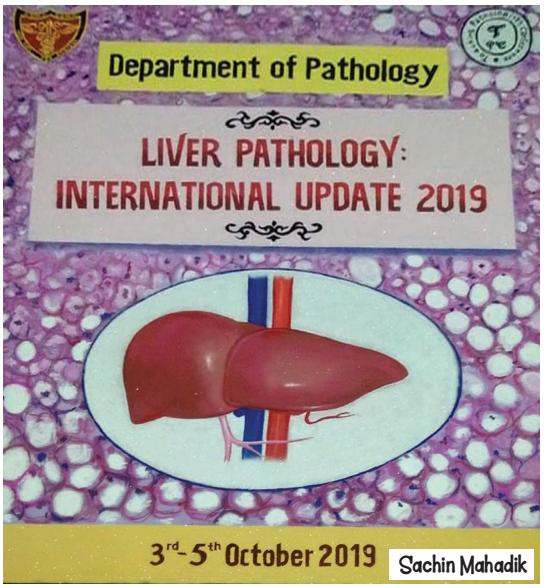
Final Remarks

'With the submission of this report will be completed six years of my stewardship as the Dean of these Institutions. They have grown beyond the expectation of the most sanguine of us and have earned a good name, not only in this city and in the presidency, but also an All-India reputation during this short space of time. For all this development my warm thanks are due to the whole staff for the zeal and enthusiasm with which they worked for the institutions

as well to the successive Commissioners who have given their warm support to all those proposals: which were for the betterment of the College and Hospital, and to the Municipal Corporation for their generous support of most of these proposals.

'Much still remains to be done to place these institutions in the vanguard of progress and towards the achievement of this object we have to look to the generous support of the citizens of Bombay. It is the philanthropists who have developed medical relief, medical education and medical research to the extent these have in Europe and America, and it is to such citizens in the city that one looks forward to for a generous support to similar causes in the Presidency.'

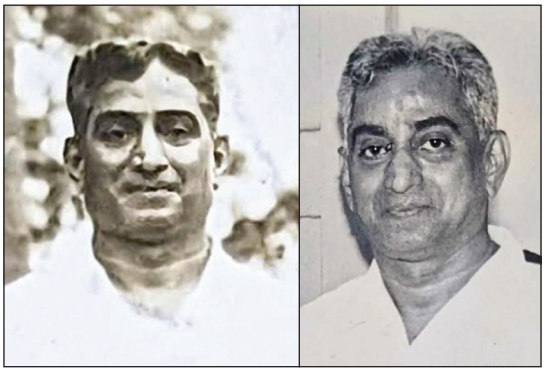




Rangoli greeting at the entrance of JMLT.

10

First Person Account by Dr Nireshwalaya Rangappa Suvarna (1901–2001) Member of the First Batch of Students who Joined the Seth Gordhandas Sunderdas Medical College



[He was born on 27 July 1901] This happened during my school days in Mangalore. One day when I returned from school, I saw my pet dog lying in the garden, paralyzed. I at once remembered about the mud treatment mentioned in the 'Guide to Health' by Mahatma Gandhi.

Immediately, I dug a pit and half buried the dog and started spoon feeding it. After about ten days, when I removed the dog from the pit, to my surprise I found him cured of paralysis.

This decided my future.

Admission to Seth Gordhandas Sunderdas Medical College

May 1925, after my Inter-Science, I was waiting for a reply from the Madras Medical College, to my application for a seat. In the meantime, my brother told me about a new medical college being started at Parel, Bombay. I sent my application without delay. After waiting for a week, I wired to the Dean regarding my application for a seat. To this, I got a reply saying that if original certificates are produced, I will be admitted.

Post-haste, I reached Bombay and on the 3rd of June, 1925, I had the pleasure of meeting the Dean in the College office. Along with me, there were few other students.

It was a very encouraging meeting, and we liked the Dean, Dr Jivraj N. Mehta for his kind inquiries. At that meeting, he said, one of you is a good sportsman. I knew that it was a reference to me, but I did not reveal myself.

Within a day or two all the students, from different parts of India arrived. There was one from Kashmir and two from Punjab, few from Nagpur, two from Calcutta and I from the South. It was truly an all India representation, but the most surprising part of it was that inspite of different culture and different language, we all behaved with each other like blood brothers.

Sports and Tennis

For the first six months, there were no sporting activities in the college. This

did not prevent me from continuing my activities as a sportsman. I became a member of the P.J. Hindu Gymkhana and started playing my favorite tennis game. Very soon I came to be recognized as a good player.

This had its repercussions in the Inter-Collegiate tennis committee. Somebody in the committee suggested that G.S. Medical College has some good players and as such they should send an invitation to them to compete in tournaments.

We got the invitation and I competed and won the singles and doubles also along with Mr M.M. Pandya as my partner.

The matches were played in the Xavier College Court and on the final day both the Dean and Mrs Mehta had come to grace the occasion.

A judge from the Bombay High Court presided, and after the distribution of the prizes, I and Mr Pandya with a feel of inexplicable joy raised the prizes over the heads of the Dean and Mrs Mehta and other students who had come to witness, shouted, a holiday—a holiday.

This was the beginning of a glorious next five years.

Thereafter the Dean took keen interest in the sporting activities of the college. We had an elected general body with Dean as President and two Professors as Vice Presidents. After the election I was selected as the Hon General Secretary and Dr Khanolkar was entrusted with the duty of drafting a constitution. He did it in a fine way and the constitution was adopted after a discussion with general body with some minor changes.

We had now a body with a President, two Vice-Presidents, a General Secretary, and a Secretary with two Assistant Secretaries for different departments of sports. Inspite of the fact that we were only a small number of students, we competed in inter-collegiate tournaments in cricket, football, and even athletics.

Of course, tennis was our favorite game, where we showed our merit.

Because of our achievement in tennis our Dean was made the President of University tennis sub-committee. Though he did not know much of sports, the Dean did well in managing the inter collegiate tennis tournament, of course with my solid support.

Opening Ceremony of the Hospital

Then we had a grand opening ceremony of the hospital. We had lot of Bombay elites attending the function with the Bombay Governor himself presiding on the occasion.

Municipal President, who was an orator, made a grand speech. I still remember some of the words he said, "Charity, charity, there is nothing nobler than charity". To match his oratorical speech, the Governor—who was friendly on the occasion, made an equally impressive speech. The ceremony was rounded off with an exhilarating tennis match in which I and Mr Pandya played against Mr Annet,

the municipal engineer and the wife of Municipal Commissioner. The match was well contested.

Hostel and Messes

A few months later, our hostel was ready for occupation. Every individual had a room and we were provided three messes—Gujarati, Maharashtrian, and Punjabi, on the ground floor, run by the students themselves. After this everything was comfortable and we could carry out our studies without any let or hindrance. Whenever we got up in the morning, and when we saw the stately college building, which is more or less a Roman structure and the sprawling hospital building which is about three furlongs, in front of us, we all felt that we were a fortunate lot to be the students of this institution.

Teachers and Studies

The day after we were admitted to the college, we met Dr Koppikar who was professor of anatomy and Dr Niyogi professor of physiology. Their enthusiasm to teach us was simply superb. This was really infectious. It roused our enthusiasm to learn and study hard.

Dr Koppikar was really a jolly good man. He mixed up with us even in sports. Sometimes he used to get a badminton team from Santa Cruz where he was staying to play against our college team. Leaving aside this, even in the matter of teaching, he took personal interest in every student. Once, during a holiday, when all the students had left, I stayed on the campus. I took advantage of my stay by going into the dissection room and studying the brain. Dr Koppikar, to my astonishment dropped in and sat with me for hours together and helped me in the dissection. Who would not like a professor like him! I was really overwhelmed with feelings. As a contrast, Dr Niyogi was a serious type of man, but his efforts to teach were laudable.

After the first inter-MBBS exam, we started learning two new subjects, Pharmacology and Pathology and, as hospital students, we got introduced into diseases of human beings. Though Pharmacology and Pathology were difficult but all the same important subjects, both Dr Paranjape and Dr Khanolkar took personal interest in making it interesting and easy.

As for our experience in the hospital, it was something unique. Dr R.N. Cooper and Dr Shirvalkar on the surgical side, Dr M.D.D. Gilder and Dr P.C. Bharucha on the medical side with their marvelous bedside clinics in the hospital and lectures in the college made us feel that our future was safe in their hands.

In this respect, I must make a special mention about Dr A.S. Erulkar who, with his eloquent English, made his clinic and lectures so attractive that we canceled all other fixtures to attend to his lectures and clinic.

Add to all this, when we became senior students, we had the unique pleasure of watching the two great surgeons of the day, Dr A.P. Bacha and Dr G.V. Deshmukh. Both these surgeons could easily be compared with Lord Lister and

Lord Moynihan of England respectively.

Dr Shirwalkar and Dr Cooper vied with each other in teaching us surgery. Their bedside clinics were marvelous.

We could see from the hostel, when the lights were on in the operation theater and then we used to run to the hospital to see these masters operating. Emergency surgery was particularly inspiring.

My enthusiasm was great for surgery. Often I used to stay on during vacations and attend the outdoor clinics. Dr Rege who was managing them, used to do minor surgery after the outdoor attendance was over. I used to stay on and help him. When he noticed my interest, he used to permit me to carry out some minor operations and later, when he saw that I was doing well, he used to entrust all these operations to me and go away.

Later, as I was very much interested in surgery, I became Dr Deshmukh's house surgeon and learnt a lot from him. I was fascinated by his surgical skills and he took to me, maybe because of my tennis skills and my interest in surgery.

One day when he was on rounds in the ward, he plainly asked me to compete in the Western India Championship in tennis and said he would allow me to do it, keeping some other doctor on temporary duty. It was because of his encouragement that I competed in the and won it when I was his house surgeon in 1931.

All these keen activities on the part of surgeons, professors, and teachers to train us and encourage not only our studies but also extracurricular activities such as sports, had developed feeling of kinship in us. We organized a dinner party in front of the hostel. All the three messes cooperated in preparing the meal. All the honorary professors and doctors and demonstrators attended the party and it was a grand success.

College Day Celebrations

The Dean wanted to organize the college day celebrations officially. We suggested that, since it concerned the students, they should be allowed to do it in their own way. The students selected me as the President of the committee organizing it. We planned on a day-long series of activities and sub-committees were appointed for different activities during that day.

In the morning on that day, all the teachers and students traveled to Juhu in two buses. Food packets had been prepared for each of us. We had hired a boat to make some trips into the sea. On one of the trips, Prof Khanolkar was sitting in the boat along with few others. Some good swimmers jumped into the sea to have a swim. Ravi Prakash, son of a rich man from upper India, though he did not know much of swimming, also jumped into the sea and he started sinking. I saw this and shouted to others to catch him and push him up. Luckily this was done in time, otherwise it might have ended in a catastrophe. It might have ended my career in the college since, as the President of the function, I would have been held responsible.

Anyhow, we returned happily from Juhu in the evening, when there was a light music program held in the college hall. It was presided over by Dr Purandare, who gave us useful advice in his address. After this we retired for dinner in the garden behind the hospital and enjoyed some delicious food. The women students cooperated in making the celebrations a success.

In 1930, we had our final MBBS exam and we had all been well-groomed for the occasion.

Dr Jivraj Mehta's Arrest and Change in Policies

So all was well till 1930, when Dr Jivraj Mehta was arrested for nationalistic activities. Dr Khanolkar was appointed Dean in his place. It was during his regimen that the selection board of the hospital denied appointment as house surgeons and house physicians to local candidates and, instead, appointed candidates from J.J. Hospital.

This was the beginning of endless trouble. I took the lead in agitating and the matter took grave turn. There was even a strike by the students and the matter went up to the Municipal Council. The outcome of all this was, I became an undesirable. I was a casualty officer then. After finishing my term, I wanted to do a postgraduate course of three months, which was necessary before appearing for M.S. exam. So I told Dr Khanolkar about it, but he point-blank refused.*

This ended my life at the K.E.M. I went to J.J. Hospital and completed the post graduate course in surgery there. I appeared for the M.S. examination and, after getting the degree in 1932, started a hospital of my own at Opera House.

I assisted Dr G.V. Deshmukh in his private operations and worked as an Honorary Surgeon in the Congress Free Hospital where I could do operations from head to foot. Dr Deshmukh was the President of this hospital and operated there from time to time.

I also operated at the K.B. Haji Bachooali Charitable Ophthalmic and ENT Hospital.**

A few years later, I moved to Sawantwadi where I was the chief medical officer of the state. I did about 700 operations there. I then moved to the coastal town of Malvan in Sindhudurg district. I set up my own hospital there. I feel I have about 10,000 operations to my credit.

I am now 90 years old and have stopped performing surgery. Present day students at Seth Gordhandas Sunderdas Medical College will be glad to know that a student belonging to the first batch of the college is still active at the age of 90 and doing some useful work for suffering humanity. In the past two decades, I have worked on cancer and have discovered drugs that can help these patients. I have cured 2000 of 3200 patients treated for cancer.

I feel rewarded when I see the relief on the faces of these unfortunate patients and that spurs me on to work harder, even at this age. I look back, on my six decades

of active life as a doctor, with pride and satisfaction.

I certainly own a debt of gratitude to the institution and to those doctors, where I was initiated and trained into medical profession with its noble objectives.

Dear friends, colleagues, I have no doubt that you all will spare no efforts to the best in your noble profession and will bring credit to the esteemed institution where you have been nurtured.

Best of luck to you all.

Dr N. R. SUVARNA

[In his annual reports, Dr Mehta referred to the achievements of Messrs Suvarna and Pandya with pride. The report for 1930–1931 was written by Dr Jivraj Mehta. It is the last annual report mentioning Dr Suvarna.]

* In his report for 1931–1932 as Dean, Dr Khanolkar makes no mention of the policy on recruitment of resident doctors referred to by Dr Suvarna above.

** This hospital was part of the effort made by the Free Ophthalmic Hospital's Society to give unconditional medical aid to poor and needy patients. It owed its inception to the enthusiasm, public spirit and charitable disposition of three eminent ophthalmologists in Mumbai – the late Dr D. D. Sathaye, Dr D. S. Sardesai and Dr C. R. Athavale. In 1914, with meager resources, they started helping those suffering from various eye diseases. The hospital started with 6 beds in a small, rented block at Parel, populated by mill hands and the labor class. As it was located on Aimai Merwanji Street, it was initially referred to as the Aimai Hospital. As word of their efforts spread, Mr. M. D. Chamarbagwalla, a philanthropist living in the locality made available a portion of his chawl, with the nominal rent of Rs. 1/- per annum. The hospital found a patron in Khan Bahadur Haji Bachooali who donated Rs. 50000/- which helped meet pressing needs and requirements. In recognition, the hospital was named after him The foundation stone of the present hospital building was laid by Mahatma Gandhi on Saturday, August 8th 1931. [He passed away in Malvan on 22 November 2001.]

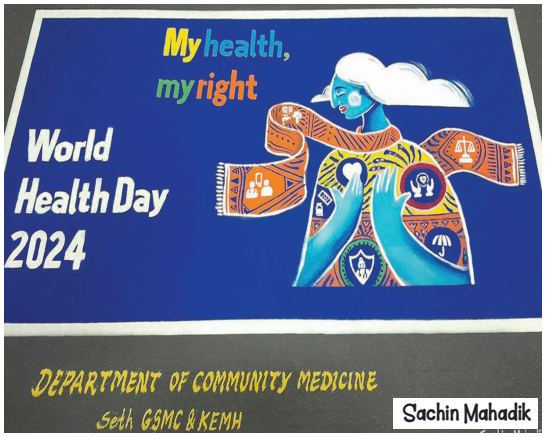
Acknowledgment

This essay was provided to us by Dr Rajaninath S. Satoskar, who knew Dr Suvarna well. Dr Satoskar retired as Professor and Head, Department of Pharmacology, Seth Gordhandas Sunderdas Medical College. Among his other achievements is the publication of texts in pharmacology that continue to be required reading by students.

We are grateful to Mr Arun N. Suvarna, son and Mrs Prafulla Arun Suvarna, daughter-in-law for the photographs kindly supplied by them to Dr Swarupa Bhagwat for inclusion in this volume. Mr Arun Suvarna served in our army and retired as Captain. During the battle in

the Sialkot sector, he was awarded the Raksha Medal. He later joined Air India and retired as Assistant General Manager. Mrs Prafulla Suvarna has served as a Medical Social Worker in our hospital, helping patients and clinicians in many ways. She was awarded a gold medal in appreciation of her work. Later she has served as Public Relations Officer in our Plasma Fractionation Center.

Rangoli at the entrance of JMLT.



Rangoli greeting at the entrance of JMLT.

11

Annual Report (1931–1932)

Staff

The Dean, Jivraj N. Mehta M.D. (Lond.), M.R.C.P. (Lond.), was on leave from the 6 May 1931 to the 23 December 1931 during which period, V.R. Khanolkar B.Sc. (Lond.), M.D. (Lond.), Professor of Pathology and Bacteriology, acted as Dean in addition to his own duties. This bland statement hides the fact that Dr Mehta's active participation in the non-cooperation and Quit India movements had resulted in his arrests in 1932–33 and later in 1942–1944.

The Hospital

The Hospital worked throughout the year in excess of the full complement of 354 beds. The 354 beds were distributed as follows:

Of the total 10,898 patients (10,540 new

Department.	Male.	Female.	Children.	Total.
Medical	83	31	10	124
Surgical	83	31	14	128
Gynæcological	..	35	..	35
Opthalmic	16	16	..	32
Aural	6	2	2	10
Skin and Venereal	6	2	..	8
Casualty	6	3	..	9
Isolation	6	2	..	8
	206	122	26	354

Particulars.	Figures for the year 1931.	Figures for the year 1930.
(a) In-patients—		
1. Scheduled strength of beds	354	354
2. Daily average number of in-patients	372.8	368.4
3. Total number of in-patients admitted	10,540	9,117
4. Average number of days each patient was resident ..	12.9	14.0
(b) Out-patients—		
1. Total number of new Out-patients	68,515	58,377
2. Total number of Out-Patient attendance	2,00,879	1,73,511
3. Number of Casualty patients included in No. 1 above ..	11,226	10,044
(c) Operations—		
1. Total number of operations on In-patients	3,614	3,103
2. Total number of operations on Out-patients	3,506	3,126

patients and 358 in residence on 1 January 1931), 4,127 were cured, 4,504 discharged relieved, 941 either absconded of left against medical advice and 995 died. Of the 995 deaths, 212 were within 24 hours of admission, 254 within three days of admission and 529 after 3 days. (These figures did not include one still-born child and a miscarriage.)

Excluding the amount spent out of the Loan Funds, the total expenditure incurred on the maintenance of the hospital during the year 1931–32 including the liabilities outstanding at the end of the year, amounted to Rs. 5,20,321. This expenditure included the cost of the maintenance and treatment of inpatients, the cost of the outpatient department, of the Resident Medical, Nursing and Support Staff as well as that of the Administration and of maintenance and repairs of buildings.

The details of the cost per in-patient, per day, for the years 1931–32 and 1930–31, respectively were as follows:

Particulars.	1931–32.			1930–31.		
	Rs.	a.	p.	Rs.	a.	p.
(a) Average cost per In-patient per day	3	1	4	3	3	9
(b) Average cost of diet, per In-patient, per day ..	0	8	4	0	9	8
(c) Average cost per In-patient admission	38	5	1	45	8	2
(d) Average cost per Out-patient attendance	0	7	9	0	8	1
(e) Average cost per Out-patient admission	1	6	9	1	8	3

The average cost for every new out-patient admission was as follows:

Year.	Diets.			Drugs, Dressings and Instruments.			Stores and Linen.			Heating and Lighting.			Miscellaneous.			Establishment.			Repairs to buildings and Engineering.			Total.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
1931–32	0	8	4	0	5	3	0	3	0	0	2	4	0	1	9	1	10	5	0	2	3	3	1	4
1930–31	0	9	8	0	6	6	0	3	2	0	2	3	0	1	10	1	10	0	0	2	4	3	3	9

The following table gives the average cost for every new Out-patient admission completely treated during the year under report in comparison with that for the previous year :—

Year.	Diets.	Drugs, Dressings and Instruments.	Stores and Linen.	Heating and Lighting.	Miscellaneous.	Establishment.	Repairs to buildings and Engineering.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1931–32	....	0 9 4	0 1 0	0 0 8	0 0 9	0 10 3	0 0 9	1 6 9
1930–31	....	0 9 0	0 1 1	0 0 8	0 0 9	0 11 7	0 1 2	1 8 3

Though the scheduled number of beds in the hospital during the year was 354, the demand made by the public on the hospital accommodation had been so persistent that on an average 20 more patients had to be accommodated over and above the scheduled number, The highest number of inpatients on a single day during the year 1931 was 414. The highest number of inpatient admissions on a single day was 61, the average number of daily admissions being 29. The congestion in the wards existed in spite of refusing admission to many patients whom the Medical Staff would like to admit.

The plea for an infirmary or convalescent home where patients with chronic illnesses, those with neurological disorders and those requiring nursing care could be kept was repeated. The hospital continued to send unclaimed patients to the Helpless Beggars' Camp on payment of a contribution of Rs. 10,000 per year by the Municipal Corporation. This had proved a great help.

The arrangements with the Maratha Hospital and the Turner Sanatorium for patients with tuberculosis continued, 310 patients with advanced phthisis being sent to the former, many directly from the outpatients department. In a new arrangement, 13 patients with acute dysentery were transferred to the Arthur Road Hospital.

The highest number of outpatients on any particular day during the year 1931 was 979, the highest number of new admissions in the outdoor department on a single day was 349 and the highest number of old cases treated on a single day was 627.

Equipment and Works

The Standing Committee of the Corporation had agreed to the purchase of equipment for deep X-ray therapy, using Rs. 25,000 donated by the Wadia Charities. It was hoped that this equipment would be in place by the end of the year.

The noise from two hot water boilers disturbed patients early in the morning. They were replaced by geysers. Since two geysers had been installed the previous year, the hospital now had four of them.

The extension of the Surgical Dressings department in the outpatient clinic had been completed.

There was only one common gate for entry and exit of patients and vehicles to the outpatient department of the hospital. As a result, there was congestion of vehicles and patients in a small space in front of the entrance of the department entailing a risk of injury to the patients and their relatives. An extra gate had been provided for exit this year. Unfortunately, the width of the road in front of the new gate was insufficient for safe flow of traffic. The new gate had therefore not been opened so far. This was brought to the notice of the Engineering Department. The question of widening the road was under consideration.

To help relatives carry the bodies of patients home or to the burial or cremation grounds, one portage car and two wheeled stretchers were provided at a cost of Rs. 4,658-7-0. On payment of a prescribed fee, the car was available to the public for carrying the bodies and the stretchers for taking the bodies of patients of this hospital to adjoining localities.

Due to financial stringency caused by the acute trade depression prevailing in the city, the following works and equipment had to be kept in abeyance:

1. *Provision of radium*. The need for this was obvious as the hospital had treated 394 patients with cancer during the year. As there was no radium available in this hospital, some of the acute cases were referred for radium treatment to Mission Hospital, Miraj and Radium Institute, Patna. The inconvenience of a long journey and the waiting period before admission to those Institutes made the use of radium in cancer cases in Bombay urgent.
2. *Provision of electric refrigerators* in the pantries of wards.
3. *Opening of Venereal Wards.* It was now over a year that the Venereal Wards were ready for the admission of patients. As no funds could be provided for the necessary equipment and staff, they had not been opened to receive patients.
4. *Extension of the electro-cardiograph department.*
5. *Extension of the hospital office.*
6. *Construction of a Tonsil Ward.* As reported in the previous year, the Aural Section of the outpatient department needed to be provided with a small ward for patients operated for tonsils and adenoids. The displacement of operated patients from the Aural Theater to the Surgical Wards was inconvenient to the patients and the staff, as the patients had to be wheeled through corridors crowded with outpatients awaiting treatment. An additional ward in the open space adjacent to the Aural Department would afford much relief to the patients and to their relatives. There would be practically no extra cost for managing such a ward as children operated upon in the morning for tonsils and adenoids would be allowed to go home in the afternoon.

Floods

Two of the three gates on the eastern side of the compound had been closed. Bund walls were erected wherever necessary. As a result there was no recurrence of flooding of the hospital wards during this year. An improvement in the drainage arrangements by the provision of a stormwater drain was under consideration by the Engineering Department.

Nursing Staff

Reorganization of nurses' education was undertaken and a teaching unit composed of four Sisters from the Senior Nursing Staff was instituted for practical and bed-side training to supplement the usual teaching by lectures and demonstrations by the college and hospital staff. Besides this, a new revised system of circle duties for the Nursing Staff was introduced, thus bringing their working hours up to modern requirements. According to the new arrangement, a Sister has 47 hours of duty a week, a Staff Nurse has 48 hours and a Probationer Nurse has 53 hours.

The results of the nursing examinations of Probationer Nurses by the Bombay Presidency Nursing Council were as follows:

Examination.	September 1931.		March 1932.	
	Appeared.	Passed.	Appeared.	Passed.
First Examination ..	19	11	13	10
Final Examination ..	8	3	10	5

The following nurses were awarded prizes:

Names.	Amount.	Name of the Prize.
	Rs. a. p.	
1. Miss Mildred Devinne ..	17 8 0	"Mrs. Abigail Elijah Moses Prize".
2. Miss Irene Brown	12 0 0	"Mrs. Sawitribai Purandare Prize".
3. Miss Rose Rodrigues ..	20 0 0	"Mrs. Dhangowri Rangildas Desai Prize".
4. Mrs. Girjabai P. Heble ..	20 0 0	

Nurses' Welfare Fund

In August 1931, the nursing staff of this hospital, with the cooperation of certain ladies and gentlemen interested in their welfare, organized a concert at the Royal Opera House. The proceeds of the sale of tickets for the concert after defraying expenses, amounted to Rs. 2,000. With this amount in hand, the Nurses' Welfare Fund was inaugurated for the promotion of the welfare of the nursing staff of the King Edward Memorial Hospital and for rendering monetary and other help to the nursing staff whenever required. A constitution was laid down for the conduct of the work of the Fund. Dr Mrs Gilder and Mrs Flanders were mainly responsible for the success and organisation of the concert.

School Clinics

At the request of the Schools Committee, clinics for handicapped children attending vernacular schools in F and G Wards of Bombay were held from 13 August 1931 to 31 March 1932 at this hospital as an experimental measure. The cost of the work for the above period amounted to Rs. 6,032. The number of children treated during the period was 2,129. The work was carried on with perfect cooperation between the Medical Inspectors and Teachers of the Schools Committee and the Medical Officers and the Nursing Staff of this Hospital for which they deserve to be

complimented. Dr Nadir A. Cooper, D.D.S. (New York), had volunteered his services for the Dental Clinics. The experiment was successful beyond expectation.

The Poor Box Charity Fund

Appendix 14 provided details:

The College

70 fresh students were admitted in June 1931. The number of students (including 22 women) at the close of the year was:

I.	M.B., B.S. First Year	69
I.	„ „ Second „	47
II.	„ „ Third „	50
III.	„ „ Fourth „	51
III.	„ „ Fifth „	73
		290
	Post-graduates	15
	Grand Total	305

Examinations

Examinations.	Candidates sent up.	Passed the whole examination.	Passed part of the examination.
I. M.B., B.S. (April 1931)	36	18	...
I. „ (December 1931)	71	32	..
II. „ (April 1931)	28	14	...
II. „ (January 1932)	48	31	...
Final M.B., B.S. Part II. (April 1931)	23	8	..
III. M.B., B.S. (April 1931)	21	..	12
III. M.B., B.S. (December 1931)	57	25	7
B.Sc., Physiology—Principal	1	1	..
M.D.—Medicine	3	3 (2 with distinction)	..
M.D.—Midwifery	4	2	..

Annual Cost and Revenue

The total expense of the college and the hostel, excluding the amount spent out of loan funds was Rs. 2,28,848 (previous year Rs. 2,29,501). The revenue of the college

Appendix 14: **Poor Box Charity Fund—Statement of Accounts for the year 1931-32.**

Receipts.

Particulars.	Amount. Rs.	a.	p.
Balance in hand	136	9	1½
Balance with the Central Bank of India in current account	1,617	14	9
Out-patient Casualty Department	433	15	7½
„ Medical Department	23	14	0
„ Minor Surgery Department	76	0	4
„ Surgical Dressings Department	51	4	9
„ Skin Department	777	5	11½
„ X-Ray Department	76	8	0
„ Aural Department	112	4	3
„ Dental Department	19	8	0
„ Gynæcological Department	11	10	0
„ Electro Therapy Department	12	1	3
Ward No. I	238	6	3
„ II	141	5	3
„ III	171	3	1
„ IV	268	12	4
„ V	663	13	3
„ VI	385	2	6
„ VII	716	9	2½
„ VIII	278	1	0
„ IX, X, XI	895	7	3
„ XII, XIII	524	14	1
„ XIV, XV	272	2	7½
„ XVI	50	6	0
„ XVII	234	15	½
Other collections	3,907	15	3
Collection on account of issue of Medical Certificates	1,448	0	0
Interest	2,832	8	0
Proceeds from the sale of Hospital Pharmacopœia	334	0	0
Total	16,613	9	2

Payments.

Particulars.	Amount. Rs.	a.	p.
Appliances such as Crutches, Hernia belts, Spectacles, Artificial eyes, Artificial limbs, &c., supplied to poor patients	894	11	0
Blood transfusion charges	740	0	0
Travelling expenses paid to poor patients	123	0	0
Expenses incurred in giving comforts to patients of the Hospital	192	13	0
Printing and Stationery	35	8	0
Dead-Stock	95	0	0
Clothing supplied to patients	78	4	0
Sundries	107	12	0
Purchase of Securities of the face value of Rs. 7,000	6,633	13	9
Balance with the Central Bank of India in current deposit account	*3,409	3	4
Invested with the Central Bank of India in fixed deposit	4,000	0	0
Cash in hand	209	1	1
Payment of suspense account	94	6	0
Total	16,613	9	2

* This includes the amount of Rs. 1,364-6-3, held in suspense for the following accounts :—

1. Resident Medical Officers' Mess Deposit Account	Rs. 1,272	0	0
2. Splint Deposit	„ 77	0	0
3. Patients' money	„ 15	6	3
	Rs. 1,364	6	3

in the form of tuition fees, hostel rent, and miscellaneous receipts amounted to Rs. 79,497 (previous year Rs. 79,116). Fees from postgraduate students not included in the above figure amounted to Rs. 2,400.

Museum

The foundation for the museum using funds provided by the trustees of the Seth Jamnadas Lallubhai Charities had been laid. It was hoped that the building would be ready the next year.

Library

92 new books (261 during the previous year) were purchased and 62 bound volumes of periodicals (70 during the previous year) were added to the Library. 102 medical books were presented to the Library during 1931–32, 96 being from Dr Jivraj N. Mehta.

Students were making greater use of the library, 4,566 books being issued to them as against 3,259 in the preceding year.

Hostel

42 additional rooms were made available in the additional floor over the hostel. However, the demand for rooms from students from the mofussil could not be met fully. Arrangements were, therefore, made to reserve Gopaldas Building, near the college on the Parel Main Road through the Manager of the Central Bank of India, for the students. Although all the available rooms on the three upper floors of the building were occupied by the students, most of the new entrants to the College and many postgraduate students were left out. Efforts were being made to make a satisfactory arrangement in another building in the locality. It was hoped to house most of the students in the vicinity of these institutions as it was necessary for medical students to be near the patients under their observation.

Hostel For Women

The question of providing residential accommodation to women students of this college engaged attention during the year but, due to financial stringency, proposals for a new building had to be shelved. In deference, however, to the general feeling of the Corporation and the representations from institutions like the Bombay Presidency Women's Council and the public, proposals for the conversion of an existing building in the K.E.M. Hospital, was under consideration. The University of Bombay was also considering the question of building a central hostel for women students.

Gymkhana

The college entered all inter-collegiate tournaments during the year and were successful in securing the football shield.

Research

The following inquiries were conducted under the auspices of the Indian Research Fund Association:-

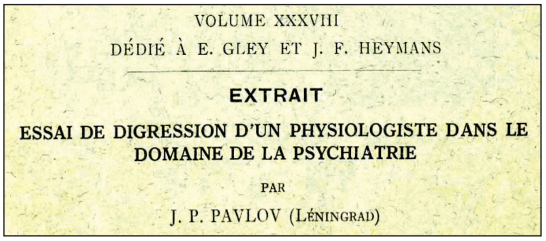
1. Determination of hemoglobin in health and in anemias in Bombay, under the direction of Dr V.R. Khanolkar, B.Ss. (Lond.), M.D. (Lond.)
2. Nutritive value of Indian vegetable foodstuffs, under the direction of the

Professor of Physiology (and partly under the Professor of Pharmacology during the former's absence on leave)

3. Foetal and maternal dystocia in India, under the direction of Dr H. D'Sa, M.D. (Bom.), Honorary Lecturer in Obstetrics and Gynecology at this College
4. A study of protozoal parasites in vitro, under the direction of the Professor of Pathology and Bacteriology
5. Anthropometric measurements in Bombay, under the direction of Dr G.M. Kurulkar, M.B.B.S., Associate Professor of Anatomy

Of the above inquiries, only 1 and 5 were continued during the year 1932–33 by the Indian Research Fund Association. The researches in the pharmacology department of this college, referred to in the previous year's report were still in progress.

A paper on the work done on *Embelin*, the chief constituent of the Indian drug Embelia (Vavdinga),with reference to its uses as an anthelmintic was published in the *Archives Internationales de Pharmacodynamie et de Therapie* 1932; XLII. It is of interest to note that two years earlier, in 1930, Dr I.P. Pavlov had published a paper in this journal:


VOLUME XXXVIII
DÉDIÉ À E. GLEY ET J. F. HEYMANS

EXTRAIT

ESSAI DE DIGRESSION D'UN PHYSIOLOGISTE DANS LE DOMAINE DE LA PSYCHIATRIE

PAR

J. P. PAVLOV (LÉNINGRAD)

As during earlier years, there were appendices to the report:

Index of Appendices	
1.	Summary of In-patients and their classification as per departments.
2.	Summary of Out-patients and their classification as per departments.
3.	Chart illustrating In and Out-patient admission by months.
4.	Summary of patients according to sex, age and caste, with a chart illustrating this summary.
5.	Summary of patients according to the nature of diseases.
6.	Classification of operations in the Surgical Department.
7.	Classification of operations in the Gynecological Department.
8.	Classification of operations in the Ophthalmic Department.
9.	Classification of operations in the Ear, Nose and Throat Department.
10.	X-ray and Electro-Therapy Report.
11.	Skin & Venereal Department Report.
12.	Clinical Laboratory Report.
13.	Electro-Cardiograph Department Report.
14.	Poor Box Charity Fund — Statement of Accounts.

A study of the entries is fascinating as it shows the prevalence of treatable diseases and the nature of surgical operations during the year. An example is in Appendix 6 where lies this interesting entry:

Nature of operation.	In patients.										Out-patients operated on.
	Remained as per last Report.	Operations.			Number of patients operated on.	Results.				Remained under treatment.	
		Principal.	Secondary.	Total.		Cured.	Relieved.	Discharged otherwise.	Died.		
Spine—	..										
Laminectomy	1	2	..	2	2	..	1	..	1	1	..
Removal of Sacrum	..	..	1	1	..	..	..	..	..	..	..

12

Annual Report (1932–1933)

This report too was written by Dr V.R. Khanolkar.

Staff

Dr Jivraj N. Mehta was on leave since 2 March 1932 and Dr V.R. Khanolkar, Professor of Pathology and Bacteriology, was acting as Dean in his place in addition to his own duties.

Dr R.P. Koppikar, Professor of Anatomy, and Dr A.S. Paranjpe, Professor of Pharmacology, were granted 6 months and 1 day's leave—from the 7 October 1932 to 7 April 1933—and during the period of their absence, Drs G.M. Kurulkar and C.C. Merchant were appointed Acting Professor of Anatomy and Associate Professor of Pharmacology respectively.

The Hospital

The hospital beds were distributed as follows:

Department.	Male.	Female.	Children.	Total.
Medical	83	31	10	124
Surgical	83	31	14	128
Gynæcological ..	....	35	....	35
Ophthalmic	16	16	....	32
Aural	6	2	2	10
Skin and Venereal ..	6	2	....	8
Casualty	6	3	....	9
Isolation	6	2	....	8
	206	122	26	354

Demands on these beds exceeded their availability with the result that the hospital worked throughout the year in excess of its full complement.

Particulars	Figures for the year 1932	Figures for the year 1931
(a) In-patients—		
1. Scheduled strength of beds:	354	354
2. Daily average number of in-patients:	360.2	372.8
3. Total number of in-patients treated:	10,515	10,540
4. Average number of days each patient was resident:	12.7	12.9
(b) Out-patients—		
1. Total number of new out-patients:	64,073	68,515
2. Total number of out-patient attendance:	1,88,395	2,00,879
3. Number of casualty patients included in number 1 above:	9,848	11,226
(c) Operations—		
1. Total number of operations on in-patients:	3,974	3,614
2. Total number of operations on out-patients:	3,073	3,506

A sub classification followed:

1.	Roadside cases brought by the Police	60
2.	Tetanus	226
3.	Motor accidents	329
4.	Burns	187

Of 10,515 patients under treatment in the hospital, 3,606 were cured, 4,282

were discharged as relieved, 1,374 either absconded or left the hospital against medical advice and 918 died. A balance of 335 patients was left in the hospital at the end of the year. Of the 918 deaths including one still born child, 304 died within the first 24 hours of admission, 186 after 24 hours and within 3 days and the remaining 428 after 3 days of their admission into the hospital.

Excluding the amount spent out of the Loan Funds, the total expenditure incurred on the maintenance of the hospital during the year 1932–33, including the liabilities outstanding at the end of the year approximately amounted to Rs. 5,27,418. This expenditure included the cost of the maintenance and treatment of inpatients, the cost of the outpatient department, of the Resident Medical, Nursing and Support staff as well as that of the Administration and of the maintenance and repairs of buildings. The relative costs of inpatients and outpatients were as follows:

Particulars.	1932-33.	1931-32.
	Rs. a. p.	Rs. a. p.
(a) Average cost per in-patient per day	3 4 5	3 1 4
(b) Average cost of diet per in-patient per day	0 7 11	0 8 4
(c) Average cost per in-patient admission ..	41 7 4	38 5 1
(d) Average cost per out-patient attendance ..	0 8 3	0 7 9
(e) Average cost per out-patient admission ..	1 8 2	1 6 9

Breakdown of costs per inpatient:

Year.	Diets.	Drugs, Dressings and Instruments.	Stores and Linen.	Heating and Lighting.	Miscellaneous including water charges.	Establishment.	Repairs to buildings and engineering.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1932-33 ..	0 7 11	0 6 8	0 3 2	0 3 2	0 3 8	1 8 9	0 3 1	3 4 5
1931-32 ..	0 8 4	0 5 3	0 3 0	0 3 0	0 1 9	1 10 5	0 2 3	3 1 4

Breakdown of costs per outpatient:

Year.	Diets.	Drugs, Dressings and Instruments.	Stores and Linen.	Heating and Lighting.	Miscellaneous including water charges.	Establishment.	Repairs to buildings and engineering.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1932-33 ..	0 9 3	0 1 0	0 0 9	0 0 11	0 11 5	0 10 3	0 0 10	1 8 2
1931-32 ..	0 9 4	0 1 0	0 0 8	0 0 9	0 10 3	0 0 9	1 6 9	

The highest number of outpatients' attendance on any particular day during the year 1932 was 890, the highest number of new admissions in the outdoor department on a single day was 323. The highest number of old cases treated on a single day was 562 and the highest number of inpatients under treatment on any particular day was 427.

Equipment and Works

Stabilivolt – a deep-X-ray unit manufactured by Siemens, had been purchased and installed. The Wadia Charities had donated Rs. 25,000 for this purpose.

'It generates a continuous constant voltage and is operated by a remote electric control. Every precaution is taken in the design and the installation to protect the patient and the operator from radiations of X-rays except at the very small field of treatment. Since July, 1927, when the X-ray Department was transferred from the Coombe to the Royal City of Dublin Hospital, the Stabilivolt apparatus with 2 Holfelder cylinders, manufactured by Siemens, Reiniger, Veif a of Berlin, has been in use.'

Electrical conditions:- 180 K.V. 4 M.A.

Filters:- 0.4 copper plus Pertinax.

This appears to be a unit containing valves and had an output of 200 kilovolts. In April 1947, the Government of Ceylon advertised as below:

> THE Director of Medical and Sanitary Services will receive sealed tenders in writing not later than 12 noon on Tuesday, April 15, 1947, for the purchase of the following parts of the "damaged Siemens Deep Ray Theraphy 200 K. V. Plant", lying at General Hospital, Colombo.
>
> Parts referred to :—
>
> (1) 2 valves for Stabilivolt apparatus type 230/802 P.
> (2) 2 half of tube shields type T with H. T. cables.
> (3) 1 Can cooling oil for tube.
>
> The articles will be available for inspection at the General Hospital, Colombo.

Financial stringency caused by poor trade in the city had halted most works on the campus.

Attention was particularly drawn to items listed in the previous report as well as these were required urgently:

1. Venereal wards: Lack of equipment and staff prevented the use of these wards constructed at the cost of Rs. 40,000. These patients could not be admitted to the general wards for fear of spread of disease.
2. Radium: 410 cancer patients had been seen in the hospital during the year. A small number could be referred to the Mission Hospital, Miraj and Radium Hospital, Patna for treatment. An appeal was made to 'the philanthropic public of this great city' for help.
3. Extension of the hospital office: It was hoped that at least some temporary relief would follow the completion of the Clinical Museum under construction.
4. Tonsil ward: 672 patients were operated upon. The Ear, Nose and Throat Department in the outpatient section remained overcrowded on most days. It was impossible to prevent parents and family members from witnessing the condition of patients as they came out of anesthesia soon after surgery.
5. Extension of the electro-cardiograph section.

The widening of the road near the extra entrance gate in front of the outpatients department was awaited.

Present and Future Considerations on Beds, Need for Convalescent Home

Dr Khanolkar made an excellent analysis, which I reproduce.

'The demand made by the public on the hospital accommodation continued to persist. In spite of the two slack months last year owing to the communal riots, on an average 6 more patients per day had to be accommodated in the hospital in excess of the scheduled number of 354.

The demand for hospital accommodation is keeping well ahead of the increase of nearly 1,000 hospital beds in the city during the last eight years and the city population is gradually becoming hospital conscious. This raises important considerations about the future policy in regard to the provision of hospital accommodation. The time has now arrived to take a stock of the existing hospital accommodation before launching upon any plan of increasing it in order that the actual needs of the people might be met with the maximum of efficiency and the minimum of expense. There are at present in Bombay City 4,166 hospital

beds, including those in public and private hospitals.'

The distribution was as follows:

—	Beds available per 10,000 population.			
	Europe.		U. S. A.	Bombay.
	England and Wales.	Germany.	(Minimum requirements as suggested by Mr. Lewinski-Corwin.)	
General Hospital	53.4	56.9	39	20.9
Institutions for Infectious Diseases.	5.7	....	5.5	6.3
Maternity Institutions ..	....	....	....	8.3

'The figures for the U.S.A. and England in the above table relate to the whole country and not the cities only, which would undoubtedly be higher. Even then it is seen that the number of available beds in Bombay is far below the number considered adequate to meet the needs of most of the advanced European and American countries. This disproportion becomes all the more glaring when it is realized that the poverty of our people makes them much more liable to disease than in most cities abroad. In an industrial city like Bombay the provision of adequate hospital accommodation is a matter of considerable economic importance.

A great deal of the efficiency of the work-people engaged in industry depends on the soundness of their health on which in turn depends the prosperity of industries and the progress of the country. The question of proper hospital accommodation therefore is not only a matter of great civic importance but a matter of almost nation-wide concern.

In view of this paucity of hospital beds in the city, it is further important that the available beds should be used to the best possible extent and that the hospital accommodation in well-equipped modem hospitals should not be wasted on chronic wasting maladies or in keeping the patients in costly hospital beds during the convalescent period which does not need much expert attendance. It will be noticed from the above table that there is no arrangement for the accommodation of convalescent or chronic cases. This necessitates an unduly long stay of certain types of cases in hospitals resulting in a much smaller turnover and the withholding of medical aid to many acute cases who could otherwise be saved from the mutilating effects of serious diseases by timely treatment.

These considerations may be made clearer by some relevant data. Owing to the continued congestion of patients at this hospital, as an experimental measure, a time limit of one month was laid down as the maximum period for which a patient could ordinarily be allowed to stay in the hospital. It was however found necessary to keep 547 patients much in excess of this period and one patient had actually to be kept for as long as 273 days. Further it will be seen that as the average period of stay per patient in the hospital is 12.7 days and the average attendance at the outpatient department was 576 cases exclusive of the 27 casualty cases, only 33 or 4.5 per cent of the persons who sought relief at the outpatient department could be admitted for careful investigation or indoor treatment at the hospital. The existence of a convalescent home would greatly relieve this state of affairs. The absence of such an

institution results in the withholding of expert medical attendance from those who need it and keeping in the hospital those who do not need it to the same extent.

Apart from this, the financial aspect is of no less importance. Each bed in the hospital has cost the Municipality Rs. 14,000 on an average for construction and the cost per in-patient per day works out at. Rs. 3·4–5 while it has been estimated that a completely endowed 20-bed unit for convalescent patients could be built and maintained at an average cost of Rs. 4,75,000 including a building cost of only Rs. 2,000 per bed. It is therefore obvious that the existence of a convalescent home will greatly relieve the congestion in the hospital by shortening the stay of patients and make it possible to administer medical relief where it is most needed. It would therefore appear that a scheme for a convalescent home is well worth the consideration of charitably minded citizens and trustees of charitable funds.'

The arrangement with the Committee of Helpless Beggars' Camp has been continued on payment of a contribution of Rs. 10,000 per year by the Municipal Corporation. 72 patients were transferred there during the year.

Arrangements with the Maratha Hospital and the Turner Sanatorium continued to help. 260 patients with advanced phthisis were transferred to the Maratha Hospital. 105 patients with acute dysentery were transferred to the Arthur Road Hospital.

Nurses

The system of circle duties for nurses introduced during the previous year was continued and has been extended to make it applicable to the staff nurses and later to the Sisters in charge of wards. The system has been found to have certain very promising features, leading to a more even distribution of work amongst the different members of the nursing staff.

A statement showing the hours of duty per week by the different grades of nurses as compared with those obtaining formerly and at a recognized London Hospital is given below:

Particulars.	St. Bartholomew's Hospital.	K. E. M. Hospital after Introduction of Circle Duties.	K. E. M. Hospital before the Introduction of Circle Duties.
Sisters	58½	47	41
Staff Nurses	62½	48	50
Probationer Nurses ..	56	53	56 1 week of night duty of 84 hours twice a month.

The new system allowed a better regulation of hours of duty and of rest for the nurses, making it possible for them to make arrangements during their off duty hours and thus removing one of the main grievances of nurses in most of the hospitals, namely, the uncertainty of the time of coming off duty and the inability to plan visits to their relatives or friends.

The hours of duty and of rest for the whole nursing staff conform to a definite plan with a view to concentrate as large a number as possible to remain on duty during the busy hours of hospital work and to afford ample time for rest or recreation during the slack hours of the day.

Coordination of this system with an

improved supervision of teaching of nurses in the wards and in lecture-rooms and the Nurses' Home has been responsible for lower rate of sickness and a better result at the examinations of the Bombay Presidency Nursing Council. The duties of the different grades of nurses according to this system follows:

Sisters' duty ..	.. 7-30 to 4-30 (1 hour for lunch) 1 half a day a week, 2 days off a month (every 2nd Sunday).
Staff Nurses (*D Nurses*). ..	.. 8 hours duty (7 to 12—4 to 8). One hour for lunch, one half day a week, 1 night duty (Friday), 30 hours off duty after night.
Nurses (*Circle A, B, C.*)	.. 8 hours duty. Three senior probationers do the night duty, *i.e.*, 6 to 2—2 to 10—10 to 6 a.m. When the night duty is finished they get 30 hours off duty and it means work on 2 nights every week.
Junior Probationers (*E Nurses*).	.. 8 hours duty (7 to 10—1 to 4—8 to 10 p.m.). No night duty and they get a pass from 10 a.m. once a week.
Night Superintendent	.. Six weeks each sister doing a turn (10 p.m. to 7 a.m.). 1 night off a week.
Emergency Staff Nurse (*Night*).	.. 8 p.m. to 6 a.m. One week every four months. 1 night off a week (Sunday).

The results of nursing examinations for probationer nurses held by the Bombay Presidency Nursing Council and prizes awarded were as follows:

Examination.	September 1932.		March 1933.	
	Appeared.	Passed.	Appeared.	Passed.
1st Examination ..	4	2	11	10
Final Examination ..	10	7	13	12

Names.	Amount.	Name of the Prize.
	Rs. a. p.	
Miss Lilly Mascarenhas ..	17 8 0	Mrs. Abigail Elijah Moses Prize.
Miss Christina Rozario ..	12 0 0	Mrs. Savitribai Purandare Prize.
Mrs. Sitabai R. Madiman	20 0 0	Mrs. Dhangowri Rangildas Desai Prize.
Miss Motibai Conthum ..	20 0 0	Mrs. Dhangowri Rangildas Desai Prize.

Nurses Welfare Fund

The Nurses' Welfare Fund proved beneficial to the nursing staff. Monetary and other help was rendered through it in deserving cases. Under the auspices of this Nurses' Welfare Fund, about 10 socials were held. The thanks of the nursing staff are due to Mrs Kirpalani, Mrs Gilder and Mrs Erulkar for their keen interest in the social welfare of the nurses.

School Clinic

The treatment of school children attending the Municipal primary schools was continued during the year.

Medical and Surgical	396
Aural	545
Ophthalmic	362
Dental	232
Skin	170
	1,705

78 children were admitted to the surgical wards of the hospital for operative treatment. Pathological and X-ray examinations were carried out in a certain number of selected cases. The work was carried out on very economical lines. The cost amounted to Rs. 7,698-7-0. There is ample evidence to believe that these clinics are appreciated by the parents and guardians of these school children.

Poor Box Charity Fund

The Lightfoot Refrigeration Company Limited, continued the free supply of oxygen.

Poor Box Charity Fund—Statement of Accounts for the year 1932-33.

Receipts.	Amount. Rs.	a.	p.
Balance in hand	209	1	0
Balance with the Central Bank of India in current account	3,409	3	4
Out-patient Casualty department	232	1	3
" Medical "	72	15	0
" Minor surgery department	142	1	11½
" Surgical Dressings department	38	14	6
" Skin department	632	8	1½
" X-Ray department	12	2	0
" Aural department	198	5	6
" Dental department	21	5	6
" Gynaecological department	72	5	1½
" Electro-therapy department	0	4	3
Ward No. I	313	0	9
" II	188	4	2½
" III	152	4	9
" IV	212	7	11
" V	484	5	0
" VI	359	3	3
" VII	404	14	10
" VIII	362	7	7
" IX-X-XI	726	8	0
" XII-XIII	432	14	9
" XIV-XV	259	1	9
" XVI	28	8	9
" XVII	145	9	0
Other collections	3,953	7	6
Collection on account of issue of medical certificates	1,249	8	0
Interest	3,351	4	1
Proceeds from the sale of Hospital Pharmacopoeia	212	0	0
Proceeds from the discharge of fixed deposit invested with the Central Bank of India	4,000	0	0
Total	21,879	1	9

Payments.	Amount. Rs.	a.	p.
Appliances such as Crutches, Hernia belts, spectacles, artifical eyes, artifical limbs, etc., supplied to poor patients	538	2	0
Blood transfusion charges	657	0	0
Travelling expenses paid to poor patients	115	3	0
Expenses incurred in giving comforts to patients of the hospital	143	5	0
Clothing supplied to patients	332	10	0
Dead stock and equipment	315	0	0
Supply of costly medicines to the patients of the hosp'tal	971	13	8
Funeral expenses for the deceased patients	5	0	0
Repairs to appliances	38	6	0
Amount of false coins and difference in exchange of foreign coins written off	21	3	4
Sundries	116	0	9
Investment with the Central Bank of India in fixed deposit	4,171	12	0
Payment of suspense account	148	1	3
Cash in hand	785	5	7
Balance with the Central Bank of India in current deposit account	13,518	3	2*
	21,879	1	9

* This includes the amount of Rs. 1,216-5-0 held in suspense for the following accounts :—

	Rs.	a.	p.
1. Resident Medical Officers' Mess deposit account	1,135	0	0
2. Splint deposits	28	0	0
3. Patients' money	53	5	0
	Rs. 1,216	5	0

Donations and gifts received during the year were tabulated:

	Rs.	a.	p.
1. The Burmah-Shell Oil Storage and Distributing Co. of India	800	0	0
2. The Agents, Peninsular and Oriental Steam Navigation Co.	350	0	0
3. The Secretary, Bombay Electric Supply and Tramways Co., Ltd.	300	0	0
4. Mr. Meghji Mathradas	151	0	0
5. Dr. C. J. Ghia	101	0	0
6. The Agents, Swan Mills, Ltd.	100	0	0
7. The Agents, Gold Mohur Mills, Ltd.	100	0	0
8. The Agents, Finlay Mills, Ltd.	100	0	0
9. The Andhra Valley Power Supply Co., Ltd.	100	0	0
10. The Tata Hydro-Electric Power Supply Co., Ltd.	100	0	0
11. Messrs Katrak, Ltd.	100	0	0
12. Mrs. E. Oliveira	100	0	0
13. Dr. J. V. Vora	100	0	0
14. Mr. Haridas J. Joshi	100	0	0
15. Dr. M. D. D. Gilder	One Gramophone.		
16. Mr. Nagardas H. Shah	One wooden cupboard.		
17. Mr. C. V. Vijayaraghavachariar	26 stools, wooden.		

The College

70 new students were admitted in June 1932. The number on the college rolls (including 24 women students) was as follows:

I. M.B.B.S. First Year	69
I. " Second "	54
II. " Third "	60
III. " Fourth "	52
III. " Fifth "	88
B.Sc.	3
	326
Post-graduate Students	16
Total	342

Examinations

Examinations.	Candidates Sent Up.	Passed the Whole Examination.	Passed Part of the Examination.
I. M.B.B.S. (April 1932)	41	25	..
I. " (December 1932)	81	37	..
II. " (April 1932)	34	18	..
II. " (January 1933)	47	26	..
III. " (April 1932)	42	13	8
III. " (December 1932)	56	19	8
B.Sc. Physiology—Principal	2	1	..
M.D.	7	1 (with distinction)	..
M.S.	5	3	..
D.O.	4	1	..

Annual Cost and Revenue

The total cost of the college and hostel excluding the amount spent out of Loan Funds was Rs. 2,22,021 (Rs. 2,28,848 the previous year) and the revenue in the form of tuition fees, hostel rent and miscellaneous receipts was Rs. 85,953 (Rs. 79,497 the previous year). The fees from post-graduate students amounted to Rs. 1,470. The gross cost per student per year was Rs. 678, the net cost was Rs. 414.

Library

147 new books were purchased (92 the previous year) and 53 bound volumes of periodicals, etc. (62 the previous year) were added. Six medical books were presented to the library during the period under report. During the year, 4,773 books were issued to the students as against 4,566 in preceding year.

Students' Hostel

132 students stayed in the hostel. The total recurring expense on the hostel was Rs. 9,392. The demand for rooms continued to far exceed their availability.

Hostel For Women Students

Financial stringency disallowed action on the proposal for providing hostel accommodation to women students.

Gymkhana

The students participated in all inter-collegiate tournaments and won the football shield.

Research

The following publications had appeared in various medical journals:

Rangoli at the entrance of JMLT.

Serial No.	Name of Article.	Contributed by.	Name of Journal.
1	Inguinal Hernia—A new and simple method of Operation with New Observations on Anatomy and Aetiology.	Dr. G. V. Deshmukh, M.D. (Lond.), F.R.C.S. (Eng.), Hon. Surgeon.	The Bombay Medical Journal. (January 1932).
2	Description of three operations of complete Laryngectomy for Carcinoma Larynx.	Dr. V. M. Kaikini, B.A., F.R.C.S. (Edin.), Hon. Surgeon.	The Bombay Medical Journal.
3	Partial removal of trigone of bladder and transplantation of urethra for epithelioma of trigone by LaRoque's method.	Do.	Do.
4	Subphrenic abscess	Do.	Antiseptic, Madras.
5	Anorectal fistula	Do.	National Medical College Magazine, Bombay.
6	The Gall Bladder and its disease ..	Dr. V. M. Kaikini, B.A., F.R.C.S. (Edin.), Hon. Surgeon.	Antiseptic, Madras.
7	How to avoid Maternal and Fœtal dangers.	Dr. N. A. Purandare, M.D., F.C.P.S. (Bom.), Honorary Gynæcologist.	The Journal of the Indian Medical Association. (April 1933.)
8	Yet uncertainty about the treatment of Placenta Prævia.	Do.	The Antiseptic, Madras, Vol. 29. (July 1932.)
9	Differences in location of different parts of the Fœtus as noticed during the latter part of pregnancy and in labour.	Do.	Do.
10	Culture de L'Entamœba Dysentriæ sur milieux a L'Intestin du chat.	Dr. R. G. Dhayagude, M.D. (Bom.), Associate Professor of Pathology and Bacteriology.	Annales de Parasitologie.
11	Endometrioma	Do.	Bombay Medical Journal.
12	Hyperinsulinism	Do.	Do.
13	Pituitary Basophilia	Do.	Do.
14	Ovarian Pregnancy	Drs. N. A. Purandare, M.D. (Bom.), and R. G. Dhayagude, M.D. (Bom.).	Do.
15	Placental Neoplasm	Do.	Do.
16	Observations on Ankylostomiasis in Bombay.	Drs. R. G. Dhayagude, M.D. (Bom.), and C. B. Dhurandhar, M.B.B.S., D.O. (Bom.)	Do.
17	Studies in the Nutritive value of Indian Vegetable foodstuffs (Part IV)	Dr. S. P. Niyogi, M.B., M.Sc. (Cal.), Professor of Physiology.	The Indian Journal of Medical Research.
18	Anthropometric measurements in Bombay (Part 1).	Dr. G. M. Kurulkar, M.B.B.S., Associate Professor of Anatomy.	Do.
19	A case of Pellagra	Dr. B. H. Rajadhyaksha, M.B.B.S., Medical Registrar.	Bombay Medical Journal.
20	Recovery of a case of Pneumococal Septicæmia by Specific Serum.	Dr. R. Banerji, M.B. (Cal.), M.R.C.P. (Lond.), Medical Tutor.	Do.
21	The development of the conception of disease.	Dr. Abdul Hamid, M.D. (Bom.).	Do.

The following studies were in progress:

Serial No.	Name of Enquiry	Conducted by	Name of the Institution.
1	Artificial Pneumothorax and its limitations as a therapeutic measure.	Dr. R. Banerji, M.B. (Cal.), M.R.C.P. (Lond.), Medical Tutor.	Under the auspices of the Ratanji Ranchhodji Desai Fellowship.
2	The Rabbit Ovulation test	Dr. S. B. Anklesaria, M.B.B.S.	Under the auspices of the Dr. Mangaldas V. Mehta Research Scholarship.
3	Determination of Hæmoglobin in Health and in Anæmias in Bombay.	Under the direction of Dr. V. R. Khanolkar, B.Sc., M.D.(Lon.), Professor of Pathology and Bacteriology.	Under the auspices of the Indian Research Fund Association.
4	Anthropometric measurements in Bombay.	Under the direction of Dr. G. M. Kurulkar, M.B.B.S., Associate Prof. of Anatomy.	Under the auspices of the Indian Research Fund Association.

Research on the 'nutritive value of vegetable foodstuffs' was under the consideration of the Department of Agriculture of the Government of Bombay. If sanctioned during the year 1933–34, the research work could be undertaken at the college.

Rangoli welcoming at the entrance of JMLT.

13

Annual Report (1934–1935)

Staff

Dr Jivraj Mehta had resumed his duties. Dr S.G. Vengsarkar, Honorary Assistant Physician was granted six months study leave from 24 December 1934 to 23 June 1935 for postgraduate training in Europe and Dr N.D. Patel was appointed to act in his place during that period.

Dr Z.J. Joseph, Honorary Assistant Radiologist was granted one year's leave from 15 September 1934 to 14 September 1935 to prosecute postgraduate studies in England and abroad.

The University of Bombay had granted permission to admit 80 students to Seth Gordhandas Sunderdas Medical College. The teaching staff was augmented to cope with the requirements of the increased number of students. The following extra staff was sanctioned by the Corporation:

One assistant professor, biochemistry

One tutor, biophysics

Three demonstrators

One Honorary Assistant Physician

One tutor in surgery

The following extra staff was sanctioned for the hospital for administrative work and to look after the old medical cases in the outdoor department, respectively:

One Assistant Medical Officer

One Medical Assistant, outpatient department

THE SENIOR TEACHING STAFF IN THE COLLEGE AND HOSPITAL

Dean

Jivraj N. Mehta, M.D. (Lond.), M.R.C.P. (Lond.), F.C.P.S. (Bom.)

Professor of Anatomy

R. P. Koppikar, M.S. (Bom.), F.C.P.S. (Bom.)

Asst. Professor of Anatomy and Embryology

G. M. Kurulkar, M.B.B.S. (Bom.)

Professor of Physiology

S. P. Niyogi, M.Sc., M.B. (Cal.)

Assistant Professor, Biochemistry

V. N. Patwardhan, M.Sc. (Bom.), Ph.D. (Lond.), A.I.I.Sc.

Assistant Professor of Physiology

A. Fernandez, M.B.B.S. (Bom.)

Professor of Pharmacology and Materia Medica

A. S. Paranjpe, M.D. (Heidelberg), D.T.M., Ch.B.

Professor of Pathology and Bacteriology

V. R. Khanolkar, B.Sc. (Lond.), M.D. (Lond.)

Asst. Professor of Pathology and Bacteriology

R. G. Dhayagude, M.D. (Bom.)

R. G. Modak, M.D. (Bom.)

Hon. Physicians and Lecturers in Medicine

M. D. D. Gilder, B.A., M.D. (Lond.), F.R.C.S. (Eng.), F.C.P.S. (Bom.)

P. C. Bharucha, M.D., B.S. (Lond.), F.C.P.S. (Bom.)

A. S. Erulkar, M.D., B.S. (Lond.), F.C.P.S. (Bom.)

P. T. Patel, M.D. (Lond.), M.R.C.P. (Lond.), D.T.M. & H. (Cantab.), F.C.P.S. (Bom.)

L. D. Dhawale, B.A. (Allahabad), M.D. (Bom.)

Jivraj N. Mehta, M.D. (Lond.), M.R.C.P. (Lond.), F.C.P.S. (Bom.)

Honorary Assistant Physician

S. G. Vengsarkar, M.D. (Bom.), on leave

N. D. Patel, M.D. (Lond.), M.R.C.P. (Lond.) (Acting)

Honorary Surgeons and Lecturers in Surgery

G. V. Deshmukh, M.D. (Lond.), F.R.C.S. (Eng.)

A. P. Bacha, F.R.C.S. (Eng.)

R. N. Cooper, M.S. (Lond.), F.R.C.S. (Eng.), F.C.P.S. (Bom.)

T. O. Shah, F.R.C.S. (Eng.), F.C.P.S. (Bom.)

V. M. Kaikini, B.A., M.B.B.S. (Bom.), F.R.C.S. (Edin.)

Hon. Surgeon and Lecturer in Ear, Nose and Throat

H. D. Gandhi, M.B.B.S. (Bom.), F.R.C.S. (Edin.)

Honorary Assistant Surgeons

A. V. Baliga, F.R.C.S. (Eng.)

K. G. Munsif, M.B.B.S. (Bom.), F.R.C.S. (Eng.)

G. M. Phadke, M.B.B.S. (Lond.), F.R.C.S. (Eng.)

Hon. Gynecologists and Lecturers in Gynecology and Obstetrics

N. A. Purandare, M.D. (Bom.), F.C.P.S. (Bom.)

H. D. DeSa, M.D. (Bom.), F.C.P.S. (Bom.)

Mangaldas V. Mehta, O.B.E., B.A., F.C.P.I., F.C.P.S., Ex-Officio Hon. Lecturer in Obstetrics

Hon. Assistant Gynecologist

Miss P. C. Daroowalla, M.D. (Bom.)

Hon. Ophthalmic Surgeons and Lecturers in Ophthalmology

R. P. Ratnakar, D.O. (Oxon.), D.O.M.S. (Lond.), D.Ch. O. (L'pool.), F.C.P.S. (Bom.)

G. T. Mody, M.B.B.S. (Bom.), D.O. (Oxon.)

Hon. Dental Surgeons and Lecturers in Dentistry

H. G. Moghe, L.M. & S. (Bom.), L.D.S., R.C.S. (Eng.)

D. M. Desai, L.D.S., R.C.S. (Eng.)

Hon. Dermatologist and Lecturer in Dermatology and Venereology

A. C. Rebello, M.B.B.S. (Bom.), D.T.M. & H. (Lond.)

Hon. Radiologist and Lecturer in Radiology and Electro-Therapy

J. L. Desai, M.B.B.S. (Bom.), D.M.R.E. (Cantab.)

Hon. Assistant Radiologist

Z. J. Joseph, M.D. (Bom.), (on leave)

Hon. Anesthetist and Lecturer in Anesthetics

M. N. Desai, M.B.B.S. (Bom.)

Hon. Lecturer in Medical Jurisprudence and Toxicology

Khan Bahadur A. K. Turner, L.M. & S. (Bom.), F.C.P.S. (Bom.)

Hon. Lecturer in Hygiene and Preventive Medicine

J. S. Nerurkar, B.Sc., L.M. & S. (Bom.), D.P.H. (Cantab.)

The Hospital

As during the earlier years, 354 beds were insufficient to cater to the need for admissions of patients.

Department.	Male.	Female.	Children.	Total.
Medical	84	29	10	123
Surgical	84	29	14	127
Gynæcological	....	35	....	35
Ophthalmic	16	16	....	32
Aural	6	2	2	10
Skin and Venereal ..	6	2	....	8
Casualty	6	3	....	9
Isolation	6	4	....	10
Total	208	120	26	354

Particulars.	Figures for the year 1934.	Figures for the year 1933.
(a) In-patients—		
1. Scheduled strength of beds	354	354
2. Daily average number of in-patients	364.9	354.5
3. Total No. of new in-patients treated	10,853	10,498
4. Average No. of days each patient was resident	11.9	11.0
(b) Out-patients—		
1. Total No. of new out-patients	72,636	71,754
2. Daily average No. of new out-patients	233.6	232.2
3. Total No. of out-patient attendance	2,12,434	2,07,811
4. Daily average No. of out-patient attendance	683.1	672.4
5. No. of casualty patients included in No. 1 above	10,322	9,569
(c) Operations—		
1. Total No. of operations on in-patients	3,477	3,465
2. Total No. of operations on out-patients	4,106	4,277

23. Among the patients treated in the hospital during the year 1934, the following cases may be mentioned as of special interest :—

1. Roadside cases brought by the Police 53
2. Tetanus 102
3. Motor accidents (of whom 107 were admitted as in-patients) 416
4. Burns. 195

Of the 195 patients with burns, 90 needed admission. The causes for burns were:

1.	Segree	18.	5.	Electrical	2.
2.	Stove	16.	6.	Crackers	1.
3.	Hot water, etc. ..	20.	7.	Explosives	12.
4.	Lamp	6.	8.	Minor Causes	15.
					90.

Of the 11,206 inpatients (10,853 new admissions and 353 in hospital from the previous year) 4,198 were cured, 4,233 were discharged as relieved, 1,374 either absconded or left the hospital against medical advice and 1,044 died, leaving a balance of 357 patients at the end of the year. Out of the 1,044 deaths, 370 died within the first 24 hours of admission, 101 after 24 hours and within 3 days of admission, and the remaining 573 after 3 days of their admission in the hospital.

The total expenditure incurred on the maintenance of the hospital during the year 1934–35 including the liabilities outstanding at the end of the year

approximately amounted to Rs. 4,77,285. This expenditure includes the cost of the maintenance and treatment of inpatients, the cost of the outpatient department, of the resident medical, nursing, and support staff as well as that of administration and maintenance and repairs of buildings.

Figures were provided for the past 5 years to show the care and economy in reducing costs despite increasing work. The annual cost had been reduced by about Rs. 50,000 without reducing the efficiency and utility of the hospital.

Year	Scheduled No. of beds	Daily average No. of in-patients	Cost (Rs.)
1930–31	354	368.4	5,26,572
1931–32	354	372.8	5,20,321
1932–33	354	360.2	5,27,418
1933–34	354	354.5	4,86,689
1934–35	354	364.9	4,77,285

The cost per inpatient per day had been reduced to Rs. 2-13-7 in the year under report from Rs. 3-0-8 in the previous year. Reduction to the extent of Rs. 0-3-1 was due to the lower cost incurred under the heads shown below as favorable prices were obtained for various items needed for the patients' diet, drugs, dressings, stores, and provisions for the Nurses' Home.

Some essential repairs could not be carried out due to stringency of funds. This reduction of expense cannot be called 'savings' as it is only deferred expenditure.

		Amount of reduction in cost, per patient, per day		
		Rs.	a.	p.
1	Diets	0	1	0
2	Drugs, dressings, etc.	0	0	6
3	Stores and linen	0	0	1
4	Establishment	0	0	9
5	Repairs and maintenance	0	0	9
	Total	0	3	1

The relative costs per inpatient and outpatient was shown in a different table:

Particulars	1934–35			1933–34		
	Rs.	a.	p.	Rs.	a.	p.
(a) Average cost per in-patient, per day	2	13	7	3	0	8
(b) Average cost of diet per in-patient, per day	0	5	9	0	6	9
(c) Average cost per in-patient admission	34	8	11	36	2	3
(d) Average cost per out-patient attendance	0	7	2	0	7	2
(e) Average cost per out-patient admission	1	5	0	1	4	8

92 (117 the previous year) patients with no relatives were transferred to the Helpless Beggars Camp. 295 patients with advanced phthisis were transferred to the Maratha

Hospital and 7 with milder forms of the disease to the Turner Sanatorium. 156 patients with diarrhoea and dysentery were transferred to the Arthur Road Hospital.

The highest number of outpatients on a day was 926, the highest number of new outpatients on a single day being 333. The highest number of inpatients admitted on a single day was 60.

Equipment and Works

A diathermy apparatus and a portable X-ray apparatus were purchased during the year at the cost of Rs. 1,200 and Rs. 2,755, respectively. A complete set for electro-surgical operations was purchased at a cost of Rs. 1,935-3-0.

The need for radium remained unmet. The number of patients with cancer and other malignant growths during the year was 339 against 300 in the previous year. The modern methods of treating superficial cancers by deep therapy contact method of Prof Henri Choul was attracting attention. Dr Mehta hoped that, if radium is not available, this new apparatus costing Rs. 10,000 as against the much larger cost of radium would at least be made available for the relief of some of the ravages of this fell disease.

Additional cardiac and Fowler beds were required.

The existing operation table was unsatisfactory and an appropriate replacement had been requested.

Since a portable X-ray unit was now available, arrangements were under way to obtain an X-ray and orthopedic table to facilitate skiagrams without undue discomfort to the patient.

It had become increasingly necessary to open the venereal wards which have been ready since 1930 and to consider the provision of a separate ward for tubercular patients, construct a tonsillar ward, and extend the electro-cardiograph room.

The accommodation for patients with advanced phthisis at the Maratha Hospital were now proving inadequate. The number of such patients who attended this hospital was 962 (as against 460 in the previous year). Only a third of these patients could be transferred to the Maratha Hospital and Turner Sanatorium. Admission to special isolation wards was needed for these patients to protect family members and other hospital patients.

Patients who are operated upon for diseased tonsils and adenoids require to be observed for the day before they are discharged. There was no ward adjacent to the operation theater where these patients could be kept. A fairly large number of these patients are young children from the school clinics held under the compulsory education scheme of the Municipality in this hospital. If such a ward was made available, not only could more work be undertaken but better nursing facilities could be given to these patients. The cost of such a ward would be about Rs. 10,000. 820 persons were operated for the removal of tonsils and adenoids during the year.

The room being used for electrocardiography was small and stuffy. An extension would cost Rs. 3,000.

The need for extension of the office and of the staff quarters was also emphasized. The records of the hospital and particularly of the inpatients has been growing rapidly. A central medical records place was getting more and more urgent.

Clerks, compounders, and the engineering staff were shuffled in available rooms. This was now proving unsatisfactory and it was now necessary to provide additional suitable quarters for the staff.

Training of Medical Assistants In Municipal Dispensaries in the Treatment of Leprosy

The Corporation had decided to use municipal dispensaries for treating leprosy patients. The medical assistants working there were sent in batches of two to King Edward VII Memorial Hospital for practical training. 12 medical assistants had been trained thus during the year.

Nurses

Results of the examination of probationer nurses by the Bombay Presidency Nursing Association were as follows:

Examination	September 1934		March 1935	
	Appeared	Passed	Appeared	Passed
First examination	19	12	11	7
Second examination	9	7	7	6

The cost of the nursing establishment including salaries, uniform, laundry allowance, mess changes, gas and electricity charges, repairs to their quarters, and honoraria paid to medical officers for giving instruction in the nursing school was Rs. 80-06-2 per nurse (Rs. 83-9-6 during the previous year).

Two nurses were given the task of helping in the collection of funds during the *Special Hospital Day Race* at the Western India Turf Club arranged by the Hospital Maintenance Fund Committee. Their help was greatly appreciated by the Committee.

Nurses' Conference

The All-India Conference of the Trained Nurses' Association was held at the Goculdas Tejpal Hospital in November 1934. Our Sisters and the Students' Unit of this Association in our hospital participated.

The exhibition of models and drawings prepared by student nurses included those by our students. The exhibition was opened by Mrs Marion McCarthy, our Matron. Two won prizes for their drawings and models:

1. Miss C.B. DeMello 3rd year 1st prize in drawing
2. Miss E. DeMello 1st year 1st Prize in models

Nurses Welfare Fund

Under the auspices of this fund, four socials and two picnics were organized by Mrs Kripalani, Mrs Chandavarkar, Mrs Deshmukh, Mrs Gilder, Mrs Erulkar, Mrs Raiji, and Mrs Cooper.

Messrs Mackinnon Mackenzie & Co not only contributed the sum of Rs. 500 but also provided lunches for picnics to Mandwa on two occasions for the nurses during the year.

The total collections to the fund (members' subscription, donations, and interest) amounted to Rs. 2,397-3-6. (This included a donation of Rs. 500 from Messrs Mackinnon Mackenzie & Co.) The expenditure amounted to Rs. 473-7-8.

Proprietors of the *Nawa-kal*, *Times of 1ndia lllustrated Weekly*, the *Jame-Jamshed*, *Kaiser-I-Hind*, continued to supply one copy each of these journals for the use of the nursing staff. Messrs Kirloskar Bros., Ltd., proprietors of the monthly magazines of *Kirloskar* and *Stree* supplied a complimentary copy of each of these journals for the use of the nursing staff in response to the appeal sent to them.

School Clinic

2,235 children were treated in the different departments of the hospital against 2,080 in the preceding year.

143 children were operated upon in the Aural department. 4 were admitted in the surgical wards and were treated for appendicitis, bleeding from the ear after a fall, motor accidents, and thrombophlebitis. 4 children were admitted in the medical wards for continuous fever, mitral regurgitation, tape worms, and X-ray tests. In the Ophthalmic department, 2 major operations, 15 minor operations, and one tattooing of the cornea were performed. 135 glasses were prescribed. 7 X-ray plates were taken in addition to the number of screenings done for diagnostic purposes. Deep X-ray therapy was given to 3 children and ultraviolet rays to 4. Laboratory investigations were done in the case of 14 children.

The cost amounted to Rs. 8,514 and the work was carried out on very economical lines as can be judged from the number of children treated in the various departments and the total attendance therein as shown in the table. A detailed report of the School Clinic Work was submitted to the Schools Committee which publishes it annually.

	1934–35			1933–34		
	New admissions	**Old cases**	**Total attendance**	**New admissions**	**Old cases**	**Total attendance**
Medical and Surgical	570	1,711	2,281	559	1,975	2,534
Aural	387	383	770	567	379	946
Ophthalmic	329	1,089	1,418	434	2,001	2,435
Dental	384	230	614	297	325	622
Skin	565	1,013	1,578	223	869	1,092
	2,235	4,426	6,661	2,080	5,549	7,629

Poor Box Charity Fund (Appendix 15)

Poor Box Charity Fund—Statement of Accounts for the year 1934-35.

Receipts. Particulars.	Amount. Rs. a. p.
Balance in hand	833 1 2
Balance with the Central Bank of India in Current account	10,370 8 7
Balance with the Central Bank of India in Home Savings Account	5,237 1 6
Out-patient Casualty department	1,328 8 11
" Medical department	48 5 3
" Minor surgery department	89 7 9
" Surgical dressing department	55 4 6
" Skin department	341 8 9
" X-Ray department	71 11 0
" Aural department	232 5 0
" Dental department	31 13 0
" Gynaecological department	45 2 9
Ward No. I.	180 4 9
" II	171 9 0
" III	109 13 6
" IV	144 14 6
" V	694 9 3
" VI	465 15 0
" VII	408 6 0
" VIII	283 1 3
" IX-X-XI	818 3 0
" XII-XIII	457 4 6
" XIV-XV	236 4 6
" XVI	12 0 9
" XVII	141 11 0
Other collections	4,958 5 0
Collections on account of issue of medical certificates	1,339 0 0
Interest	5,240 1 9
Proceeds from the sale of Hospital Pharmacopoeia	....
Proceeds from the sale of Pathology note books	....
Cost of spectacles	7 0 0
Proceeds from the sale of Greeting Cards	9 14 0
Balance of deposits	1,787 11 3
Total	36,150 15 2

Disbursements. Particulars.	Amount. Rs. a. p.
Appliances such as crutches, Hernia belts, spectacles, artificial eyes, artifical limbs, etc., supplied to poor patients	815 13 0
Blood transfusion charges	525 0 0
Travelling expenses paid to poor patients	100 0 0
Expenses incurred in giving comforts to patients of this Hospital	338 7 0
Deadstock and equipment	48 12 0
Supply of costly medicines to the patients of the Hospital	326 8 0
Funeral expenses of deceased patients	27 0 0
Repairs to appliances	57 7 10
Sundries	45 14 0
Radium to patients	50 0 0
Investment for purchasing Bonds	25,318 11 6
Printing and stationery	32 1 0
X-Ray materials	19 7 0
Applying leeches to the patients	10 4 0
Apparatus	3,955 0 0
Charges in connection with printing of Greeting Cards	16 9 6
Charges in connection with printing of Pharmacopoeia	14 0 0
Cash in hand	761 4 3
Balance with the Central Bank of India Ltd., current deposit account	1,525 4 1*
Balance with the Central Bank of India Ltd., Home Savings Account	2,163 7 0*
	36,150 15 2

*This includes the amount of Rs. 3,425-15-3 held in suspense for the following account:—

	Rs. a. p.
1. Resident Medical Officers' Mess Deposit Account	1,152 0 0
2. Splint deposits	67 0 0
3. Patients' money	75 3 9
4. Ramchandra Tejpal's deposit	1,578 0 0
5. Menial staff Welfare Fund	132 8 0
6. Debt Redemption Society	385 7 6
7. Miscellaneous deposits	35 12 0
Rs.	3,425 15 3

The Lightfoot Refrigeration Co., Ltd. continued the free supply of oxygen to the hospital. The oxygen business of the Lightfoot Refrigeration Co. was taken over by the Indian Oxygen and Acetylene Co., Ltd., Calcutta. They too have generously intimated their desire to grant free supply of oxygen.

Other donors:

	Donor	Rs.
1	The British India Steam Navigation Co., Ltd.	1,100
2	The Burmah-Shell Oil Storage and Distributing Company of India.	450
3	Messrs. General Motors India Ltd.	400
4	The Secretary, Millowners' Association	400
5	The Secretary, Bombay Electric Supply and Tramways Company, Limited	300
6	The Secretary, N. M. Wadia Charities, Bombay	250
7	Mrs. Mahadibai	225
8	Dr D. R. Desai (for Diathermy apparatus)	151
9	Dr B. A. Vaidya	151
10	The Manager, Kohinoor Mills	100
11	Messrs. Finlay Mills Ltd.	100
12	Messrs. Swan Mills Ltd.	100
13	Mr. Bartholomes on behalf of the Goanese members of the crew of S.S. 'Viceroy of India'	80
14	Messrs. Havero Trading Company, Limited	75
15	Mr. Huseinbhoy Gulam Husein (for wooden stools)	51
16	Dr A. C. Rebello, D.T.M. & H. (Lond.)	51

(Continued)

17	The Manager, Bharat Rubber Works	51
18	R. S. Dadachanji, Esq.	51
19	Bhukandas B. Desai, Esq.	50
20	Krishnaraj M. D. Thackersey, Esq.	50
21	The Manager, Toyo Podar Cotton Mills Co., Ltd.	50
22	S. G. Kantak, Esq.	50
23	M. A. Rahiman, Esq.	50
24	Mrs. Teresa Roach	Ten Gramophone records
25	N. P. Shah, Esq.	One Hemometer complete
26	Nanikram Rochiran, Esq.	One Potain's Aspirator
27	A. R. D'Sousa, Esq.	12 wooden stools

Gift

Mrs Laxmibai Kane of Nagpur presented 20 electric clocks made by Messrs Swadeshi Electric Clock Manufacturing Company of Bombay to this hospital in memory of her deceased son, Mr Gopal Waman Kane, who had obtained his M.B.B.S. from the Seth G.S. Medical College. After holding a medical appointment on the staff of the King Edward Memorial Hospital, he died in this hospital in January 1933. The Swadeshi Electric Clock Manufacturing Company presented an Electric Master Clock to the hospital, which was gratefully accepted.

Donations

Two donations were received for the award of prizes to the students of the Seth Gordhandas Sunderdas Medical College. Mrs Laxmibai Kane donated Rs. 1,425 for the award of a Gold Medal every year to the regular student of the college passing the third M.B.B.S. examination on certain specified conditions in memory of the death of her son.

Mr B.N. Dhume, whose son was a regular student of our college and died in 1930, endowed the prize of about Rs. 35 to a newly admitted student to our college on specified terms and conditions.

Hospital Pharmacopoeia

Since all available copies had been exhausted, arrangements were made to print 1,000 copies of the Pharmacopoeia by the Basel Mission Press of Mangalore.

The College

The University had raised the number of permissible admissions. 80 new students were admitted to the first year class in June 1934 (60 at the start of the college, 70 from 1931 onwards). A survey of the 80 students was carried out this year which showed the age at which the Inter-Science was passed.

Age of passing intermediate science exam	Number of students
17	1
18	11
19	22
20	21
21	9
22	10
23	4
24	2

Average of passing matriculation exam	Number of students
15	3
16	16
17	20
18	25
19	8
20	6
21	2

Occupations of the parents of these students

Occupations of parents	Number of students
Service	32
Medical practitioners	16
Merchants, business	9
Landlords	25
Legal profession	7
Farmers	7
Artisan	1

Marital status of the students	Number of students
Single	66
Married	11
Betrothed	3

There were 389 students on the college rolls at the end of the year, including 28 women.

		Women
1st MBBS 1st year	79	4
1st MBBS 2nd year	60	3
2nd MBBS 3rd year	59	4
3rd MBBS 4th year	64	4
3rd MBBS 5th year	126	13
B. Sc.	1	
Total number of regular students	389	28
Postgraduates	10	2
Grand total	399	30

(Continued)

Examinations

Examination	Month & Year	Candidates Sent Up	No. Passing the Whole Examination
1st M.B.B.S.	April 1934	48	19
	Dec. 1934	93	39
2nd M.B.B.S.	April 1934	55	28
	Dec. 1934	62	42
3rd M.B.B.S.	April 1934	75	23
	Dec. 1934	81	22
M.D.		5	1
M.S.		4	1

Annual Cost and Revenue

The total expenditure for the year on account of the college and the hostel including the liabilities outstanding at the end of the year comes to Rs. 2,26,117 (previous year 2,14,149). The revenue of the college in the form of tuition fees, hostel rent and miscellaneous receipts amounted to Rs. 99,840 (previous year: Rs. 93,327). Fees received from the postgraduate students amounted to Rs. 1,815.

Year	Gross cost per student (Rs.)	Net cost per student (Rs.)
1925–26	6,245	6,024
1926–27	1,798	1,471
1927–28	1,487	1,191
1928–29	1,134	842
1929–30	962	700

Year	Gross cost per student (Rs.)	Net cost per student (Rs.)
1930–31	873	572
1931–32	789	515
1932–33	678	414
1933–34	590	333
1934–35	582	325

Over the 10 years of the existence of the college, the cost had been steadily brought down year by year. It was hoped to bring down the costs further.

Museum

Anatomical and pathological specimens were now housed in the new museum building.

Mr D.S. Laud, the Superintendent, Municipal Gardens sent a number of bodies of animals dying in the Victoria Gardens for the pathological and the comparative anatomy sections of the Museum. The skeleton of the elephant which was presented to the Victoria Gardens by the Maharaja of Baroda in the year 1900, and which suddenly died on 11 September 1934, was being prepared for mounting in the Museum.

Library

158 new books were purchased (181 the previous year) and 67 bound volumes of periodicals (50 the previous year) were added to the library. 209 medical books were presented to the Library, as against 84 during the previous year. The number of books issued for reading was 8,395 as against 6,734 in the previous year.

Students' Hostel

The number of students residents in the hostel during the year under report was 134. 'The total expenditure on the hostel was Rs. 8,830, the revenue (fees) being Rs. 14,832.

Gymkhana

The students took part in the inter-collegiate tournaments and were runners up in the hockey and tennis doubles. The hockey team won the Dr Vijayakar Hockey.

The urgent need for a pavilion to be used by students was emphasized. The gymkhana was unable to save anything out of its revenue received by way of members fees. A sum of Rs. 10,000 was set apart for the pavilion and an additional sum of at least Rs. 20,000 is required for this purpose. Appeals by the Gymkhana Pavilion Committee were sent out and philanthropic responses were hoped for.

14

Annual Report (1938–1939)

Staff

THE COLLEGE AND HOSPITAL SENIOR STAFF

Dean

Jivraj N. Mehta, Esq., M.D. (Lond.), M.R.C.P. (Lond.), F.C.P.S. (Bom.)

Assistant Dean

R. E. Dadachandji, Esq., M.B.B.S. (Bom.)

Assistant Medical Officer

V. V. Jadhav, Esq., M.B.B.S. (Bom.)

Professor of Anatomy

R. P. Koppikar, Esq., M.S. (Bom.), F.C.P.S. (Bom.)

Assistant Professor of Anatomy

G. M. Kurulkar, Esq., M.B.B.S. (Bom.)

Professor of Physiology

S. P. Niyogi, Esq., M.Sc., M.B. (Cal.)

Assistant Professor of Biochemistry

V. N. Patwardhan, Esq., M.Sc. (Bom.), Ph.D. (Lon.), A.I.I.Sc.

Assistant Professor of Physiology

A. Fernandez, Esq., M.B.B.S. (Bom.)

Professor of Pharmacology and Materia Medica

A. S. Paranjpe, Esq., M.D. (Hield), D.T.M. (Lond.), M.B.Ch.B. (Edin.)

Professor of Pathology and Bacteriology

V. R. Khanolkar, Esq., B.Sc. (Lond.), M.D. (Lond.)

Assistant Professors of Pathology and Bacteriology

R. G. Dhayagude, Esq., M.D. (Bom.)

R. G. Modak, Esq., M.D. (Bom.)

Assistant Clinical Pathologist

K. D. Manohar, Esq., M.D. (Bom.)

Honorary Physicians and Lecturers in Medicine

M. D. D. Gilder, Esq., B.A., M.D. (Lond.), F.R.C.S. (Eng.), F.C.P.S. (Bom.), (on leave)

P. C. Bharucha, Esq., M.D. (Lond.), B.S. (Lond.), F.C.P.S. (Bom.)

P. T. Patel, Esq., M.D. (Lond.), M.R.C.P. (Lond.), D.T.M. & H. (Cantab.), F.C.P.S. (Bom.)

L. D. Dhawale, Esq., B.A. (Allahabad), M.D. (Bom.)

S. G. Vengsarkar, Esq., M.D. (Bom.)

Honorary Assistant Physicians and Lecturers in Medicine

N. D. Patel, Esq., M.D. (Lond.), M.R.C.P. (Lond.)

A. Hameed, Esq., M.D. (Bom.) (on leave)

M. J. Shah, Esq., M.B.B.S. (Bom.), M.R.C.P. (Lond.), D.T.M. & H. (Lond.)

P. Raghavan, Esq., M.D. (Bom.), Officiating

K. N. Vaidya, Esq., M.D. (Bom.), Officiating

Dr A.V. Baliga, F.R.C.S. (Eng.), was appointed as Honorary Surgeon and Lecturer in Surgery from 1 October 1938. Dr Abdu Hameed, M.D., Honorary Assistant Physician, proceeded to Europe on study leave from 1 September 1938 and Dr K.N.

Vaidya, M.D. (Bom.) had been appointed in his place. Dr M.N. Desai, D.A., (Eng.)., Honorary Anesthetist and Honorary Lecturer in Anesthesia proceeded to New York on 1 September 1938, to attend the Congress of Anesthetists and resumed duty on 6 December 1938.

The Hospital

The number of patients requiring admission continued to exceed the full complement of 370 beds. At times this necessitated admitting patients onto mattresses placed on the floor. During the emergency day of the medical or surgical unit, the number of patients was, at times, greater than 60. The highest number of admissions on a day was 69.

With an increase of 50 to over 100 per cent above the scheduled number of patients in a ward, it was impossible to look after them efficiently and carefully without a corresponding increase in the nursing and labor staff. Thus far, two additional sisters, ward boys, and sweepers had been sanctioned by the Corporation.

The steady increase in demand for medical relief at the K.E.M. Hospital over the past few years may be attributed to the rapid development of the north of the island. There was no other large general hospital in this area and, as the financial condition of the general public continued to be poor, there seemed to be little prospect of the number of outpatients and inpatients ever falling to its previous level. A note on the necessity of having a moderate-sized general hospital in the furthest north of the island was under preparation and would be submitted for the consideration of the Corporation as soon as all the details were available. The question of adequate medical relief in Sion, Dharavi, Matunga, and adjacent areas would soon need to be tackled.

These beds were distributed as follows:

Department	Male	Women	Children	Total
Medical	90	31	10	131
Surgical	84	29	14	127
Gynecological	–	35	–	35
Ophthalmic	16	16	–	32
Ear, Nose and Throat	6	2	2	10
Skin and Venereal	10	6	–	16
Casualty	6	3	–	9
Isolation	6	4	–	10
Total	218	126	26	370

Particulars	Figures for the year 1938	Figures for the year 1937	Figures for the year 1936
(a) In-patients			
1. Scheduled strength of beds	370	370	370
2. Daily average No. of in-patients	411.7	410.49	397.6
3. Total No. of new in-patients treated	13,320	12,425	12,127
4. Average No. of days each patient was resident	11.28	12.05	11.6
(b) Out-patients			
1. Total No. of new out-patients	114,813	101,389	85,557
2. Daily average No. of new out-patients	359	319	269
3. Total No. of out-patient attendance	366,132	331,933	265,910
4. Daily average No. of out-patient attendance	1,173.5	1,062.15	857.8

(Continued)

Particulars	Figures for the year 1938	Figures for the year 1937	Figures for the year 1936
5. No. of casualty patients included in No. 1 above	19,093	17,712	14,416
(c) Operations			
1. Total No. of operations on in-patients	4,044	4,200	4,020
2. Total No. of operations on out-patients	9,734	8,637	7,047
Note: It may be noted that though one of the wards had to be closed for nearly 11 months to facilitate the construction of a new ward over it and to repair its floor and dadoing the walls, the daily average number of in-patients was as high as that in the previous year, viz., 411, i.e., 41 patients more than the total scheduled number of beds in all the wards—including the one temporarily closed—which would give an idea of the congestion in the wards during the year. It is a matter of gratification that in spite of closing one ward as stated above, the total number of in-patients treated in the Hospital was slightly more than in 1937, thanks to the large verandahs in each ward which permitted the accommodation of extra cots in them.			

Of 13,750 inpatients (13,320 admitted during the year under report and 430 left over from the previous year) 3,723 were cured, 6,094 were discharged as relieved, 2,051 either left the hospital against medical advice or were otherwise discharged and 1,450 died, leaving a balance of 432 patients at the end of the year. Besides these, there were two stillborn children. Out of 1,450 deaths, 445 died within the first 24 hours of admission, 267 after 24 hours and within three days of admission and the remaining 738 after 3 days of their admission into the hospital. The total expenditure on the maintenance of the Hospital during the year 1938–39 including the liabilities outstanding at the end of the year amounted to Rs. 5,67,749. This expenditure included the cost of maintenance and treatment of inpatients, the cost of the outpatient department, of the resident medical, nursing and support staff as well as administration and maintenance and repairs of buildings.

The following table shows the relative costs of inpatients and outpatients per patient per day over three years:

Particulars	1938–39			1937–38			1936–37		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
(a) Average cost per in-patient per day	2	15	0	2	12	8	2	13	7
(b) Average cost per in-patient admission	33	4	6	32	10	11	33	0	2
(c) Average cost per out-patient attendance	0	5	10	0	5	10	0	6	8
(d) Average cost per out-patient admission	1	2	8	1	2	5	1	5	0

Details are as follows:

Year	Diets	Drugs, Dressings, Surgical Appliances, etc.	Stores and Linen	Heating and Lighting	Miscellaneous	Establishment	Repairs to Buildings and Engineering	Total
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1938–39	0 6 10	0 6 1	0 2 7	0 2 8	0 1 8	1 8 3	0 2 11	2 15 0
1937–38	0 5 11	0 5 3	0 2 8	0 2 11	0 1 7	1 7 11	0 2 5	2 12 8
1936–37	0 6 2	0 5 10	0 2 11	0 2 11	0 2 0	1 7 1	0 2 8	2 13 7

The average cost of every new out-patient admission was as follows:

Year	Drugs, Dressings, etc.	Stores and Linen	Heating and Lighting	Miscellaneous	Establishment	Repairs to Buildings and Engineering	Total
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1938–39	0 7 1	0 0 8	0 0 6	0 0 4	0 9 8	0 0 5	1 2 8
1937–38	0 7 4	0 0 10	0 0 6	0 0 4	0 9 0	0 0 5	1 2 5
1936–37	0 8 4	0 0 10	0 0 7	0 0 7	0 10 0	0 0 8	1 5 0

Note: It may be added that the actual cost incurred on patients (in-patients as well as out-patients) under drugs, dressings, surgical appliances, etc., is more than that indicated in the above tables as the cost of expensive drugs and injections administered to patients, of blood transfusions, etc., was met to the extent of about Rs. 7,300/- in the year under report, as in the previous years, with the help of the Poor Box Charity Fund of the Hospital. A reference in this connection is invited to para 32 of the report and to appendix no. 15.

The highest number of outpatient attendance on any particular day during the year 1938 was 1,608 and the highest number of new admissions in the outdoor department on a single day was 515. The highest number of old cases treated in a single day was 1,154, casualty cases 109 and inpatients admitted 73.

With the closure of the Helpless Beggars' Camp at Rowli Hill, the destitute and incurable patients of the Hospital were sent to the Lady Dhunjibai Jehangir Home for Destitutes and the King George V Infirmary for incurables respectively, which get an annual contribution of Rs. 10,000 from the Municipal Corporation. It was a matter of satisfaction that the patients transferred to these institutions are now better cared for and looked after than they were at the old Beggars' Camp. During this year, 85 patients were transferred to the Destitute Home and 166 to the Infirmary as against the total number of 125 patients transferred to the Beggars' Camp in the previous year.

349 patients suffering from advanced phthisis were transferred to the Maratha Hospital. 607 patients suffering from various infectious diseases were transferred to the Arthur Road Hospital. 252 cases of enteric fever (which raged in an epidemic form especially in the northern part of the city last year) and 106 cases of dysentery had to be transferred necessarily there on account of the congestion in our hospital. No patient was sent to the Turner Sanatorium during the year.

Extension of the Hospital

During the year, a new ward pavilion had been added to the existing number of wards. A second pavilion was almost nearing completion. The electro-cardiograph room was being extended by the addition of a wing and a couple of rooms. The rooms for general and linen stores, stocking furniture, and other dead stock were also being enlarged.

There had been a rapid progress in the construction of the new Nurses Home. The construction of the new ministerial staff quarters, which was taken up in hand at the beginning of the calendar year, was almost nearing completion. Another special feature of the works

under construction is the addition of a floor on each side of the rooms near the garage which were provided with a hall, verandah, and bathroom for the use of the social welfare center for the labor staff. An additional floor had also been provided by the side of the Clinical Pathology Laboratory to provide additional facilities for laboratory work, the need for which was greatly felt for many years.

Motor Accident Cases Treated In the Hospital

These were on the increase.

	Particulars	1938	1937	1936
1.	Treated in the casualty department	578	564	457
2.	Treated as in-patients	184	150	155

The largest number of motor accident cases, whether of ordinary severity (only requiring treatment in the casualty or outpatient departments) or marked severity (needing admission into the hospital) occurred in the age group of 20 to 30 (35% in the case of those admitted and 38% in the case of those treated in the outdoor department). Women formed only about 15% of the total number of motor accident cases.

Patients Brought In After Mill Accidents

(a) Treated in the Casualty Department

Particulars	Males	Females	Children		Total
			Male	Female	
Hindus	1,299	49	1	—	1,349
Mohamedans	117	2	—	—	119
Christians	25	1	—	—	26
Others	28	1	—	—	29
Total	1,469	53	1	—	1,523

(b) Admitted as Indoor Patients from the Casualty Department on Account of Severity of Injury

Particulars	In patients				Total
	Cured	Re-lieved	Left against medical advice, etc.	Died	
MALES:					
Hindus	12	42	6	1	61
Mohamedans	2	4	—	—	6
Christians	—	1	—	—	1
Others	—	—	—	1	1
FEMALES:					
Hindus	—	1	—	—	1
Mohamedans	—	—	—	—	—
Christians	—	—	—	—	—
Others	—	—	—	—	—
Total	14	48	6	2	70

Poisoning

213 patients were treated in the hospital for poisoning.

Acid	3
Alcohol	50
Anaphylactic shock after serum injection	4
Arsenic	5
Belladonna	1
Bhang	1
Calomel	1
Cannabis indica	4
Copper sulfate	1
Dhatura	11
Eucalyptus	1
Food	14
Iodine	6
Kerosene	5
Liniment — Aconite, Belladonna, and Camphor	2
Methyl salicylate liniment	1
Luminol overdose	2
Mercury thiocyanate	1

(Continued)

Naphthalene	1
Opium	34
Phosphorus	2
Potassium cyanide	1
Red oxide of mercury	1
Sulfur	1
Sulfonamide	1
Tin (Stannoxyl)	1
Undiagnosed cases of poisoning	18
Vasaka	1
Veronal	1
Zinc (Zinc-oxide ointment)	1
Total	176
BITES	
Snake-bite	32
Dog bite	5
Total (Bites)	37
Grand Total	**213**

Nurses

Results of the examination of the probationer nurses of the hospital by the Bombay Nurses, Midwives, and Health Visitors' Council were as follows:

Examination	September 1938		March 1939	
	Appeared	Passed	Appeared	Passed
1st examination	14	11	19	13
2nd examination	12	12	4	4

The cost of the nursing establishment worked out at Rs. 83-2-0 per nurse, per month (80-12-4 in the previous year). It included not only the cost of salaries, uniform, laundry allowances, and honoraria paid to the medical staff giving instruction in the nursing school, but also their mess charges, the cost of gas and electric energy consumed, repairs to their quarters, household linen, crockery, etc. The pro-rata rent for quarters provided to the support staff employed in the Nurses' Home and the Municipal Provident Fund contributions are not included in the above figures. The increase in the cost of the nursing establishment to the extent of Rs. 2-5-8 p.m. is due to the slight increase in the number of nurses sanctioned in the previous year.

Nurses Welfare Fund

The total collections to the Fund by way of members' subscriptions, donations and interest amounted to Rs. 1,262-5-5. The expenditure amounted to Rs. 1.056-3-9.

The Fund was of help to them. Under its auspices, 8 socials and 3 picnics were arranged during the year. Thanks are due to the ladies who helped in this Fund and their keen interest in the welfare of the nursing staff during the year and to all those firms and individuals who had contributed towards its funds either in cash or kind. Messrs Killick Nixon & Co. contributed a sum of Rs. 100 to this Fund.

The proprietors of the *Navakal*, the *Illustrated Weekly of India*, the *Jam-e-Jamshed*, the *Kaiser-i-Hind* (Gujarati and English editions), and of *Kirloskar* and *Stree* supplied, free of charge, one copy of each of these journals for the use of the nursing staff during the year.

School Clinic

As shown in the following table, 2,095 new children were treated in the different departments of the Hospital, in addition to a large number of children who began

their treatment in the previous year. The total number of children treated in the year was 8,425 (8,250 in the previous year).

Departments	1938–39			1937–38		
	New cases	Old cases	Total	New cases	Old cases	Total
Medical and Surgical	671	2,963	3,634	646	2,874	3,520
Ear, Nose and Throat	352	556	908	451	690	1,141
Ophthalmic	282	1,225	1,507	255	1,161	1,416
Dental	385	325	710	267	435	702
Skin	405	1,261	1,666	332	1,139	1,471
Total	**2,095**	**6,330**	**8,425**	**1,951**	**6,299**	**8,250**

12 children were operated upon in the Ear, Nose, and Throat and 14 in the ophthalmic departments. 6 required major operations. Seven children were admitted and treated for ankylostomiasis, catarrhal jaundice, dysentery, anemia, bilateral genu valgum, septic wound, and extra digit. Ultraviolet treatment was given to 13 children. 12 X-ray plates were taken. Laboratory investigations were done for 32 children.

One case of dog bite and one case of monkey bite were referred to the Haffkine Institute for treatment. Refraction was done on 184 children and glasses were prescribed to 126 children. The total cost of the School Clinics at the K.E.M. Hospital amounted to Rs. 8,898-10-0. A detailed report of the School Clinic had been submitted to the Schools Committee through the Executive Health Officer which was published by the Committee annually.

Poor Box Charity Fund

Poor Box Charity Fund—Statement of Accounts for the year 1938-39.

Dr. RECEIPTS.

Particulars.	Rs. a. p.	Rs. a. p.	Amount. Rs. a. p.
To balance in hand on 31st March 1938			2,927 2 10
,, balance with the Central Bank of India, Ltd.			142 6 9
,, collections from the out-patient department boxes :—			
Casualty Department	89 12 3		
Medical Department	14 4 0		
Minor Surgery Department	32 6 0		
Surgical Dressing Department	28 0 9		
Skin and Venereal Department	38 12 10		
X-Ray Department	20 11 3		
Aural Department	102 9 6		
Dental Department	28 15 9		
Gynæcological Department	17 7 6		
Electro-therapy Department	38 10 6		
		411 10	
,, collections from the ward boxes :—			
Ward No. 1	136 12 6		
,, 2	92 6 8		
,, 3	36 11 6		
,, 4	176 13 6		
,, 5	365 1 0		
,, 6	263 11 10		
,, 7	24 7 3		
,, 8	117 15 10		
,, 9, 10, 11	417 15 3		
,, 12-13	371 12 6		
,, 14-15	214 0 6		
,, 16	140 5 10		
,, 17, 18	122 3 3		
		2,480 5 5	
			2,891 15 9
,, donations			4,070 3 0
,, miscellaneous receipts			109 10 5
,, collections on account of issue of medical certificates			1,062 0 0
,, interest			5,578 13 3
,, part payment of spectacles			23 0 0
,, sale of Pharmacopœia, 2nd edition			424 0 0
,, sale of Pathology Note Books			99 0 0
,, moiety amount due to the Resident Medical Officers			20 0 0
,, excess of receipts over payments in deposit account			472 12 0
		Total ..	17,821 0 0

DISBURSEMENTS. *Cr.*

Particulars.	Amount. Rs. a. p.
By appliances such as crutches, hernia belts, artificial limbs, etc.	752 7 0
,, blood transfusion charges	1,715 0 0
,, travelling expenses paid to poor patients	298 15 6
,, expenses incurred in giving comforts to patients	85 0 0
,, supply of costly medicines to the poor patients of the Hospital	4,601 9 6
,, repairs to appliances	4 12 0
,, funeral expenses of deceased patients	10 0 0
,, purchase of security bonds, etc.	3,962 6 8
,, printing and stationery	298 8 0
,, applying leeches	20 14 0
,, spectacles to patients	113 4 0
,, X-Ray materials	46 6 0
,, sundries	272 3 6
,, cash in hand	28 8 2
,, balance with the Central Bank of India, Ltd.	2,253 10 7
,, amount of defalcations debited to suspense account pending orders of the Standing Committee and the Corporation	3,357 7 1
Total ..	17,821 0 0

As earlier, the fund was used to provide patients with spectacles, crutches, trusses, artificial limbs, travelling expenses, etc. It had received steady support from the public as well as from the patients of the Hospital as seen in the table above. Relief in the shape of blood transfusion, costly drugs, medicines, injections, travelling expenses, etc. were also provided to 140 patients at a total cost of Rs 928. It may be added that it was possible to provide blood transfusion in 49 cases with the help of monetary assistance to the donors of blood from this fund.

Particulars	No. of Patients
Spectacles	80 Nos.
Bamboo crutches with rubber heels	25 "
Genu Valgum splints	2 "
Walking calipers with cork boots, sockets, etc.	4 "
Colostomy belts	2 "
Parker's Tracheotomy tube (silver)	1 No.
Knee-caps, elastic	1 "
Abdominal belts	3 Nos.
Artificial legs (Peg legs)	7 "
Portable Rubber Urinals	4 "
Ivory plug	1 No.
Hernia Truss	1 "
Mercury Rubber tube (Jague's Bougie)	1 "
Thomas' Hip Splint (with pattern) + boots	2 Nos.
Sliding leather pad with crutches	1 No.
Hamilton Irving suprapubic apparatus	1 "
Elephant Pattern Boots (for Syme's amputation)	1 "
Dental apparatus (with cleft palate)	1 "
Surgical Boots (Orthopedic)	2 Nos.
Total	**140**

The Indian Oxygen and Acetylene Co., Ltd., Calcutta has continued to supply oxygen free of charge to the hospital. Other donations were as follows:

No.	Contributor	Rs.
1	Burmah-Shell Oil Storage and Distributing Co. of India, Ltd.	350
2	General Motors (India), Ltd.	300
3	The B.E.S. & T. Co., Ltd.	300
4	B.I.S.N. Co., Ltd. (Rs. 25 p.m.)	300
5	Bombay Dyeing and Manufacturing Co., Ltd.	251
6	The Agents, Bombay Dyeing and Manufacturing Co., Ltd.	251
7	Judicial Clerk, Magistrate's Court, Bhoiwada, Dadar	100
8	Hindustan Spinning and Weaving Mills Co., Ltd.	100
9	Indian Manufacturing Co., Ltd.	100
10	Western India Spinning and Manufacturing Co.; Ltd.	100
11	Wolverhampton Works Co., Ltd.	100
12	Zandu Pharmaceutical Works, Ltd.	100
13	Manager, Comptoir National D'Escompte De'Paris	100
14	Tata Sons, Ltd., Bombay	100
15	Finlay Mills, Ltd.	100
16	Bombay Gas Co., Ltd.	100
17	Swan Mills, Ltd., per pro James Finlay & Co., Ltd.	100
18	The Agents, Kohinoor Mills Co., Ltd.	100
19	Swadeshi Mills Co., Ltd. (Tata Sons Ltd. Agents)	100
20	Mr. K.D. Sahukar	50
21	Miss Madri Desai	50
22	Director, Messrs. H.J. Foster & Co., Ltd.	50
23	Messrs. Volkart Bros.	50
24	Mr. S.J. Kantak	50

Hospital Pharmacopoeia

The copies of the second edition of the Hospital Pharmacopoeia having been nearly exhausted, the printing of the third edition had been taken in hand and the copies of the new edition were likely to be available shortly.

The College

80 new students were admitted. The average age on admission was 19.8 years. 70 of these students were single, 7 married, and 3 betrothed. At the close of the year, 450 students were on the college rolls.

Course & Year	Male Students	Female Students
1st M.B.B.S. 1st year	61	19
1st M.B.B.S. 2nd year	46	8
2nd M.B.B.S. 3rd year	54	13
3rd M.B.B.S. 4th year	67	14
3rd M.B.B.S. 5th year	153	13
Total number of students	**382**	**68**
Post-graduates including research students	63	3
Grand Total	**445**	**71**

The authorities at the Bai Jerbai Hospital for Children continued the facilities given to the students of this College for clinical instruction in diseases of children at that hospital.

In accordance with the scheme of examining students medically, as inaugurated by the University of Bombay, out of 447 students examined, 287 students (64.2 per cent.) were placed under 'A' class, 156 (34.9 per cent.) in class 'B' and 4 (0.9 per cent.) in class 'C'. Those requiring treatment were referred to the Honorary Staff of the K.E.M. Hospital.

The results of the various examinations were as follows:

Examination	Date	Candi-dates Sent Up	No. Passing the Whole Examination
1st M.B.B.S.	April 1938	46	22
	Dec. 1938	49	46
2nd M.B.B.S.	April 1938	50	34
	Dec. 1938	67	41
3rd M.B.B.S.	April 1938	90	24
	Dec. 1938	114	31
M.D. (Medicine)	June 1938	5	1
M.D. (Pathology)	June 1938	1	—
M.D. (Midwifery)	June 1938	5	1
M.D.	June 1938	7	2
D.O.	June 1938	2	—
Ph.D.	June 1938	1	1
B.Sc.	April 1938	10	4

Annual Cost and Revenue

The total expenditure of the college including liabilities as well as expenditure on the Hostels came to Rs. 2,57,045 (Rs. 2,56,370 during 1937–38). The revenue of the College in the form of tuition fees, hostel rent, and miscellaneous receipts amounted to Rs. 1,14,245 (Rs. 1,06,585 during 1937–38). The gross cost per student for the year was Rs. 571 (593 during the previous year) while the net cost was Rs. 317 (Rs. 346 during the previous year). The fees received from the postgraduate students were Rs. 3,945.

Library and Museum

152 new books were added to the college library (226 in the preceding year). Of these, 15 books were presented to the library by their authors as complimentary copies. 129 volumes of medical journals were got bound. The number of books

issued to the medical students was 13,020 (9,800 in the preceding year). 1,887 books and journals were issued to members of the teaching staff of the college and resident medical officers of the K.E.M. Hospital.

50 new wet and dry specimens were added to the Anatomy Museum during the year and about 100 specimens renewed. The total number of specimens in the Anatomy and Comparative Anatomy section was now over 1,350. Both the sections of the Anatomy Museum were well stocked with specimens. There is hardly any room left for further expansion of this Museum.

94 new specimens were added to the Pathology Museum during the year (Total then 1,330). The Seth Jamnadas Lallubhai Museum Hall was now rapidly getting filled. 34 X-ray diapositives and 7 large public health plaster models had been added in special niches in the hygiene section. Messrs Duncan Stratton & Co. of Bombay provided one model of the activated sludge sewage purification plant for the Museum.

The unveiling ceremony of the bust of Seth Jamnadas Lallubhai in front of the Seth Jamnadas Lallubhai Museum by the Hon'ble Dr M.D.D. Gilder, the Minister for Health and Excise took place before a large and distinguished gathering on 4 February 1939. The Trustees of the Seth Jamnadas Lallubhai Estate presented the fine marble bust and treated the visitors to the function with sumptuous refreshments.

Students' Hostel

The number of students resident in the Hostel for male students during the year under report was 130 (133 during the previous year).

Hostel For Women Students

The pressing need of having a good hostel for the women students of the College had been met. A fine hostel building for the women students had been built at a cost of about Rs. 82,000. It had 20 single rooms and 4 double rooms and was designed to accommodate 28 women students comfortably. The hostel was opened to the women students from October 1938 and the response from them was encouraging. 12 students applied for admission during the winter term 1938 and the number rose to 22 during the spring term 1939. The latter figure included 9 women students from the Grant Medical College. The Hostel had been placed under the able management and supervision of Mrs A.C. Chatterjee who had been appointed as Lady Superintendent of the Hostel. The total expenditure incurred on the hostels was Rs. 9,785 while the income derived in the form of rent was Rs. 14,829.

Gymkhana

Students participated in the inter-collegiate tournaments as usual. The hockey team reached the finals but lost to St. Xavier's College. The cricket team also faired fairly well. In the inter-collegiate badminton championships, Miss Lovji secured the Ladies' Singles

Championship and with Miss S.H. Mulls, got the Ladies' Doubles championship. In the Mixed Doubles, Miss Lovji and Mr N.L. Divekar reached the final but were unfortunately defeated. The College won for the first time the Inter-Collegiate Tennis Championship. Mr N.L. Divekar won the Individual Championship in Tennis while Miss D.B. Lovji and Mr Divekar secured the Mixed Double Championship. The students were taking keen interest in physical training under the able guidance of Mr K.G. Rao, the Physical Instructor of the College.

Serial No.	Name of the Enquiry	Conducted by	Name of the Fund or Institution under whose auspices the enquiry is undertaken
1	Balanced Diet	Prof. S. P. Niyogi, M.Sc., M.B. (Cal.), Prof. V. N. Patwardhan, M.Sc., Ph.D., Mr. B. N. Acharya, M.Sc.	Indian Research Fund Association & Sir Dorabji Tata Trust with Baby and Health Week Association
2	Basal Metabolism in Children and Adults in Bombay Presidency	Same as above	Indian Research Fund Association
3	Pharmacological investigations of Oroxylin	Prof. A. S. Paranjpe, M.D. (Heidl.), D.T.M., Ch.B., Mr. P. L. Powar, M.B.B.S.	Do. do.
4	Thrombo-angiitis Obliterans	Drs. R. N. Cooper, M.S., F.R.C.S., A. V. Baliga, F.R.C.S., K. G. Munsif, F.R.C.S., A. E. DeSa, F.R.C.S., Dr R. G. Dhyagude, M.D.	Do. do.
5	Calcium Metabolism in Health and Disease	Dr V. N. Patwardhan, M.Sc., Ph.D. (Lond.), Mr. R. G. Chitre, M.Sc.	Do. do.
6	Toxemia in Pregnancy	Dr N. A. Purandare, M.D., Mr. N. A. Parikh, M.B.B.S.	Do. do.
7	Incidence of Pneumococcal Infection in Bombay	Dr R. G. Dhyagude, M.D.	Bombay University
8	Virulence in Bacillus Tuberculosis	Dr C. B. Dhurandhar, M.B.B.S., D.O. (Bom.)	Do. do.
9	Studies in Mesenteric Revascularization	Dr K. D. Manohar, M.D. (Bom.)	Do. do.
10	Body part development in children (6-11 yrs)	Dr G. M. Kurulkar, M.B.B.S. (Bom.)	Do. do.
11	Excretion of Vitamin C in Urine	Dr A. Fernandez, M.B.B.S.	Do. do.
12	Diet Survey in Bombay	Prof. S. P. Niyogi, M.Sc., M.B. (Cal.), Mr. D. R. Sukthankar, M.Sc.	G.S.M. College & K.E.M. Hospital Research Fund
13	Absorption of Phosphates from Intestines	Dr V. N. Patwardhan, M.Sc., Ph.D. (Lond.), Mr. N. G. Natu, B.Sc.	Do. do.
14	Study of Spirochetal Jaundice	Dr K. D. Manohar, M.D.	Do. do.
15	Mechanics of the Pleura	Dr K. D. Manohar, M.D.	Do. do.

Research

The following papers were published:

Sr. No.	Name of the Article	Contributed by	Name of the Journal Publishing It
1	True Achlorhydria and Anemia	Dr R. G. Dhyagude, M.D. (Bom.), Mr. V. N. Khadilkar, M.B.B.S.	Indian Journal of Medical Research, January 1939
2	An Aneurysm of a Coronary Artery	Dr K. D. Manohar, M.D. (Bom.)	Archives of Pathology, December 1939, Vol. 26
3	Anginal Pain in a case of Malaria	Dr K. D. Manohar, M.D.	Indian Medical Gazette, March 1938
4	Sub-Clinical Septic Foci	Dr K. D. Manohar, M.D.	Medical Bulletin, November 1938
5	Studies in Calcium and Phosphorus Metabolism	Dr V. N. Patwardhan, M.Sc., Ph.D. (Lond.)	Indian Journal of Medical Research, Vol. XXVI, October 1938
6	The Constitution of Oroxylin-A, Part II	Mr. C. R. Mehta, M.Sc.	Journal of the Chemical Society, England, 1938
7	Diabetes Mellitus	Dr N. D. Patel, M.D., M.R.C.P. (Lond.)	Medical Bulletin, August 1938

Special classes for the D.O., D.O.M.S., and Primary F.R.C.S. examination were held during the year. Six students from this college appeared for the Primary F.R.C.S. examination held in January 1939 at Lahore and 3 of them were declared successful. [13 students in all had appeared for this examination from all parts of India and only 6 students passed. Out of these six successful students, four (including three of this College) came from Bombay.] It reflects a great credit on the staff in the anatomy and physiology departments of this college and the Grant Medical College to have had such an excellent result. These classes were organized jointly by the heads of the two colleges in consultation with the staff of the said departments.

Dr C.C. Merchant M.B.B.S., a demonstrator in the pharmacology department, was awarded the Dossabhoy Hormasji Cama Prize for 1938 by the University of Bombay for his essay on 'The prevention of Diabetes Mellitus.' Mr C.R. Mehta, M.Sc., a demonstrator in the chemical section of the same department, was awarded the degree of Doctor of Philosophy by the Bombay University for his thesis on 'Chemical investigation of the root bark of *Oroxylum indicum* vent and the synthesis of wogonin.' Wogonin has been shown to have anxiolytic, anticonvulsant and anti-tumor activity.

[1938] *The Constitution of Oroxylin-A. Part II.*
1555

290. *The Constitution of Oroxylin-A. Part II. Attempted Synthesis of Oroxylin-A and the Synthesis of Wogonin.*

By R. C. SHAH, C. R. MEHTA, and T. S. WHEELER.

The presence of baicalein in the root bark of *Oroxylum indicum*, Vent, has been confirmed, and sitosterol and galactose have also been isolated. In an attempt to synthesize the previously isolated oroxylin-A (5 : 7-dihydroxy-6-methoxyflavone), it was found that benzoylation of 2 : 4-dihydroxy-3 : 6-dimethoxyacetophenone proceeded normally (with ring closure) to give *7-hydroxy-5 : 8-dimethoxyflavone*, which was demethylated by aluminium chloride to *5 : 7 : 8-trihydroxyflavone*, obtained, it is believed, pure for the first time, and to wogonin (5 : 7-dihydroxy-8-methoxyflavone). This is the first synthesis of this naturally occurring flavone. The action of hydriodic acid on 7-hydroxy-5 : 8-dimethoxyflavone and on wogonin under the experimental conditions described gave baicalein (5 : 6 : 7-trihydroxyflavone), and it is suggested that this is due to the opening of the pyrone ring with subsequent rearrangement.

Social Welfare for the Labor Class

The Bhagini Samaj was hitherto looking after the welfare of the support and labor staff of the hospital and college. This was now taken over by the Health Department. A drowning tragedy took place at Marwa Beach, Malad on 12 February 1939, when a party of the members of our welfare center went out for a picnic. A few of the swimmers were accompanied by one who did not know swimming. One of the swimmers went to his rescue but lost his life along with the other in trying to save his comrade. Two precious lives were thus suddenly and prematurely cut off.

Three Co-operative Credit Societies were started for the labor staff of the hospital and college. They had been making good progress. During the last two years, various difficulties were experienced in working the three societies separately, the aims, workings, and managements of which were practically identical. Moreover, the three separate units entailed more labor and expense. It was therefore decided last year to amalgamate the three societies into one. The Registrar, Co-operative Credit Societies was therefore approached and his sanction for the said amalgamation was obtained. The new amalgamated society had started its work from 29 May 1939.

The total share capital of the societies was Rs. 4,180 at the year ending 30 June 1938. This had increased to Rs. 7,200 by 31 May 1939. Sums to the extent of Rs. 4,400 were returned to the depositors during the same period as the societies were steadily building up their own capital. The societies still had Rs. 4,350 as fixed deposits obtained from various sources. The total loans advanced to members during the last 11 months—11 July 1938 to 31 May 1939—came to Rs. 15,490. About 70 per cent of the loans had been given for liquidating old debts, 15 per cent for marriages etc. 10 per cent for repairs to homes and farms and 5 per cent for other miscellaneous purposes. The membership of the Societies which was 237 on 30 June 1938 went up to 280 by the end of May 1939.

Defalcation of Accounts

Defalcations of fees paid by students as well as of other municipal and other dues was detected in June 1938. The total amount involved was over Rs. 27,000, the defalcation running over a period of six years since 1933. Two clerks concerned in the misappropriation of public monies were tried in a Court of Law. One of them, the principal culprit, was sentenced to rigorous imprisonment for a total period of two and a half years and a fine of Rs. 16,000 or, in default, six months' of further imprisonment. The other was sentenced to rigorous imprisonment for three months and a fine of Rs. 100, or, in default, one month's further imprisonment. Disciplinary action against the subordinate staff had already been taken for negligence in their duty and lack of proper supervision. A detailed report had been made by the Municipal Commissioner to the Corporation in this matter and steps had been taken which would prevent the occurrence of such defalcation in future.

15

Annual Report (1939–1940)

Staff

THE COLLEGE AND HOSPITAL SENIOR STAFF

Dean
Jivraj N. Mehta, Esq., M.D. (Lond.), M.R.C.P. (Lond.), F.C.P.S. (Bom.).

Assistant Dean
R. E. Dadachanji, Esq., M.B.B.S. (Bom.).

Assistant Medical Officers
V. V. Jadhav, Esq., M.B.B.S. (Bom.).
V. H. Muzumdar, Esq., B.Sc., M.B.B.S. (Bom.).

Professor of Anatomy
R. P. Koppikar, Esq., M.S. (Bom.), F.C.P.S. (Bom.).

Assistant Professor of Anatomy
G. M. Kurulkar, Esq., M.B.B.S. (Bom.).

Professor of Physiology
S. P. Niyogi, Esq., M.Sc., M.B. (Cal.).

Assistant Professor of Biochemistry
V. N. Patwardhan, Esq., M.Sc. (Bom.), Ph.D. (Lond.), A.I.I.Sc.

Assistant Professor of Physiology
A. Fernandez, Esq., M.B.B.S. (Bom.).

Professor of Pharmacology and Materia Medica
A. S. Paranjpe, Esq., M.D. (Heidel.), D.T.M. (Lond.), M.B.Ch.B. (Edin.).

Professor of Pathology and Bacteriology
V. R. Khanolkar, Esq., B.Sc., (Lond.), M.D. (Lond.).

Assistant Professors of Pathology and Bacteriology
R. G. Dhayagude, Esq., M.D. (Bom.).
R. G. Modak, Esq., M.D. (Bom.).

Assistant Clinical Pathologist
K. D. Manohar, Esq., M.D. (Bom.).

Honorary Physicians and Lecturers in Medicine
M. D. D. Gilder, Esq., B.A., M.D. (Lond.), F.R.C.S. (Eng.), F.C.P.S. (Bom.).

P. C. Bharucha, Esq., M.D. (Lond.), B.S. (Lond.), F.C.P.S. (Bom.).

P. T. Patel, Esq., M.D. (Lond.), M.R.C.P. (Lond.), D.T.M. & H. (Cantab.), F.C.P.S. (Bom.).

L. D. Dhawale, Esq., B.A. (Allahabad), M.D. (Bom.).

S. G. Vengsarkar, Esq., M.D. (Bom.).

Honorary Assistant Physicians and Lecturers in Medicine
N. D. Patel, Esq., M.D. (Lond.), M.R.C.P. (Lond.).

Abdul Hameed, Esq., M.D. (Bom.).

M. J. Shah, Esq., M.B.B.S. (Bom.), M.R.C.P. (Lond.), D.T.M. & H. (Lond.).

P. Raghavan, Esq., M.D. (Bom.), Officiating.

K. N. Vaidya, Esq., M.D. (Bom.), Officiating.

Honorary Surgeons and Lecturers in Surgery
R. N. Cooper, Esq., M.S. (Lond.), F.R.C.S. (Eng.), F.C.P.S. (Bom.).

T. O. Shah, Esq., L.M. & S. (Bom.), F.R.C.S. (Eng.), F.C.P.S. (Bom.).

V. M. Kaikini, Esq., B.A., M.B.B.S. (Bom.), F.R.C.S. (Edin.), F.C.P.S. (Bom.).

A. V. Baliga, Esq., F.R.C.S. (Eng.).

Honorary Assistant Surgeons

K. G. Munsif, Esq., M.B.B.S. (Bom.), F.R.C.S. (Eng.).

G. M. Phadke, Esq., M.B.B.S. (Lond.), F.R.C.S. (Eng.).

M. M. Pandya, Esq., M.B.B.S. (Bom.), F.R.C.S. (Eng.).

A. E. DeSa, Esq., M.B.B.S. (Bom.), F.R.C.S. (Eng.).

Honorary Aural Surgeon and Lecturer in Ear, Nose and Throat

Homi D. Gandhi, Esq., M.B.B.S. (Bom.), F.R.C.S. (Edin.).

Honorary Assistant and Lecturer in Ear, Nose and Throat

S. G. Joshi, Esq., M.S. (Bom.).

Honorary Gynecologists and Lecturers in Gynecology and Obstetrics

H. D'Sa, Esq., M.D. (Bom.), F.C.P.S. (Bom.), F.R.C.O.G. (Lond.).

Miss P. C. Darookwalla, M.D. (Bom.).

Sir Mangaldas V. Mehta, Kt., O.B.E., B.A., F.C.P.I., F.C.P.S., F.R.C.O.G. (Lond.), Ex-Officio Honorary Lecturer in Obstetrics.

Honorary Assistant Gynecologist

K. M. Masani, Esq., M.D. (Lond.), F.R.C.S. (Eng.).

Honorary Ophthalmic Surgeons and Lecturers in Ophthalmology

R. P. Ratnakar, Esq., L.M. & S. (Bom.), D.Ch.O. (L'pool), D.O. (Oxon.), D.O.M.S. (Eng.), F.C.P.S. (Bom.).

G. T. Mody, Esq., D.O. (Oxon.), M.R.C.S. (Eng.), L.R.C.P. (Lond.), M.B.B.S. (Bom.).

Honorary Dental Surgeons and Lecturers in Dentistry

H. G. Moghe, Esq., L.M. & S. (Bom.), L.D.S., R.C.S. (Eng.).

D. M. Desai, Esq., L.D.S., R.C.S. (Eng.).

Honorary Lecturer in Dermatology and Venereology and Honorary Dermatologist and Venereologist

A. C. Rebello, Esq., M.B.B.S. (Bom.), D.T.M. & H. (Lond.).

Honorary Assistant Dermatologist and Venereologist

J. A. Fernandez, Esq., L.R.C.P. (Lond.), M.R.C.S. (Eng.), M.R.C.P. (Edin.).

Honorary Radiologist and Lecturer in Radiology and Electro-therapy

J. L. Desai, Esq., M.B.B.S. (Bom.), D.M.R.E. (Cantab.).

Honorary Assistant Radiologist

Z. J. Joseph, Esq., M.D. (Bom.), D.M.R.E. (Cantab.).

Honorary Anesthetist and Lecturer in Anesthesia

M. N. Desai, Esq., M.B.B.S. (Bom.), D.A. (Eng.).

Honorary Lecturer in Medical Jurisprudence and Toxicology

R. E. Dadachanji, Esq., M.B.B.S. (Bom.).

Honorary Lecturer in Hygiene and Preventive Medicine

R. K. Mhatre, Esq., L.M. & S. (Bom.), D.P.H., D.T.M. & H. (Cantab.).

Honorary Lecturer in Psychiatry

K. A. J. Lalkaka, Esq., M.B.B.S. (Bom.).

Dr R.N. Cooper, Honorary Surgeon went no leave for 4 months and 13 days from 16 October 1939 when Dr K.G. Munsif, Honorary Assistant Surgeon, was appointed to look after his work. Dr R.N. Dixit, Surgical Registrar, was appointed to work as Honorary Assistant Surgeon in place of Dr Munsif.

Dr K.A.J. Lalkala was appointed as Honorary Lecturer in Psychiatry from 30 August 1939 in the new post created.

The Hospital

On account of the large number of patients lying on the floor, Corporation resolved to increase the strength of the hospital from 370 to 426. The distribution is as follows:

Department.	Men.	Women.	Children.	Total.
Medical ...	111	38	10	159
Surgical ...	105	36	14	155
Gynaecological ...	...	35	...	35
Ophthalmic ...	16	16	...	32
Aural ...	6	2	2	10
Skin and Venereal ...	10	6	...	16
Casualty ...	6	3	...	9
Isolation ...	6	4	...	10
Total ...	260	140	26	426

The total number of admissions during the year was 11,932 (1937: 12,425; 1938: 13,320). The scare occasioned by the war (World War 2) towards the end of the monsoon was the probable cause for the reduced number. Emigration of families to their native places reduced the population in the city. Shortage of drugs in the early months of the war also contributed. As drugs became available and tensions reduced, the number of admissions climbed and by the end of the year, the wards were congested again.

Particulars.	Figures for the year 1939.	Figures for the year 1938.	Figures for the year 1937.
(a) In-patients—			
1. Scheduled strength of beds ...	426	370	370
2. Daily average No. of in-patients ...	384	411	410
3. Total No. of new in-patients treated ...	11,932	13,320	12,425
4. Average No. of days each patient was resident ...	11.42	11.28	12.05
(b) Out-patients—			
1. Total No. of new out-patients ...	1,22,473	1,14,813	1,01,389
2. Daily average No. of new out-patients ...	386	359	319
3. Total No. of out-patient attendance ...	3,93,496	3,66,132	3,31,933
4. Daily average No. of out-patient attendance ...	1,263	1,173	1,062
5. No. of casualty patients included in No. 1 above ...	20,230	19,093	17,712
(c) Operations—			
1. Total No. of operations on in-patients ...	3,762	4,044	4,200
2. Total No. of operations on out-patients ...	10,209	9,734	8,637

On an average, 90 more outpatients attended daily than the number during 1938. The highest number of outpatients attendance on any day during 1939 was 1,945. The highest number of new admissions in the outdoor department on a single day was 625. The highest number of old patients treated on a single day was 1,325. 25–30 inpatients were present above the scheduled number, the maximum on a single day being 455.

Of the total number of 12,364 inpatients (11,392 admitted during the year and 432 left over from the previous year), 3,184 were cured, 6,082 were discharged relieved, 1,404 either left the hospital against medical advice or were otherwise discharged and 1,346 died leaving a balance of 348 patients at the end of the year. Of 1,346 deaths, 385 died within the first 24 hours of admission, 298 after 24 hours and within three days of admission, and the remaining 663 after 3 days of their admission into the hospital.

The total expenditure incurred on the maintenance of the Hospital during the year 1939–1940, including the liabilities outstanding at the end of the year, amounts to Rs 5,92,013. The relative cost of inpatients and outpatients, per patient, per day, during the years 1939–40, 1938–39 and 1937–38 was as follows:

Particulars.	1939-40.	1938-39.	1937-38.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
(a) Average cost per in-patient per day	3 1 6	2 15 0	2 12 8
(b) Average cost per in-patient admission	36 0 5	33 4 6	32 10 11
(c) Average cost per out-patient attendance	0 5 8	0 5 10	0 5 10
(d) Average cost per out-patient admission	1 2 0	1 2 8	1 2 5

Year.	Diets.	Drugs, dressings, surgical appliances etc.	Stores and Linen.	Heating and lighting.	Miscel-laneous.	Establish-ment.	Repairs to buildings and Engi-neering.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1939-40 ...	0 6 6	0 6 11	0 3 3	0 1 0	0 2 4	1 9 4	0 4 2	3 1 6
1938-39 ...	0 6 10	0 6 1	0 2 7	0 2 8	0 1 8	1 8 3	0 2 11	2 15 0
1937-38 ...	0 5 11	0 5 3	0 2 8	0 2 11	0 1 7	1 7 11	0 2 5	2 12 8

The slight increase in the average cost per inpatient, per day, over that in the previous year is largely due to the increased cost of Repairs to buildings. The increase is also slightly under 'Establishment' on account of the strengthening of the staff. The weather-sheds all over the hospital building were giving way, evidently on account of faulty construction. The Corporation accordingly resolved to spread the work of repairing the weather-sheds over four years at an annual cost of Rs. 10,000.

The cost under medicines went up because of the epidemic of malaria last year. Under 'Heating and Lighting', there has been a welcome decrease on account of the hospital using sludge gas generated at the Dadar Municipal Purification Works instead of the Bombay Gas Company. In years prior to 1938–39, the gas bill used to come to about Rs 18,500 a year. With the use of the sludge gas since May 1938, the bill was reduced in that year to Rs. 4,852, which has been still further reduced to Rs. 1,093-12-0 this year.

The cost of every new outpatient was as follows:

Year.	Drugs, dressings etc.	Stores and Linen.	Heating and lighting.	Miscella-neous.	Establish-ment.	Repairs to buildings and engi-neering.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1939-40	0 6 7	0 0 7	0 0 2	0 0 4	0 9 11	0 0 5	1 2 0
1938-39	0 7 1	0 0 8	0 0 6	0 0 4	0 9 8	0 0 5	1 2 8
1937-38	0 7 4	0 0 10	0 0 6	0 0 4	0 9 0	0 0 5	1 2 5

The actual cost was more than what is indicated in the tables above as expensive drugs, appliances, blood transfusions to the extent of Rs. 8,392-8-0 were paid for from the Poor Box Fund.

The destitute and incurable patients and those where relatives were unable to take them home were transferred to Lady Dhunbai Jehangir Home for Destitutes (24 patients) and King George V Infirmary for incurables (37 patients) respectively, which receive an annual contribution of Rs. 10,000 from the Municipal Corporation. Arrangements made with the Maratha Hospital for the transfer of patients suffering from pulmonary tuberculosis were continued during the year. 316 patients were transferred to the Maratha Hospital. 1,120 patients suffering from various infectious diseases were also transferred to the Arthur Road Hospital during the year. 606 patents with enteric fever during the epidemic in the northern part of the city for about 2 years, 18 patients with dysentery, and 19 patients with meningitis had to be necessarily transferred there on account of congestion in the hospital. 108 female patients were transferred to the Nowrosjee Wadia Maternity Hospital for the treatment of obstetric conditions.

Extension of the Hospital

The following works were completed:

1. Additional floor over ward pavilions 3 and 4
2. Extension of the electrocardiograph room
3. Extension of the store rooms
4. Additional floor over the clinical pathology department
5. Construction of the ministerial staff quarters
6. Two halls for the social welfare center.

Construction of the new Nurses' Home was progressing. Quarters for the Assistant Dean and the Assistant Medical Officers had also been completed.

The following works would be started in 1940–1941:

1. Extension of the outpatient department, construction of a registration hall in it and a special X-ray and electro-therapeutic block.
2. Extension of the hospital kitchens
3. Construction of an observation ward for mental patients.

Motor Accident Cases

These were on the increase.

	1939.	1938.	1937.
1. Treated in the casualty department	690	578	564.
2. Treated as in-patients	193	184	150.

(a) Treated in the casualty department.

——	Upto 5 years.	Between 5 and 10 years.	Bewteen 10 and 20 years.	Between 20 and 30 years.	Between 30 and 40 years.	40 years and above.	Total.
Male	16	40	88	255	140	53	592
Female	14	30	9	9	20	16	98
Total ...	30	70	97	264	160	69	690

(b) Admitted as indoor patients from the casualty Department on account of severity of injury.

——	Upto 5 years.	Bewteen 5 and 10 years.	Between 10 and 20 years.	Bewteen 20 and 30 years.	Between 30 and 40 years.	40 years and above.	Total.
Male	4	14	19	71	46	21	175
Female	2	6	1	1	3	5	18
Total ...	6	20	20	72	49	26	193

Mill Accident Cases

(a) Treated in the casualty department.

Particulars.	Males.	Females.	Children.		Total.
			Male.	Female.	
Hindus	1,045	36	...	...	1,081
Mahomedans	79	2	...	...	81
Christians	43	2	...	...	45
Others	15	...	...	...	15
Total ...	1,182	40	...	...	1,222

(b) Admitted as indoor patients from the Casualty Department on account of severity of injury.

Particulars.	Cured.	Relieved.	Left against medical advice, etc.	Died.	Total.
Males—					
Hindus	5	22	3	...	30
Mahomedans	1	...	1	1	3
Christians	...	2	...	...	2
Others	...	1	...	...	1
Females—					
Hindus	...	...	...	...	...
Mahomedans	...	...	...	...	...
Christians	...	...	...	...	...
Others	...	...	...	...	...
Total ...	6	25	4	1	36

2,232 certificates were issued under the Workmen's Compensation Act and 293 certificates with medical opinion during the year.

Poisoning

308 patients were treated during the year.

Acids—		Brought over	194
Nitric, Hydrochloric, Sulphuric and Carbolic	9	Lysol	1
Alcohol	79	Menthol	1
Arsenic	11	Naphthaline	1
Belladona	1	Opium	19
Bismuth	1	Petrol	2
Camphor	1	Potassium permangnate	3
Canabis Indica	7	Potassium Cynide	2
Castor Oil seeds	37	Potassium Nitrate	1
Copper Sulphate	4	Quinine	1
Dhatura	12	Soda, caustic	2
Eucalyptus	2	Strychnine	3
Food poisoning	15	Vernol	1
Iodine	8	Unknown poisonings	14
Kerosine	1		
Lead	2	Total	245
Liniment (Camphor and A B C)	4		
	194		
		Bites—	
		Insect	3
		Lizard	2
		Snake	47
		Rat	11
		Total	63
		Grand Total	308

Nurses

Results of the examinations of probationer nurses by the Bombay Nurses, Midwives and Health Visitors Council:

Examinations.	September 1939.		March 1940.	
	Appeared.	Passed.	Appeared.	Passed.
1st Examination ...	17	14	12	9
2nd Examination ...	8	7	13	11

The cost of the nursing establishment was Rs. 79-13-10 per nurse per month (Rs. 83-2-0 during the previous year). This included salaries, cost of uniform, laundry allowances, honoraria paid to medical staff serving as instructors in the nursing school, mess and electricity charges, household linen, crockery, and repairs to living quarters. The reduced cost was due to savings by using sludge gas from the Dadar Purification Works. The pro-rata rent for quarters provided to the support staff employed in the Nurses' Home and the Municipal Provident Fund contributions are not included in the above figures.

Nurses Welfare Fund

A donation of Rs. 545 was received from Mr Parmanand Krishnarao Rele in memory of his late brother, Mr Dakurnath K. Rele, who died in this hospital on 19 May 1938. The interest from this sum would be used to award a prize to the nurse obtaining the highest marks in Anatomy, Physiology, and Elementary Nursing in the month of March.

Under the auspices of the Nurses Welfare Fund, 8 socials and 5 picnics were arranged.

The proprietors of *Navakal*, the *Illustrated Weekly of India* and the *Times of India* (from June 1939) supplied one copy each of the journals free of charge. On account of the increase in the price of paper, the Editor of *Kirloskar* and *Stree*, agreed to supply copies of these journals at half the cost instead of free of charge. Mrs Krishna Hutheesing gifted 62 books to the Nurses' Library.

The total collection to the Fund by way of members' subscriptions, donations and interest amounted to Rs. 1074-7-0. The expenditure was Rs. 749-11-3.

School Clinic

Departments.	1939-40.			1938-39.		
	New cases.	Old cases.	Total.	New cases.	Old cases.	Total.
Medical and Surgical	578	3,147	3,725	671	2,963	3,634
Ear, Nose and Throat	348	887	1,235	352	556	908
Ophthalmic	245	1,212	1,457	282	1,225	1,507
Dental	330	337	667	385	325	710
Skin	345	841	1,186	405	1,261	1,666
Total ...	1,846	6,424	8,270	2,095	6,330	8,425

Particulars.	1939-40.	1938-39.	1937-38.
1. No. of school children (new cases) examined in the eye clinic in the year	245	282	255
2. No. of students with defective vision	188	216	218
3. Varieties of refractive errors	(out of 160 cases)	(out of 184 cases)	(out of 224 (cases
(*a*) Hypermetropia	30	34	19
(*b*) Myopia	24	28	36
(*c*) Hypermetropic Astigmatism	12	22	34
(*d*) Myopic Astigmatism	44	38	44
(*e*) Mixed Astigmatism	5	11	13
(*f*) Aphakia	2	...	...

111 children were operated upon in the ear, nose, and throat and 17 in the ophthalmic departments. 9 of the eye operations were major. 11 minor operations were performed in the outpatients department. 21 children were admitted to the wards. Ultraviolet treatment was given to 9 children and superficial X-ray treatment to 2. 6 children with dog bites were referred to the Haffkine Institute. The total cost of the school clinic was Rs. 8,390.

Poor Box Charity Fund

Balance Sheet of the Poor Box Charity Fund as on 31st March 1940.

Liabilities.	Rs. a. p.	Rs. a. p.
Balance on 31st March 1939 ...	1,25,125 5 2	
Add—Excess of receipts over expenditure during 1939-40.	5,893 14 0	
		1,31,019 3 2
Suspense Accounts :—		
Mess deposit ...	1,542 2 0	
Patient's money ...	141 1 8½	
Miscellaneous deposits ...	1,783 6 3	
		3,466 9 11½
Moiety amount of R.M.O.'s remained unpaid ...		20 0 0
Amount held in suspense account being difference in the amount of patients' money ...		40 9 6
Amount held in suspense account being the difference in amount of splint deposits ...		2 0 0
		1,34,548 6 7½

Assets.		Rs. a. p.	Rs. a. p.
Balance in hand with the Central Bank of India Ltd.		2,277 9 6	
Cash in hand ...		48 13 7½	
			2,326 7 1½
Investments (at cost) :—			
(1) 3½% G. P. Notes (1842-43) of the face value of	16,000		13,460 10 0
(2) 3½% G. P. Notes (1854-55) of the face value of	9,000		6,368 2 0
(3) 3½% G. P. Notes (1865) of the face value of ...	13,000		10,532 8 0
(4) 3½% G. P. Notes (1879) of the face value of ...	1,000		735 0 0
(5) 3½% G. P. Notes (1900-01) of the face value of ...	11,000		10,140 0 0
(6) 3% Loan (1951-54) of the face value of ...	6,000		6,210 0 0
(7) 4% Loan (1960-70) of the face value of	20,000		20,933 0 0
(8) 4% B.P.T. Debentures (1968) of the face value of ...	3,000		3,333 12 0
(9) 4% B.P.T. Debentures (1970) of the face value of ...	500		555 10 0
(10) 4% B.P.T. Debentures (1974) of the face value of ...	500		555 10 0
(11) 4% B.I.T. Debentures (1962) of the face value of	500		465 0 0
(12) 4% B.I.T. Debentures (1965) of the face value of ...	1,000		930 0 0
(13) 4% B.I.T. Debentures (1972) of the face value of	10,000		9,300 0 0
(14) 4% B.I.T. Debentures (1973) of the face value of ...	1,000		930 0 0
(15) 4% B.M. Debentures (1974) of the face value of ...	500		510 0 0
(16) 6% B.M. Debentures (1950-60) of the face value of ...	12,000		11,718 2 0
(17) 5% B.M. Debentures (1954-59) of the face value of	18,000		16,125 12 0
(18) 4% B.M. Debentures (1961) of the face value of (original B.I.T. Debentures) ...	500		510 0 0
(19) 4% B.M. Debentures (1962) of the face value of ...	2,000		2,040 0 0
(20) 4% B.M. Debentures (1965) of the face value of ...	1,500		1,530 0 0
(21) 4% B.M. Debentures (1967) of the face value of ...	6,500		6,862 8 0
(22) 4% B.M. Debentures (1953) of the face value of ...	500		510 0 0
		1,34,000 0 0	
Amount invested in Fixed Deposit with the General Bank of India, Ltd. ...			1,500 0 0
Deadlock and Equipment at purchase price ...			6,465 14 0
Interest paid in advance at the time of purchase of security No. 34 of 30th January 1940. 3½ G.P. Notes of the face value of Rs. 1,000 ...			2 7 6
			1,34,548 6 7½

The following appliances were provided to 154 patients at the cost of Rs. 962-14-0:

Particulars.		*No. of patients.*
Spectacles	...	92
Bamboo crutches with rubber heels	...	30
Abdominal belts	...	4
Artificial legs (Peg legs)	...	9
Lumbar belt with pad	...	1
Surgical boots (Orthopaedic)	...	3
Abduction leather belt	...	1
Taylor's brace	...	4
Hernia belts	...	3
Tracheotomy tubes	...	3
Gloria Plaster Bandage	...	3
Smoke goggles	...	1
		154

Blood transfusions were provided to 34 patients using the poor box fund.

Donors

			Rs.
1.	The Secretary, Millowners' Association	...	400
2.	Messrs. Burmah-Shell Oil Storage and Distributing Co. of India Ltd.	...	350
3.	Messrs. B. I. S. N. Co., Ltd.	...	300
4.	Messrs. Standard-Vaccum Oil Co., Ltd.	...	300
5.	Messrs. The B. E. S. & T. Co., Ltd.	...	300
6.	Messrs. Bombay Dyeing and Manufacturing Co., Ltd.	...	251
7.	Messrs. Indian Oxygen and Acetylene Co., Ltd.	...	250
8.	Messrs. General Motors (India) Ltd.	...	200
9.	Messrs. Zandu Pharmaceutical Works Ltd.	...	101
10.	Messrs. Chemdyes Ltd.	...	100
11.	Messrs. Western India Spinning and Manufacturing Co., Ltd.	...	100
12.	Messrs. Hindustan Spinning and Manufacturing Co., Ltd.	...	100
13.	Messrs. Indian Manufacturing Co., Ltd.	...	100
14.	Messrs. Wolverhampton Works Co., Ltd.	...	100
15.	Messrs. Tata Sons Ltd.	...	100
16.	The Manager, Comptoir National D'Escompte De Paris	...	100
17.	Messrs. Bombay Gas Co., Ltd.	...	100
18.	Messrs. Finlay Millas Ltd.	...	100
19.	Messrs. Swadeshi Mills Co., Ltd.	...	100
20.	Messrs. Kohinoor Mills Co., Ltd.	...	100
21.	Rev. Fr. L. F. Fernandez	...	85
22.	Mrs. Shirinbai Nariman Tookiwalla	...	55
23.	Mrs. D. F. Tavadia	...	50
24.	Messrs. New Pralhad Mills Ltd.	...	50
25.	Messrs. Modern Mills Ltd.	...	50
26.	Messrs. Martin and Harris Ltd.	...	50
27.	Messrs. Union Bank of India Ltd.	...	50
28.	Vrajlal Khemchand Shah, Esqr.	...	50
29.	Messrs. Godrej and Boyce Manufacturing Co., Ltd.	...	40
30.	Narayen Gajanan Acharya, Esqr., Chembur	...	35
31.	Hatimbhoy Abdul Tayeb Esqr.	...	35
32.	The Members of the Goan Stewards of the Purserrs department of the S. S. 'Strathenden' through Mr. A. C. Fernandez	...	30
33.	S. J. Kantak Esqr.	...	25
34.	Messrs. Jeewanlal (1929) Ltd.	...	25
35.	Messrs. Madhusudan Mills Ltd.	...	25
36.	The Director, Simplex Art Floorings Ltd.	...	25
37.	Mr. M. V. Tilve	...	25
38.	Mr. K. J. Petigara	...	25
39.	The Manager, W. T. Henleys Telegraph Works Ltd.	...	25
40.	Messrs. Ford Motor Car Co., of India Ltd.	...	25

Among the sundry gifts was that of a hyper-extension cot by Dr Manilal Ramlal.
Dr Miss Kumud Mehta offered Rs. 1,160 to purchase a water-cooler for students. This long-felt need of the students was met through her gift.

The College

80 fresh students were admitted in June 1939, their average age being 19.9. 70 students were single, 8 married, and 4 betrothed. The total number of students on the rolls at the close of the year was 431, 66 of them being women. There were 67 postgraduate students.

		Male students.	Female students.
1st M.B.B.S.	1st year	70	10
,,	2nd year	71	22
2nd M.B.B.S.	3rd year	35	3
3rd M.B.B.S.	4th year	54	14
,,	5th year	135	17
Total number of students		365	66
Post-graduates including reserach students ...		63	4
	Grand Total ...	428	70

The authorities at the Bai Jerbai Wadia Hospital for Children continued to offer our students the facilities for studying diseases in children.

Examinations

At the examinations held by the University of Bombay, out of 436 students, 292 (67%) were placed under 'A' class, 141 (32%) in class 'B', and 3 (0.7%) in class 'C'. Corresponding figures for the previous year were 64.2% in class 'A', 34% in class 'B' and 0.9% in class 'C'.

Examinations.		Candidates sent up.	No. passing the whole examination.
1st M.B.B.S.	April 1939 ...	50	18
	Decr. 1939 ...	29	18
2nd M.B.B.S.	April 1939 ...	52	38
	Decr. 1939 ...	54	37
3rd M.B.B.S.	April 1939 ...	102	39
	Decr. 1939 ...	105	46
M.D. (Medicine)	June 1939 ...	3	1
M.D. (Pathology)	June 1939 ...	2	1
M.D. (Midwifery)	June 1939 ...	3	2
M.S.	June 1939 ...	5	2
D.O.	June 1939 ...	2	1
D.O.M.S.	July 1939 ...	7	4
	Decr. 1939 ...	4	3
B.Sc.	April 1939 ...	5	1
M.Sc.	Oct. 1939 ...	1	1
Ph.D.	April 1940 ...	1	1

In order to meet the requirements of the University regarding instruction of the 1st M.B.B.S students in normal psychology and 3rd M.B.B.S. students in mental diseases, the post of Honorary Lecturer in Psychiatry was created and Dr K.A.J. Lalkaka M.B.B.S. appointed to it.

Annual Cost and Revenue

The total cost of the college including liabilities and expense on hostels was Rs. 2,62,214 (Rs. 2,527,045 the previous year). The revenue in the form of tuition fees, hostel rent, and miscellaneous receipts was Rs. 1,19,647 (Rs. 1,14,245 the previous year). The gross cost per student was Rs. 608 (Rs. 571 the previous year) and the net cost Rs. 331 (Rs. 317 the previous year). Fees from postgraduate students amounted to Rs. 4,123.

Library and Museum

232 new books were added to the library (152 the previous year). Nine of these books were presented by the authors as complimentary copies. 122 volumes of medical journals were added during the year. 292 volumes of various medical periodicals were presented to the library by Dr M.D.D. Gilder, Honorary Lecturer in Medicine at the college and Honorary Physician at the hospital.

The number of books issued to medical students was 13,426 (13,620 the previous year). 2,597 books and journals were sent outside the library to members of the teaching staff and resident medical officers.

70 new wet and dry specimens were added to the Anatomy Museum during the year and 30 were renewed. The total number of specimens in the Anatomy and Comparative Anatomy section was now over 1,500. The want of space to keep more specimens was keenly felt. 58 new specimens were added to the Pathology Museum and 142 old specimens were remounted. The total number of specimens in the museum was now 1,388. 29 X-ray diapositives were added bringing the total to 112 at the end of the year.

Students' Hostels

There were now 127 residents (130 during the previous year). The number of residents in the women's hostel was 26 (22 during the previous year). The maximum number of women who could be accommodated there was 28. The total expense on the hostels exclusive on non-recurring costs) was Rs. 10,814 and income from rent was Rs. 16,305.

Gymkhana

Students had participated in the inter-collegiate tournaments as during previous years. Our cricket team was defeated in the second round by Sydenham College. Our hockey team reached the finals but lost there to St. Xavier's College to obtain the Runners Up cup. The football team too reached the semi-finals. Miss Lovji won the championship in the badminton ladies singles and with Miss Mulla in the doubles tournament. The Grand Committee had decided to have an open-air gymkhana with better light and ventilation. This work was almost complete.

Research

Serial No.	Name of the Enquiry.	Conducted by	Name of the Fund or institution under whose auspices the enquiry is undertaken.
1	Balanced Diet.	Prof. S. P. Niyogi, M.Sc., M.B. (Calcutta). Dr. V N. Patwardhan, M.Sc., Ph.D. (Lond). and Mr. B. N. Acharya M.Sc.	Under the auspices of the Indian Research Fund Association and Sir Dorabji Tata Trust and in collaboration with the Baby and Health Week Association.
2	Basal Metabolism in Children and Adults in Bombay Presidency.	Prof. S. P. Niyogi, M.Sc., M.B., (Cal). Dr. V. N. Patwardhan, M.Sc., Ph.D. (Lond) Mr. P. L. Powar, M.B., B.S. and Mr. M. V. Sirsat, M.B., B.S.	Under the auspices of the Indian Research Fund Association.
3	Thrombo-angeitis Obliterans.	Dr. R. N. Cooper, M.S. (Lond) F.R.C.S. (Eng) Dr. A. V Baliga, F.R.C.S. (Eng). Dr. K. G. Munsif, F.R.C.S. (Eng). Dr. A. E. DeSa, F.R.C.S. (Eng). Dr. R. G. Dhayagude, M.D. (Bom) and Dr. Job Mordecai, M.D. (Bom).	Do. do
4	Calcium Metabolism n Health and Diseases.	Dr. V. N. Patwardhan, M.Sc., Ph. D. and Dr. R. G. Chitre, M.Sc., Ph.D.	Da. do.
5	Toxaemia of Pregnancy.	Dr. N. A. Purandare, M.D., F.C.P.S. (Bom). Dr. B. N. Purandare, M.D. (Bom.) F.R.C.S. (Edin). and Mr. S. N. Yerawadekar, M.B., B.S.	Do. do.
6	Investigation on Indigeneus Drugs.	Prof. A. S. Paranjpe, M.D. (Hield). Mr. B. S. Pendse, M.B., B.S. and Mr. B. Panse, M.Sc.	Do. do.
7	The Incidence of Pneumococcal Type of Infection in Bombay.	Dr. R. G. Dhayagude, M.D. (Bom).	Under the auspices of the University of Bombay.
8	Studies in Mesenteric Revascularisation.	Dr. K. D. Manohar, M.D. (Bom).	Do. do.
9	Enquiry on the Ossification of bones in Indian boys.	Prof. R. P. Koppikar, M.S.; F.C.P.S. (Bom).	Do. do.
10	The species of frogs found in the neighbourhood of Bombay and their peculiar reactions to drugs.	Mr. B. S. Pendse, M.B., B.S.	Do. do.
11	Investigation on Anaemia in Pregnant women.	Dr. K. M. Masani, M.D. (Lond) F.R.C.S. (Eng)	Do. do.
12	Development of body parts of children between 6 and 11 years of age.	Dr. G. M. Kurulkar, M.B., B.S.	Do. do.
13	The Anatomical growth amongst the fishermen.	Do. do.	Do. do.
14	Diet Survey in Bombay.	Prof. S. P. Niyogi, M.Sc., M.B. (Cal). and Mr. D. R. Sukhthankar, M.Sc.	Under the auspices of the Seth G. S. M College and K. E. M. Hospital Research Fund.
15	Enquiry into the Pathogenic and non-pathogenic flora and fauna of the Sewage Purification Works, Dadar.	Prof. V. R. Khanolkar, B.Sc., M.D. (Lond) and Mr. W. H. Patwardhan, B.Sc.	Do. do.
16	Investigation on Buffalo Milk in the City of Bombay.	Prof. S. P. Niyogi, M.Sc., M.B. (Cal). Dr. V. N. Patwardhan, M Sc., PH.D. and Mr. D. R. Sukthankar, M.Sc.	Do. do.
17	Role of Anaerobic Streptococci in Puerperal Spesis.	Dr. N. A. Purandare, M.D. F.C.P.S. (Bom) and Dr. B. N. Purandare, M.D. (Bom) F.R.C.S. (Edin).	Do. do.

The published papers were as follows. They do not include those published in the college magazine.

Serial No.	Name of the Article.	Contributed by.	Name of the Journal publishing it.
1	Peptic Ulcer (Paper read at the Society of Teaching Pathologists).	Dr. R. G. Dhayagude, M.D. (Bom.) ...	Medical Bulletin, March 16, 1940.
2	An Epidemic in controlled guinea-pig colony.	Dr. K. D. Manohar, M.D. (Bom.) ...	The Indian Journal of Veterinary Science and Animal Husbandry June 1939.
3	Congenital Absence of the right femur...	Do. do. ...	The British Journal of Surgery Vol. XXVII No. 105, 1939...
4	Pigmentation of Conjunctiva and its possible relation to Nutrition.	Dr. C. B. Dhurandhar, M.B.B.S., D.O. and Mr. A. K. Boman-Behram, M.B.B.S.	Indian Journal of Medical Research January 1940.
5	Evolution of the Chemotherapy of Bacterial Infections and Sulphonamide groups of Drugs.	Prof. A. S. Paranjpe, M.D. (Hield), D.T.M. (Lond.).	Medical Bulletin, February 1940.
6	Studies in Basal Metabolism in Bombay, Part I.	Prof. S. P. Niyogi, M.Sc., M.B. (Cal.); Dr. V. N. Patwardhan, M.Sc., Ph.D. (Lond.) and Dr. Job Mordecai M.D (Bom.).	Indian Journal of Medical Research July 1939.
7	A Diet Survey in Bombay ...	Prof. S. P. Niyogi, M.Sc., M.B. (Cal.) and Mr. D. R. Sukhthankar, M.Sc.	Indian Medical Gazette, November 1939.
8	The absorption of phosphates from the intestine.	Dr. V. N. Patwardhan, M.Sc., Ph.D. (Lond.) and Mr. N. G. Nhavi, M.Sc.	Journal of Bio-Chemistry, London Vol. 33, No. 5, 1939.
9	Absorption of Phosphates from the Intestines.	Dr. V. N. Patwardhan, M.Sc., Ph.D. (Lond.), A.I.I.Sc. (Bangalore).	Bio-Chemical Journal, Vol. 33 No. 5, 1939.
10	The excretion of Vitamin C in urine and the state of saturation in normal individuals in Bombay.	Dr. A. Fernandez, M.B.B.S. ...	Journal of the University of Bombay March 1939.
11	Observations on Clinical Aspects and treatment by Serum of Enteric Fever in Bombay.	Dr. P. T. Patel, M.D., M.R.C.P. (Lond.) D.T.M. & H. (Cantab.), M.R.C.S. (Eng.), L.M. & S., F.C.P.S. (Bom.).	Journal of the Indian Medical Association, June 1939.
12	Treatment of Pneumonia with M. & B. 693.	Dr. N. D. Patel, M.D., M.R.C.P. (Lond.) L.R.C.P. (Lond.), M R.C.S. (Eng.), Mr. S. M. Desai, M.B.B.S., and Mr. T. M. Desai, M.B.B.S.	Medical Bulletin, 6th May 1939.
13	Tumours of the Upper Jaw and its immediate neighbourhood.	Dr. V. M. Kaikini, B.A., F.R.C.S. (Edin.)	Indian Medical Gazette, July 1939.
14	Streptococcal Infection in surgica practice.	Dr. A. V. Baliga, F.R.C.S. (Eng.) ...	Medical Bulletin, 3rd February 1940.
15	Lung Abscess	Dr. M. J. Shah, M.R.C.S. (Eng.), L.R.C.P., M.R.C.P., D.T.M. & H. (Lond.)	Indian Medical Gazette, May 1939.
16	Chemotherapy in Streptococcal infections.	Do. do. ...	Medical Bulletin, February 2nd, 1940.
17	Strangulated Inguinal Hernia ...	Dr. A. E. DeSa, L.R.C.P., F.R.C.S. (Eng.).	Medical Bulletin, May 1939.

Special classes were held for students proceeding to the D.O., D.O.M.S. and Primary F.R.C.S. examinations. As the War had broke out in Europe, the Primary F.R.C.S. examination to be held in Lucknow was canceled. Accordingly, the classes for these students were also stopped.

Dr R.G. Chitre, Research Assistant on the 'Calcium metabolism' enquiry was awarded the degree of Doctor of Philosophy by the University of Bombay for his thesis *Some aspects of Calcium and Phosphorus Metabolism with special reference to the action of Vitamin D upon it*.

Air Raid Precautions (A.R.P.) classes were held in the college for medical students, nurses, and the lay public. Professor R.P. Koppikar was sent to Pachmarhi in December for special military training at the Chemical Warfare School.

An interesting feature of the year was the organisation of a Refresher Course for medical practitioners of three weeks' duration in October 1939 under the joint auspices of the Seth Gordhandas Sunderdas Medical College and Grant Medical College. It was attended by 18 physicians who found it to be instructive. The teaching staff of the hospitals attached to Seth Gordhandas Sunderdas Medical College and Grant Medical College participated.

Social Welfare for the Labor Staff

This was being carried out by the Health Officer and details have been provided in his report to the Municipal Corporation.

The Co-operative Credit Society

The new, amalgamated society of the labor staff of the hospital started work from 29 May 1939. The share capital of the Society was Rs. 7,200 then and rose to Rs. 10,056-4-0 by the end of April 1940. Fresh deposits from non-members amounted to Rs. 1,800. Rs. 600 were refunded during this period. The Society has Rs. 5,500 in fixed deposits.

The total loans advanced to members were Rs. 20,155 and Rs. 17,047-4-0 were returned by members as installments of loans. 75% of the loans were for liquidating previous loans from others at high interest rates. The demand for loans was increasing as members appreciated the benefits of borrowing from the Society. The average loan to members is Rs. 119 (Rs. 94 in 1938-1939).

At its third annual meeting on 28 September 1939, the Society declared a dividend of 6.5% on the paid-up share capital.

The membership of the Society was 280 on 31 May 1939. It fell to 257 by the end of April 1940 as 45 members retired from service. New admission to membership was 24.

A donation of Rs. 300 was made to the Society by the Managing Director of the Bombay Provincial Cooperative Bank Ltd.

INDEX OF APPENDICES

Appendix No.	1.—List of the College and Hospital Senior Staff.
Do.	2.—Summary of In-patients and their classification as per departments.
Do.	3.—Summary of Out-patients and their classification as per departments.
Do.	4.—Chart illustrating In and Out-patient admissions by months.
Do.	5.—Summary of patients according to sex, age and caste, with a chart illustrating this summary.
Do.	6.—Summary of patients according to their nature of diseases.
Do.	7.—Classification of operations in the Surgical Department.
Do.	7A.—Classification of fracture cases treated in the Surgical Department.
Do.	7B.—Classification of head-injury cases treated in the Surgical Department.
Do.	8.—Classification of operations in the Gynecological Department.
Do.	9.—Classification of operations in the Ophthalmic Department.
Do.	10.—Classification of operations in the Ear, Nose and Throat Department.
Do.	11.—X-ray and Electro-therapy Report.
Do.	12.—Skin and Venereal Department Report.
Do.	13.—Clinical Laboratory Report.
Do.	14.—Electro-cardiograph Department Report.
Do.	15.—Poor Box Charity Fund—Statement of Accounts and Balance Sheet.

16

Annual Report (1940–1941)

Staff

THE COLLEGE AND HOSPITAL SENIOR STAFF

Dean

Jivraj N. Mehta, Esq., M.D. (Lond.), M.R.C.P. (Lond.), F.C.P.S. (Bom.).

Assistant Dean

R. E. Dadachanji, Esq., M.B.B.S. (Bom.).

Assistant Medical Officers

V. V. Jadhav, Esq., M.B.B.S. (Bom.).
V. H. Majmudar, Esc., B.Sc., M.B.B.S. (Bom.).

Professor of Anatomy

R. P. Koppikar, Esq., M.S. (Bom.), F.C.P.S. (Bom.).

Assistant Professor of Anatomy

G. M. Kurulkar, Esq., M.B.B.S. (Bom.).

Professor of Physiology

S. P. Niyogi, Esq., M.Sc., M.B. (Cal.).

Assistant Professor of Biochemistry

V. N. Patwardhan, Esq., M.Sc. (Bom.), Ph.D. (Lond.), A.I.I.Sc.

Assistant Professor of Physiology

A. Fernandez, Esq., M.B.B.S. (Bom.).

Professor of Pharmacology and Materia Medica

A. S. Paranjpe, Esq., M.D. (Heidl.), D.T.M. (Lond.), M.B. Ch. B. (Edin.).

Professor of Pathology and Bacteriology

R. G. Dhayagude, Esq., M.D. (Bom.), (Offg.).

Assistant Professors of Pathology and Bacteriology

R. G. Modak, Esq., M.D. (Bom.).

Assistant Clinical Pathologist

K. D. Manohar, Esq., M.D. (Bom.).

Honorary Physicians and Lecturers in Medicine

M. D. D. Gilder, Esq., B.A., M.D. (Lond.), F.R.C.S. (Eng.), F.C.P.S. (Bom.).

P. C. Bharucha, Esq., M.D. (Lond.), B.S. (Lond.), F.C.P.S. (Bom.).

L. D. Dhawale, Esq., B.A. (Allahabad), M.D. (Bom.), (Retired from 1-1-1941).

S. G. Vengsarkar, Esq., M.D. (Bom.).

N. D. Patel, Esq., M.D. (Lond.), M.R.C.P. (Lond.).

N. K. Sahiar, Esq., M.D. (Lond.), M.R.C.P. (Lond.), (From 1-1-1941).

Abdul Hameed, Esq., M.D. (Bom.).

Honorary Assistant Physicians and Lecturers in Medicine

M. J. Shah, Esq., M.B.B.S. (Bom.), M.R.C.P. (Lond.), D.T.M. & H. (Lond.).

P. Raghavan, Esq., M.D. (Bom.).

R. J. Vakil, Esq., M.D. (Lond.), M.R.C.P. (Lond.), F.R.F.P.S.

J. C. Patel, Esq., M.D. (Bom.), M.R.C.P. (Lond.).

E. R. DeMello, Esq., M.D. (Bom.).

Honorary Surgeons and Lecturers in Surgery

R. N. Cooper, Esq., M.S. (Lond.), F.R.C.S. (Eng.), F.C.P.S. (Bom.).

T. O. Shah, Esq., L.M. & S. (Bom.), F.R.C.S. (Eng.), F.C.P.S. (Bom.).

V. M. Kakinti, Esq., B.A., M.B.B.S. (Bom.), F.R.C.S. (Edin.), F.C.P.S.

A. V. Baliga, Esq., F.R.C.S. (Eng.).

K. G. Munsif, Esq., M.B.B.S. (Bom.), F.R.C.S. (Eng.).

Honorary Assistant Surgeons

G. M. Phadke, Esq., M.B.B.S. (Lond.), F.R.C.S. (Eng.).

M. M. Pandya, Esq., M.B.B.S. (Bom.), F.R.C.S. (Eng.).

Arthur E. DeSa, Esq., M.B.B.S. (Bom.), F.R.C.S. (Eng.).

R. N. Dixit, Esq., M.B.B.S., M.S. (Bom.).

S. H. Chitnis, Esq., M.B.B.S., M.S. (Bom.).

Honorary Assistant Orthopedic Surgeon

A. K. Talwalkar, Esq., F.R.C.S. (Eng.)

Honorary Aural Surgeon and Lecturer in Ear, Nose, and Throat

Homi D. Gandhi, Esq., M.B.B.S. (Bom.), F.R.C.S. (Edin.).

Honorary Assistant Lecturer in Ear, Nose, and Throat

S. G. Joshi, Esq., M.S. (Bom.).

Honorary Gynecologists and Lecturers in Gynecology and Obstetrics

H. D'Sa, Esq., M.D. (Bom.), F.C.P.S. (Bom.), F.R.C.O.G. (Lond.), Retired from 1-1-1941.

Miss P. C. Darookwalla, M.D. (Bom.).

Sir Mangaldas V. Mehta, Kt., O.B.E., B.A., F.C.P.S.I., F.C.P.S., F.R.C.O.G., (Lond.), Ex-Officio Honorary Lecturer in Obstetrics.

Honorary Assistant Gynecologists

K. M. Masani, Esq., M.D. (Bom.), F.R.C.S. (Eng.).

B. N. Purandare, Esq., M.D. (Bom.), F.R.C.S. (Edin.), From 1-1-1941.

Honorary Ophthalmic Surgeons and Lecturers in Ophthalmology

R. P. Ratnakar, Esq., L.M. & S., (Bom.), D. Ch. O. (L'pool), D.O. (Oxon.), D.O.M.S. (Eng.), F.C.P.S. (Bom.), Retired from 1-1-1941.

G. T. Modi, Esq., D.O. (Oxon.), M.R.C.S. (Eng.).

Honorary Assistant Ophthalmic Surgeon

S. N. Cooper, Esq., M.B.B.S. (Bom.), D.O. (Oxon & Bom.), D.O.M.S. (Lond.).

Honorary Assistant Dermatologist and Venereologist

J. A. Fernandez, Esq., L.R.C.P. (Lond.), M.R.C.S. (Eng.), M.R.C.P. (Edin.).

Honorary Radiologist and Lecturer in Radiology and Electro-therapy.

J. L. Desai, Esq., M.B.B.S. (Bom.), D.M.R.E. (Cantab.).

Honorary Assistant Radiologist

Z. J. Joseph, Esq., M.D. (Bom.), D.M.R.E. (Cantab.).

Honorary Anesthetist and Lecturer in Anesthesia

Moksha Madan Desai, Esq., M.B.B.S. (Bom.), D.A. (Eng.).

Honorary Dental Surgeons and Lecturers in Dentistry

H. G. Moghe, Esq., L.M. & S. (Bom.), L.D.S., R.C.S., (Eng.). Retired from 1-1-1941.

D. M. Desai, Esq., L.D.S., R.C.S. (Eng.).

Honorary Assistant Dental Surgeon

J. A. Avasia, Esq., L.D.S., R.C.S. (Eng.), From 1-1-1941.

Honorary Dermatologist and Venereologist and Lecturer in Dermatology and Venereology

A. C. Rebello, Esq., M.B.B.S. (Bom.), D.T.M. & H. (Lond.).

Honorary Lecturer in Medical Jurisprudence and Toxicology

R. E. Dadachanji, Esq., M.B.B.S. (Bom.).

Honorary Lecturer in Hygiene and Preventive Medicine.

R. K. Mhatre, Esq., L.M. & S. (Bom.), D.P.H., D.T.M. & H. (Cantab.).

Honorary Lecturer in Psychiatry

K. A. J. Lalkaka, Esq., M.B.B.S. (Bom.).

Dr R.N. Dixit, Dr S.H. Chitnis, and Dr A.K. Talwalkar were appointed to the newly created post of Honorary Assistant Surgeons. Dr P. Raghavan was appointed to the post of Honorary Assistant Physician.

The death of Dr P.T. Patel, Honorary Physician and Honorary Lecturer in Medicine, on 29 May 1940 was recorded with deep regret. He was connected to these institutions from their inception. A fund was established in Dr P.T. Patel's memory to institute either a scholarship or a prize for students. His colleagues, friends, and students contributed generously to it.

Dr S.G. Vengsarkar, Honorary Physician and Honorary Lecturer in Medicine, was appointed by the Corporation to the post of Superintendent of the Infectious Diseases Hospital on a year's probation. He took charge of these duties on 16 October 1940 but was requested to continue to work at Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital till 30 June 1941.

Dr M.D.D. Gilder, Dr P.C. Bharucha, Dr L.D. Dhawale, Dr H.D. DeSa, Dr R.P. Ratnakar, and Dr H.G. Moghe retired from 1 January 1941 due to superannuation. All of them had been appointed as Honorary Consultants at these institutions in their respective specialties on their retirement. Drs Gilder and Bharucha had been, however, requested to continue to carry on their duties in these institutions in their purely honorary capacity without payment of honorarium for a period of one year.

The vacancies caused by the retirement of the above members were filled by the appointment of Dr N.K. Sahiar and the promotion of Dr Abdul Hameed as Honorary Physicians; Dr R.J. Vakil, Dr J.C. Patel, and Dr R. DeMello, as Honorary Assistant Physicians; Dr S.N. Cooper as Honorary Assistant Ophthalmic Surgeon; Dr B.N. Purandare as Honorary Assistant Gynecological Surgeon; and Dr J.A. Avasia as Honorary Assistant Dental Surgeon.

Whilst congratulating these members on joining the staff, Dr Jivraj Mehta could not refrain from expressing profound regret in parting with the senior members who had been snatched away due to service rules much too early from their close and valued association with the institutions.

'The loss of seasoned teachers and experience in their specialties will no doubt be keenly felt by their students, colleagues and friends nay much more by their varied and many grateful patients. The staff and students expressed their appreciation of the very valuable services the retiring members had rendered to the College and Hospital by making a presentation of a casket to them at the farewell function held in their honor.'

The institution suffered yet another loss in the retirement of Dr V.R. Khanolkar, Professor of Pathology and Bacteriology. He was mainly responsible for the creation of the Pathology Department at the College which had won a place for itself amongst the medical colleges throughout India. He was also an able teacher. In order to commemorate the association of Dr Khanolkar with this College and Hospital, *Dr Khanolkar Farewell Fund* was started, the object of which was to institute a scholarship or a prize in the subject of his speciality.

The Hospital

The occupancy of the 426 beds throughout the year was as follows:

Department.	Men.	Women.	Children.	Total.
Medical	111	38	10	159
Surgical	95	33	12	140
Orthopaedic	10	3	2	15
Gynaecological	...	35	...	35
Ophthalmic	16	16	...	32
Aural	6	2	2	10
Skin and Venereal	10	6	...	16
Casualty	6	...	...	6
Isolation	6	7	...	13
Total ...	260	140	26	426

The total number of inpatients admitted in the year was 12,575 (11,932 in 1939 and 13,320 in 1938). The total number of inpatients was reduced because of the scare caused by the War. With the disappearance of this scare, the demand for admission rose and in spite of strict control, the number of inpatients rose as high as 12,575.

With the appointment of Dr A.K. Talwalkar as Honorary Assistant Orthopedic Surgeon from 1 July 1940, a new section for the treatment of orthopedic and fracture cases was started, the want of which was very keenly felt for the last many years. It was expected that better arrangements would now be available for the treatment of patients admitted for fractures and bone diseases.

On an average 45 more outpatients were attended to each day in 1939. There were often 25–30 extra inpatients over the scheduled number.

Particulars.	Figures for the year 1940.	Figures for the year 1939.	Figures for the year 1938.
(a) In-patients—			
1. Scheduled strength of beds ...	426	426	370
2. Daily average No. of in-patients ...	423	384	411
3. Total No. of new in-patients treated ...	12,575	11,932	13,320
4. Average No. of days each patient was resident ...	11.98	11.42	11.28
(b) Out-patients—			
1. Total No. of new out-patients ...	1,21,760	1,22,473	1,14,813
2. Daily average No. of new out-patients ...	383	386	359
3. Total No. of out-patient attendance ...	4,05,093	3,93,496	3,66,132
4. Daily average No. of out-patient attendance ...	1,307	1,262	1,173
5. No. of casualty patients included in No. 1 above ...	20,665	20,230	19,093
(c) Operations—			
1. Total No. of operations on in-patients ...	4,056	3,762	4,044
2. Total No. of operations on out-patients ...	10,201	10,209	9,734

The Corporation had sanctioned some additional staff starting 1941–42.

Of the total number of 12,923 inpatients (12,575 admitted during the year and 348 previous year's balance), 2,707 were cured, 6,912 were discharged relieved, 1,599 either left the Hospital against medical advice or were otherwise discharged and 1,276 died leaving a balance of 429 patients at the end of the year. Out of 1,276 deaths, 373 died within the first 24 hours of admission, 265 after 24 hours and within 3 days of admission, and the remaining 638 alter 3 days of their admission into the Hospital.

The highest number of outpatients attendance on any particular day during the year 1940, was 1,773, the highest number of new admissions in the outdoor department on a single day being 517. Likewise, the highest number of old cases and casualty cases treated in a single day was 1,311 and 94 respectively and the highest number of in-patients admitted in a single day was 67.

The total expenditure incurred on the maintenance of the hospital during the year 1940–41, including liabilities outstanding at the end of the year and exclusive of cost on the extension scheme, amounted to Rs. 6,11,669. This expenditure included the cost of maintenance and treatment of inpatients, the cost of the outpatient department, costs of the resident medical, nursing, and labor staff as well as that of the administration and of the maintenance and repairs of buildings etc.

Particulars.	1940-41.	1939-40.	1938-39.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
(a) Average cost per in-patient per day	2 15 3	3 1 6	2 15 0
(b) Average cost per in-patient admission	36 7 2	30 0 5	33 4 6
(c) Average cost per out-patient attendance	0 6 0	0 5 8	0 5 10
(d) Average cost per out-patient admission	1 3 9	1 2 0	1 2 8

Details of the cost per in-patient per day for the years 1940–1941, 1939–1940 and 1938–1939 were as follows:

Year.	Diets.	Drugs, dressings, surgical appliances etc.	Stores and Linen.	Heating and lighting.	Miscel-laneous.	Establish-ment.	Repairs to buildings and Engi-neering.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1940-41 ...	0 7 5	0 6 8	0 2 8	0 1 1	0 1 11	1 9 6	0 2 0	2 15 3
1939-40 ...	0 6 6	0 6 11	0 3 3	0 1 0	0 2 4	1 9 4	0 4 2	3 1 6
1938-39 ...	0 6 10	0 6 1	0 2 7	0 2 8	0 1 8	1 8 3	0 2 11	2 15 0

The average cost of every new outpatient admission completely treated during the year were as follows:

Year.	Drugs, dressings surgical appliances etc.	Stores and Linen.	Heating and lighting.	Miscella-neous.	Establish-ment.	Repairs to buildings and engi-neering.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1940-41	0 7 0	0 0 9	0 0 2	0 0 4	0 10 3	0 1 3	1 3 9
1939-40	0 6 7	0 0 7	0 0 2	0 0 4	0 9 11	0 0 5	1 2 0
1938-39	0 7 1	0 0 8	0 0 6	0 0 4	0 9 8	0 0 5	1 2 8

The actual cost incurred on patients (inpatients as well as outpatients) under drugs, surgical appliances etc. was somewhat more than that indicated in the above tables as the cost of expensive drugs, injections, and blood transfusions was Rs. 7,193-4-6 and was met from the Poor Box Charity Fund.

6 (24 the previous year) destitute and incurable patients and those whose relatives would not take them away were sent to Jehangir Home for Destitutes and 263 (373 the previous year) to the King George V Infirmary for Incurables. 149 Patients suffering from pulmonary tuberculosis were transferred to the Maratha Hospital. 712 Patients suffering from various infectious diseases were also transferred to the Arthur Road Hospital during the year. 30 cases of enteric fever, 132 cases of dysentery, and 38 cases of meningitis had to be transferred there on account of congestion in the Hospital. One patient suffering from early pulmonary tuberculosis was sent to the Turner Sanatorium. 76 female patients were also transferred to the Nowrosjee Wadia Maternity Hospital as they were found to be suffering from obstetric conditions.

Extension of the Hospital

The construction of the New Nurses' Home, new registration hall, and X-ray and electrotherapy building had been completed. The new registration hall started functioning from 19 March 1941, providing much needed relief to patients. Whilst work was on in the outpatient department since 1938, two wards had to be closed. Despite this, there was no reduction in the number of inpatient beds or facilities for the outpatients. Work continued on other extensions to the outpatient building, hospital kitchen, and observation ward for mentally ill patients.

Cases of Congestive Cardiac Failure

During the year 1940, 232 cases of congestive cardiac failure were admitted and treated. Following the lines of classification as suggested by the American Heart Association, these cases were grouped into three main classes:

Particulars.	On admission.	On discharge.
CLASS I.		
Patients who are able to carry on their ordinary physical activities without discomfort ...	...	...
CLASS II.		
Patients who are unable to do so :—		
(a) Activities slightly limited ...	...	55
(b) Activities greatly limited ...	2	60
CLASS III.		
Patients with signs or symptoms of heart failure when at rest ...	230	24
Patients died ...	...	93
Total ...	232	232

Of the 232 cases admitted, only 2 cases were under Class I (b). At the time of their admission, 230 were admitted with signs and symptoms of congestive cardiac failure when the patients were at rest. Out of these, 24 left the Hospital in the same stage and 93 died. The remaining showed improvement and at the time of their discharge. 5 could be placed Class II (a) and 60 in Class II (b).

Motor Accident Cases

	1940.	1939.	1938.
1. Treated in the Casualty Department ...	641	690	578
2. Treated as in-patients ...	172	193	184

There was a slight diminution in their number compared to the accidents treated during the previous year in the Casualty Department and as inpatients, respectively. The largest number of motor accident cases whether of ordinary severity (requiring treatment in the casualty or outpatient departments only) or marked severity (needing admission into the Hospital) occurred in the age group of 20 to 30 (28 per cent in the case of those admitted and 32 per cent in the case of those treated in the outpatient department). Women patients formed about 14 per cent of the total number of motor accident cases.

(a) Treated in the casualty department.

——	Upto 5 years.	Between 5 and 10 years.	Bewteen 10 and 20 years.	Between 20 and 30 years.	Between 30 and 40 years.	40 years and above.	Total.
Male	6	48	69	183	141	102	551
Female	9	19	10	16	14	22	90
Total ...	15	67	79	201	155	124	641

(b) Admitted as indoor patients from the casualty department on account of severity of injury.

——	Upto 5 years.	Bewteen 5 and 10 years.	Between 10 and 20 years.	Bewteen 20 and 30 years.	Between 30 and 40 years.	40 years and above.	Total.
Male	2	15	13	42	35	38	145
Female	1	5	4	5	4	8	27
Total ...	3	20	17	47	39	46	172

Mill Accidents

The number of mill accident cases has largely increased this year as the number of such cases treated last year was 1,222 and 36 against 1984 and 16 patients treated in the casualty department and admitted as inpatients, respectively, during the year. This may be due to the mills working double shift during the period.

(a) Treated in the casualty department.

Particulars.	Males.	Females.	Children.		Total.
			Male.	Female.	
Hindus	1,634	56	...	...	1,695
Muslims	172	...	...	...	172
Christians	87	5	...	...	92
Others	25	...	...	...	25
Total ...	1,918	61	...	...	1,984

(b) *Admitted as indoor patients from the casualty department on account of severity of injury.*

Particulars.	Cured.	Relieved.	Left against medical advice, etc.	Died.	Total.
MALES—					
Hindus	7	67	5	8	87
Muslims	4	14	...	1	19
Christians	...	6	1	...	7
Others	...	1	...	...	1
FEMALES—					
Hindus	...	...	...	...	2
Muslims	...	...	...	...	...
Christians	...	...	...	...	...
Others	...	...	...	...	...
Total ...	11	90	6	9	116

2,857 certificates under the Workmen's Compensation Act and 305 certificates with medical opinion were issued during the year.

Poisoning and Bites

174 Cases were treated in the hospital for poisoning and 49 for bites during the year under report:

ACIDS—	
Acida Carbolic }	... 4
„ Nitric }	
Alcohol	... 72
Arsenic	... 5
Belladonna	... 2
Camphor	... 1
Carbon monoxide	... 4
Castor Oil seeds	... 2
Caustic Soda	... 1
Chlorine	... 2
Copper Sulphate	... 1
Total	... 94

Brought over	... 94
Dhatura	... 10
Food poisoning	... 22
Ganja	... 2
Iodine	... 11
Kerosene	... 3
Lead	1
Nuxvomica	... 1
Opium	... 5
Petrol gas	... 1
Phosphorus	... 1
Sewer gas	... 1
Spirit methylated	... 2
Sulphur	... 1
Unknown poisonings	... 19
Total	174

BITES—	
Insect	... 8
Jackal	... 1
Rat	... 8
Scorpion	... 1
Snake	... 51
Total	... 69
Grand Total	... 243

Nurses

The results of the probationer nurses from this Hospital who appeared for the nursing examination held by the Bombay Nurses' Midwives and Health Visitors 'Council were as follows:

Examination.	September 1940.		March 1941.	
	Appeared.	Passed.	Appeared.	Passed.
1st Examination ...	11	11	9	9
2nd Examination ...	8	5	17	14

Dr Jivraj Mehta congratulated the Matron and teaching staff for these results.

The cost of the nursing establishment was Rs. 82-12-0 per nurse per month (Rs. 79-13-0 the previous year). The increase of Rs. 2-15-0 per nurse per month is largely due to the increased rates on account of the war for the supply of provisions for the nurses. The pro-rata rent for quarters provided to the support staff employed in the Nurses' Home and the Municipal Provident Fund contributions are not included in the above figures.

Nurses Welfare Fund

6 socials and 2 picnics were arranged during the year.

The total collections of the Fund by way of members' subscriptions, donations, and interest amounted to Rs. 707-7-0. The expenditure amounted to Rs. 674-4-6.

In order to provide the members of the nursing staff of the K.E.M. Hospital sufficient facilities for recreation etc. arrangements were considered for the construction of a swimming pool at the new Nurses' Home. Liberal donations were received from the Honorary Staff of the K.E.M. Hospital and Seth G. S. Medical College to meet the cost. Dr P.C Bharucha, Honorary Physician, contributed Rs. 7,000 for the purpose. On account of delay in taking the work in hand, the cost of materials required for the construction work went far beyond the funds permitted and it was therefore not possible to provide this facility which the nursing staff rightly deserved. The donations were therefore refunded to the respective donors.

School Clinic

2,113 new children were treated in the different departments of the hospital in addition to a large number of children who began their treatment in the previous year. The total number of children treated in the year was 8,637 (8,270 in the previous year).

Departments.	1940-41.			1939-40.		
	New cases.	Old cases.	Total.	New cases.	Old cases.	Total.
Medical and Surgical ...	559	2,955	3,514	578	3,147	3,725
Ear, Nose and Throat ...	449	864	1,313	348	887	1,235
Ophthalmic ...	344	1,616	1,960	245	1,212	1,457
Dental ...	423	414	837	330	337	667
Skin ...	338	675	1,013	345	841	1,186
Total ...	2,113	6,524	8,637	1,846	6,424	8,270

97 School Clinic Children were operated upon in the aural department and 19 in the ophthalmic department, 3 requiring major operations and 16 minor. 7 minor operations were performed in the outpatient minor surgery department. 32 children were admitted in the wards and were treated for their respective diseases. Ultraviolet treatment was given to 81 children and they were screened or X-ray plates were taken

whenever it was necessary. Laboratory investigation was done for a large number of children.

6 children bitten by dogs were referred to the Haffkine Institute for treatment. 1 child was transferred to the Arthur Road Hospital and 1 to the Maratha Hospital for measles and tuberculosis, respectively.

Refraction was done on 215 cases and glasses were prescribed to 140 children (including one occluder for a child with squint). Instructions were given to 4 children with high myopia either to discontinue studies or to use text books with large sized letters only. Instructions were also sent to their respective teachers to allow these children to occupy front seats in their classes. 4 children suffering from trachoma were asked to continue treatment during the vacation and 6 other children suffering from trachoma and phlyctenular conjunctivitis were asked to report for treatment and observation at least once a fortnight. One child with perforated palate was fitted with an obturator. The total cost of the clinic at the K.E.M. Hospital amounted to Rs. 8,968. A detailed report of the School Cline had been submitted to the Executive Health Officer.

Poor Box Charity Fund

Balance Sheet of the Poor Box Charity Fund as on 31st March 1941.

Liabilities.	Rs. a. p.	Rs. a. p.
Fund account Balance on 31st March 1940 ...	1,31,019 3 2	
Less—written off on account of Dead Stock and equipment ...	6,765 14 0	
	1,24,253 5 2	
Add—Excess of receipts over expenditure during 1940-41.	4,715 12 0	
		1,28,969 1 2
Suspense Account :—		
Mess deposits ...	1,464 10 0	
Patients' money ...	80 0 9	
Miscellaneous deposits ...	3,617 5 6	
		5,162 0 3
Sundry Creditors		401 13 7
		1,34,532 15 0

Assets.		Rs. a. p.	Rs. a. p.
Cash in hand		44 7 9	
Balance in hand with the Central Bank of India Ltd. ...		1,864 3 8	
			1,908 11 5
Investments (at cost) :—			
(1) 3½% G. P. Notes (1842-43) of the face value of	16,000		13,460 10 0
(2) 3½% G. P. Notes (1854-55) of the face value of	12,000		9,248 2 0
(3) 3½% G. P. Notes (1865) of the face value of ...	13,000		10,532 8 0
(4) 3½% G. P. Notes (1879) of the face value of ...	1,000		735 0 0
(5) 3½% G. P. Notes (1900-01) of the face value of ...	17,000		15,608 12 0
(6) 3% Loan (1951-54) of the face value of ...	6,000		6,210 0 0
(7) 4% Loan (1960-70) of the face value of	20,000		20,933 0 0
(8) 4% B.P.T. Debentures (1968) of the face value of ...	3,000		3,333 12 0
(9) 4% B.P.T. Debentures (1969) of the face value of ...	500		555 10 0
(10) 4% B.P.T. Debentures (1973) of the face value of ...	500		555 10 0
(11) 4% B.I.T. Debentures (1962) of the face value of	500		465 0 0
(12) 4% B.I.T. Debentures (1965) of the face value of ...	1,000		930 0 0
(13) 4% B.I.T. Debentures (1972) of the face value of	10,000		9,300 0 0
(14) 4% B.I.T. Debentures (1973) of the face value of ...	1,000		930 0 0
(15) 4% B.M. Debentures (1974) of the face value of ...	500		510 0 0
(16) 6% B.M. Debentures (1956-60) of the face value of ...	12,000		11,718 2 0
(17) 5% B.M. Debentures (1954-59) of the face value of	18,000		16,123 12 0
(18) 4% B.M. Debentures (1961) of the face value of (original B.I.T. Debentures) ...	500		510 0 0
(19) 4% B.M. Debentures (1962) of the face value of ...	2,000		2,040 0 0
(20) 4% B.M. Debentures (1965) of the face value of ...	1,500		1,530 0 0
(21) 4% B.M. Debentures (1967) of the face value of ...	6,500		6,862 8 0
(22) 4% B.M. Debentures (1968) of the face value of ...	500		510 0 0
		1,43,000 0 0	
			1,32,602 6 0
Interest Suspense Account			21 13 7
			1,34,532 15 0

It was possible to provide blood transfusion to 80 patients during the year with the help of monetary assistance to the donors of blood from this Fund. Besides relief for blood transfusions, costly drugs, medicines, injections, travelling expenses etc., the following appliances, etc. were provided to 173 patients at a total cost of Rs. 1,660-1-0 as shown below:

Particulars.		No. of patients.
Spectacles	...	74
Bamboo crutches with rubber heels	...	37
Crutches, wooden, adjustaible	...	2
Abdominal belts	...	4
Artificial legs (peg legs)	...	12
Surgical boots (orthopaedic)	...	9
Surgical boots for clubbed feet	...	1
Laryngotomy tube, silver	...	1
Taylor's brace	...	3
Hernia belts	...	4
Tracheotomy tubes	...	5
Colostomy belts	...	2
Elastic bandages, rubber	...	4
	Total.	158

Particulars		No. of patients.
	Total. B. F.	158
Elbow splint	...	1
Thomas hip splints	...	3
Abduction splints	...	2
Dentures, upper and lower	...	1
Denture, upper, vulcanite	...	1
Walking calipers	...	4
Knee caps	...	2
Silver reels		1
	Total ...	173

A donation of Rs. 1,000 was received from Mr Malloo Balloo in memory of his wife Rajabai Malloo Yadam on the condition that the amount would be invested in securities and the account would be operated upon by the Municipal Chief Accountant and the interest accruing thereon would be transferred to the Poor Box Charity Fund account of this Hospital. The donation was accepted by the Corporation with thanks under their Resolution No. 345 dated the 9 July 1940.

The securities held by the Poor Box Charity Fund of the face value of Rs. 1,40,000, in favor of the Dean, K.E.M. Hospital, have been transferred in the name of the Municipal Commissioner for the City of Bombay and the Corporation have been approached to create a Trust of the Fund with a view to utilizing the same for the construction and maintenance of a Convalescent Home for patients discharged from this hospital. The matter is under the consideration of the Corporation.

A sum of Rs. 6,765-14-0 being the cost of deadstock purchased out of the Poor Box Charity Fund has been written off from the balance sheet as the same has been handed over for the use of the hospital. These articles are however shown in the Deadstock Ledger of the Poor Box Charity Fund for the purpose of checking and verification by the Audit Department.

Other Donations During the Year

			Rs.
1.	The Secretary, Mill Owner's Association (for 1940)	...	400
2.	The Secretary, Mill Owner's Association (for 1941)	...	400
3.	Messrs. Burmah-Shell Oil Storage and Distributing Co. of India, Ltd.	...	350
4.	A. H. Bhiwandiwala, Esq.	...	300
5.	The Secretary, The B. E. S. & T. Co., Ltd.	...	300
6.	Messrs. Nowrosjee Wadia & Sons, Agents, Messrs. Bombay Dyeing and Manufacturing Co.	...	251
7.	Indian Oxygen and Acetylene Co. Ltd.	...	250
8.	Messrs. Zandu Pharmaceutical Works	...	101
9.	Mathuradas Vassanjee, Esq.	...	101
10.	Messrs. Thackersey Moolji & Co., Agents, Messrs. Hindustan Spinning and Weaving Co. Ltd.	...	100
11.	Messrs. Thackersey Moolji Sons & Co. Agents, Messrs. Western India Spinning and Manufacturing Co. Ltd.	...	100

12. Messrs. Damodar Thackersey Moolji & Co. Agents, Messrs. Indian Manufacturing Co. Ltd. ... 100
13. Messrs. Jethabhai Khatau & Co., Agents, Messrs. Digvijay Spinning & Weaving Co. Ltd. ... 100
14. The General Manager & Engineer, The Bombay Gas Co. Ltd. ... 100
15. Messrs. W. & T. Henley's Telegraph Works, Ltd. ... 100
16. Messrs. Standard Vacuum Oil Co. Ltd. ... 100
17. The Managing Director, Messrs. Greaves Cotton & Co. Ltd. ... 100
18. Messrs. Tata Sons, Ltd.—Agents, Messrs. Swadeshi Mills, Ltd. ... 100
19. Messrs. Swan Mills,—Agents, Messrs. James Finlay & Co. ... 100
20. Messrs. Finlay Mills, Ltd. ... 100
21. Messrs. Killick Nixon & Co.—Agents, Messrs. Kohinoor Mills ... 100
22. The Secretary, Messrs. Century Spinning and Manufacturing Company ... 100
23. Master Harjeevan J. Majmudar ... 75
24. Dr W. Vaz, M.B., B.S. ... 60
25. Mahomedbhoy I. M. Rowjee, Esq. ... 51
26. Piraji Narasji, Esq. ... 50
27. Dr Miss P. C. Daroowalla, M. D. ... 50
28. Messrs. N. Sirur & Co. ... 50
29. The Manager, Comptoir National d'Escompte de Paris ... 50
30. Messrs. Martin & Harris, Ltd. ... 50
31. Messrs. F. M. Chinoy & Co. Ltd. ... 50
32. Messrs. Narandas Rajaram & Co. ... 50
33. R. E. Contractor, Esq. ... 50
34. Messrs. Godrej & Boyce Manufacturing Company ... 40
35. Haji Ebrahim Uplatwala, Esq. ... 31-4
36. Keru Sawlaram, Esq. ... 30
37. Mrs. Ratanji Adalji Collector ... 25
38. Abashbhoy Esufally, Esq. ... 25
39. Mrs. Shirinbai T. Bamji ... 25
40. Goan Crew R. M. S. Steith Aden ... 25
41. Messrs. Jeewanlal (1929) Ltd. ... 25
42. The Director, Messrs. Simplex Art Floor Works, Ltd. ... 25
43. Messrs. Madhusudan Mills, Ltd. ... 25
44. N. R. Ferguson, Esq. ... 25
45. Messrs. General Accident Fire & Life Assurance Corporation ... 25
46. F. A. Fizzalbhov, Esq. ... 25
47. Henry Canon, Esq. ... 25
48. Messrs. W. & T. Henley's Telegraph Works, Ltd. ... 25
49. A. D. Shroff, Esq. ... 25
50. Messrs. Ford Motor Co. of India ... 25

Gifts to the Hospital in Kind

Two iron lungs were received as a gift offered by Lord Nufheld to the Hospitals in the British Empire. The gift was received free of cost and was gratefully accepted. The charges for packing, transport and duty etc. however amounted to Rs. 497-13-0.

Appendices to the Report

Some new appendices had been added and a few old appendices modified to increase the utility of the Annual Report. Appendix 6 providing a summary of discharges and deaths according to disease had been modified and enlarged. Appendices 7, 8, and 9 are new features providing a classification of patients suffering from tuberculosis and malignant neoplasms. Lists of surgical operations in Appendix 10 had been classified in a more systematic manner. Appendices on fractures and head injuries, introduced in the annual report last year, had been printed as Appendices 11 and 12.

Appendix 13 gives details on patients with diseases of the female generative organs. All these changes were in accordance with the recommendations made by the Committee of the Superintendents of Hospitals in Bombay over a couple of years ago, and it was hoped that other hospitals will publish their statistical information on similar lines for purposes of comparison and study. It was a matter for gratification that an increasing number of non-Government hospitals had been basing their annual reports on the lines of the Annual Report of the K.E.M. Hospital. It was hoped that the statistical information given in the Annual Reports of Government Hospitals would follow the recommendations of the said Committee of the Hospital Superintendents, but the war has prevented such a change.

The College

8 fresh admissions were made in June 1940. An educational survey of these students shows that their average age at the time of their admission was 19 (19.9 the previous year); it being 17.2 (17.4) when they matriculated. 74 of these students were single, 3 married, and 4 betrothed. 10 of their parents were dependent on service, 19 on business, 13 on medical profession, 4 on legal profession, 4 on pensions, 1 on landed property, 1 on agriculture, 21 on miscellaneous occupations, and 8 had no occupation at all. The number of undergraduate students on the College roll at the close of the year was 426, which included 75 women students, and that of postgraduate and research students was 84.

			Male students.	Female students.
1st M.B., B.S.	1st year	...	64	17
	2nd year	...	82	15
2nd M.B., B.S.	3rd year	...	53	17
3rd M.B., B.S.	4th year	...	35	3
	5th year	...	117	23
Total number of students		...	351	75
Post-graduates including research students		...	79	5
	Grand total	...	430	80

Bai Jerbai Wadia Hospital for Children continued their facilities given to the students of this College for clinical instruction in the diseases of children.

Examinations

Of 440 students examined, 283 students (64.3 per cent) were placed under Class 'A', 154 (35 per cent) in Class 'B' and 3 (0.7 per cent) in class 'C'; the percentages of students classified as belonging to 'A', 'B' and 'C' classes during the year 1939–1940 being 67, 32, and 0.7 respectively. During the year, this college has maintained its reputation of leading the other colleges affiliated to the University of Bombay in the percentage of students placed in 'A' class by the University Board for Medical Inspection.

Examinations.		Candidates sent up.	No. passing the whole examination.
1st M.B.B.S.	April 1940 ...	86	48
	Oct. 1940 ...	36	21
2nd M.B.B.S.	April 1940 ...	42	32
	Dec. 1940 ...	26	19
3rd M.B.B.S.	April 1940 ...	87	37
	Dec. 1940 ...	98	43
M.D. (Medicine)	July 1940 ...	2	...
	Oct. 1940 ...	2	1
M.D. (Pathology)	June 1940 ...	1	1
	Oct. 1940 ...	...	...
M.D. (Midwifery)	June 1940 ...	2	...
	Oct. 1940 ...	3	1
M.S.	June 1940 ...	4	1
	Oct. 1940 ...	6	2
D.O.	June 1940 ...	...	...
	Oct. 1940 ...	2	1
D.O.M.S.	July 1940 ...	5	3
	Dec. 1940 ...	3	2
B.Sc.	April 1940 ...	2	...

Annual Cost and Revenue

The total expenditure of the college including liabilities and expenditure on the hostels came to Rs. 2,77.087 during the year (Rs. 2,62.214 during 1939–40). The increase in cost is largely due to the creation of the additional post of Professor of Pathology and Bacteriology on Rs. 1,000 per month during the leave vacancy of Professor V.R. Khanolkar. Part of the increased cost is due to normal increments in the salaries of the staff and the creation of a few additional posts on the teaching staff.

The revenue of the college in the form of tuition fees, hostel rent, and miscellaneous receipts amounted to Rs. 1.23,006 (Rs. 1,19,647 during 1939–40). The gross cost per student for the year under report came to Rs. 650 while the net cost worked out at Rs. 361.5 as compared with the corresponding figures of Rs. 608 and Rs. 331, respectively, for the year 1939–40. The amount of fees received from the postgraduate students was Rs. 7,131.

Library and Museum

204 new books were added to the college library (232 in the previous year). Of these, 26 books were presented by the authors as complimentary copies. 110 volumes of medical journals were bound. The number of books issued to the medical students was 12,034 (13.426 in the preceding year). 2,869 books and journals were sent outside the library to members of the teaching staff of the college and resident medical officers of the K.E.M. Hospital.

65 new wet and dry specimens were added to the Anatomy Museum during the year and 50 old specimens were renewed The total number of specimens in the Anatomy and Comparative Anatomy section was now over 1,565. There was no space to keep more specimens and want of extra space was keenly felt for the further expansion of this section of the museum. 73 new specimens were added to the Pathology Museum while a number of old specimens which had deteriorated were discarded. 128 old specimens were remounted during the year; thus bringing the total specimens to over 1,300. 19 X-ray diapositives had been added to the Museum bringing the total to 131 at the end of the year.

In the Artist Department, 365 photographs of patients, specimens etc. were taken during the year 1940.

Students' Hostels

The number of students resident in the hostel for male students during the year was 130 (127 during the previous year). The number of women student residents in the women student's hostel during the year was 26–the same as during the previous year. The total expenditure incurred on the hostels exclusive of non-recurring expenditure was Rs. 10,724 while the income derived in the form of rent was Rs. 16,746.

Gymkhana

The students took part as usual in the Inter-Collegiate Tournaments. In the Inter-Collegiate Cricket Tournament we did well in the first round but lost to the Sydenham College in the second round. In the Badminton Tournament, Mr. J. F. Collaco reached the semi-finals in the

Singles and in the mixed doubles with Miss L. D'Souza as his partner.

In the Inter-Collegiate Tennis Tournament Miss L D'Souza reached the Finals in the Ladies' Singles. Mr. N. R. Bhagwat was selected to join the Bombay group in the tournament in Dharwar. In hockey we reached the finals but unfortunately lost to the Grant Medical College. No Inter-Collegiate Football Tournament was held during the year under report.

Research

The following projects were under way:

1. *Seasonal variation in the vitamin A content of the liver oils of marine fish of Bombay*. (Funded by IRFA). The livers of five fish known to have high concentrations of vitamin A were collected once or twice each month and the vitamin A content measured.
2. *Effect of parching of cereals and pulses on the biological values of their proteins*. (Funded by IRFA). Parching or roasting of cereals increases the biological value and digestibility of contained proteins.
3. *Metabolism of calcium in health and disease* (funded by IRFA). The decomposition of calcium salts in bone slices of rachitic rats was being studied by immersion into calcifying solutions of varying composition. The following components were being estimated in every blood sample—calcium, inorganic and organic; phosphorus; total base; albumin and globulin, chlorides, O_2 and CO_2 capacity of blood. Bai Jerbai Wadia and Byramjee Jejeebhoy Hospitals cooperated in this study.
4. *Studies in the mechanism of calcification in vitro* (Funded by Municipal Funds). Decomposition of calcium salts in the bone slices of rachitic rats was being studied by immersion into calcifying solutions of varying composition. Experiments were being done with horse serum with a view to find the factor responsible for promoting calcification in vivo.
5. *Diet survey in the city of Bombay* (Grant from the Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital Research Fund). A survey was undertaken to analyze the food consumed by families belonging to different communities of varying economic status. An attempt was made to correlate their physical and clinical state with their diet. Results showed that the defective diet was not solely the outcome of a lack of means. The majority of people investigated were on an inadequate or ill-balanced diet. Deccani, Parsi, and Gujarati families were studied.
6. *Investigation of buffalo milk in the city of Bombay* (carried out in the Physiology Department using a grant from Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital Research Fund). The goal was to establish the standards for buffalo milk by analysing a sufficient number of samples of fresh milk from different breeds in all seasons of the year. Three breeds of buffaloes—Jaffarabadi, Mehsana, and Delhi—available in Bombay were studied for the variation in the composition of milk throughout the lactation period. Herd

samples from different stables were analyzed to study the influence of conditions, seasonal or otherwise, on the composition of milk. 442 samples were analyzed.

7. *Incidence and causation of glycosuria during pregnancy*. It was found that, during certain months of pregnancy, a large percentage of pregnant women show the presence of glucose in urine. The blood sugar curves of such cases showing sugar in the urine were being studied and further work was contemplated with a view to investigating the cause of glycosuria. The Nowrosjee Wadia Maternity Hospital and The New Hospital for Women and Children provided facilities for the collection of relevant data and clinical material.
8. *The part played by the corpus luteum in vitamin 'C' balance in women*. An attempt was being made to establish the finding that a large amount of ascorbic acid is eliminated in the urine of women as they near their menstrual period and to isolate it from urine. These findings were to be supplemented by a study of the level of ascorbic acid content of the different tissues after artificial production of corpus luteum by the injection of pregnant woman's urine in experimental animals.
9. *Investigation on indigenous drugs (funded by IRFA)*
   The actions of the glucoalkaloid obtained from *Solanum xanthocarpum* was experimentally studied and was found to have a cardiotonic and some diuretic action in animals. In addition, an action on the water imbibition of tissues was noticed and it was being further studied.
10. An alkaloidal substance was isolated from the seeds of *Carica papaya* and was found to be different from the alkaloid isolated from the papaya leaves by previous workers. This new substance (provisionally called *carpasemine)* was under investigation and some preliminary pharmacological studies were also being carried out with it.
11. *Sphaeranthus indicus* was shown to contains a large amount of tannin and a sweet smelling essential oil. The pharmacological properties of this drug were being studied.
12. The examination of *Aristolochia bracteata* showed that it contains a fatty oil, a resin, a tannin, potassium chloride and potassium nitrate. The constants for the fatty oil were determined, and its unsaponifiable portion was found to contain a crystalline substance. The pharmacological properties of this drug were being studied.
13. *Species of frogs found in the neighborhood of Bombay and their peculiar reactions to drugs* (funded by the University of Bombay)
14. *Determination of the exact period of ossification of bones amongst Indian school children.* (Funded by the University of Bombay) X-ray films of the elbow, hip, and ankle joints of 300 students of both sexes were studied. The R.M. Bhat High School, Parel and King George High School, Dadar had kindly permitted this study. Dr R.S. Savur did the radiology at great personal sacrifice.
15. *Development of body parts of children between 6 and Il years of age.* (Study by the Anatomy Department using a grant from Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital

Research Fund). This was done with a view to determine firstly, the development of the body as a whole through different age periods and its relation to the nutrition and to study the development of the individual body parts. Initially, measurements of school going children up to 11 years were taken. Over the last year, measurements of children of ages above 11 years were also taken. Nearly 5000 boys and 700 girls have been measured. The work was in progress. The following institutions permitted measurements of school children in their institutions: District School Board, Bombay Suburban District, the Bandra Municipality, managing committee of the Anandilal Poddar School, Santa Cruz.

16. *Height, weight, and chest measurements: Enquiry relating to Gujarati speaking male school children in Bombay.* This survey of various measurements of school children attending the Bharda New High School, Bombay, was taken up by D Jivraj N. Mehta of the Seth G.S. Medical College in collaboration with Dr K.S. Mhaskar and Mr L.S. Vaidyanathan, Actuary to the Oriental Government Security Life Assurance Co. Ltd., Bombay. All the children were Gujarati speaking, being either Hindus, Parsi, or Muslim. The survey was undertaken with a view to ascertaining the normal standards of height, weight, and chest measurements etc. of Gujarati speaking children of school-going age in Bombay. The physical and medical records of 6,860 children were studied dating as far back as 1916. The enquiry was divided into 3 parts according to the main communities—2,824 students from the Parsi community, 2,617 from the Hindu community, and 1,375 from the Muslim community.
17. *An experimental and cytological study in the early development of Euchoroidia eggs by artificial fertilization and the relationship of controlled and uncontrolled larval forms* to determine the exact time required for the formation of cleavage, segmentation, gastrulation, and various other embryological data and establishing the relationship with controlled and uncontrolled forms.
18. *Type of pneumococci in Bombay with a view to preparing of type-specific serum* (funded by the University of Bombay). Sputum from patients with lobar pneumonia were typed and specific sera have been prepared against Type I and II pneumococci. These sera were being tried in patients with lobar pneumonia belonging to these groups. An additional study was done of a series of patients being treated with M & B 693 alone and M & B 693 in conjunction with the serum. Hemocytic count, skiagram of the chest and electrocardiogram were done in each case. The Veterinary College, Bombay co-operated in the study.
19. *Enquiry into the pathogenic and non-pathogenic flora and fauna of the Sewage Purification Works, Dadar* (funded by a Municipal grant). In 1938, an epidemic of typhoid raged in the north of Bombay. The initiation of the epidemic and keeping it in an hyperendemic state was attributed to the proximity of the Dadar Sewage Purification and disposal works. This study was expected to help clarify the situation.
20. *Role of Anaerobic Streptococci ii Puerperal*

Sepsis (funded by the Bombay University). The research began by investigating the normal vaginal flora during the last month of pregnancy. The cultures were grown both aerobically and anaerobically, special attention being paid to streptococcal growth found to be strict anaerobes. Later, cultures were prepared from the swabs taken from the local discharge of patients with afebrile puerperium. By the end of the year the research was started with the investigation of the septic puerperal cases in whom no operative interference was done at the time of labor. In these cases, both vaginal discharge and the blood culture were prepared for anaerobic growth of streptococci. Nowrosjee Wadia Maternity and the Cama and Albless Hospitals provided facilities for the collection of clinical material for the conduct of the above enquiry.

21. *Reliability of guinea-pig inoculation test in the diagnosis of human tubercular affection* (originally funded by IRFA and then by a grant from Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital Research Fund). It was experienced that the number of positive guinea-pig inoculation tests were few. When both the culture and guinea-pig inoculations were carried out on the same specimen of material, the former was positive more often. Experiments with massive and graduated doses of mycobacteria were carried out in animals and it was shown that a positive guinea-pig inoculation test depended on the number and the virulence of mycobacterium tuberculosis. The negative results in some cases in which the material was undoubtedly tubercular could be attributed to a lack of sufficient number of virulent germs. The question as regards the resistance of the local breed of guinea-pigs is being studied.
22. *The bacteriology of infections of wounds by anaerobic bacteria* (funded by IRFA). This does not seem to have been studied in this country. Methods of cultivation of these germs have been developed in the pathology department and a study of every deep-seated wound is being made with a view to detect the incidence of different types of anaerobes responsible for the infection.
23. *Study of unrecognized type of nodules occurring in human spleens*. For the last two years, 11 specimens of spleen showed the presence of nodules varying in size from 2 to 25 mm. They were discrete, slightly raised above the surface, and sharply demarcated from the rest of the splenic tissue. They suggested a parasitic cause for their production. The material was carefully examined from that point of view and the presence of microfilaria could be demonstrated in every one of them. The nodules appear to be granulomata of microfilarial origin. So far, as our information goes, such nodules have not been previously described.
24. *Enquiry into toxemia of pregnancy* (originally funded by IRFA and then by Dr N.A. Purandare at his own cost). Tests were carried on with albumin and globulin fractions of the autolyzed saline extracts of normal placentae and then of the placentae of toxemic patients. When the albumin fraction was injected into pregnant guinea-pigs and rabbits, it produced

pronounced changes in the liver while kidneys were more affected by globulin fraction. Experiments were then carried on with the globulin fraction alone. This was obtained as a powder form so as to know the exact quantity used and what changes were produced in the kidneys in proportion to it. Blood chemistry of the toxemic patient was also studied in order to establish the diagnosis and also to find out any deviation from normal. Nowrosjee Wadia Maternity Hospital, the Cama and Albless Hospitals and the Haffkine Institute collaborated in this enquiry.

25. *Enquiry on thromboangiitis obliterans* (funded by IRFA for three years and then by Dr R.N. Cooper at his own cost with the help of material supplied by the Seth G.S.M. College and the K.E.M. Hospital Research Fund). The different lesions resulting from peripheral vascular disorders with special reference to thromboangiitis obliterans were studied. Despite the extensive work with a view to identify the causative agent, the information so far had not yielded any definite clue.
26. *Enquiry regarding the etiological incidence of heart disease*. Analysis of the autopsy records of 4,335 consecutive autopsies at the K.E.M. Hospital revealed 568 cases with cardiovascular lesions. The largest etiological group was formed by cardiovascular syphilis (29.3%). Hypertensive and arteriosclerotic disease formed 21.7%. Rheumatic heart disease accounted for 6.1% and infective conditions were responsible for 18.4% of the cases. Congenital lesions and other miscellaneous conditions accounted for the rest of the cases.
27. Age and sex incidence in different forms of heart diseases. Patients admitted into the K.E.M. Hospital, Bombay with cardiac failure were studied in order to determine:
    1. Etiological factors concerned
    2. Incidence of the different types of failure
    3. Degrees of failure or decomposition encountered, with reference to prognosis
    4. Age and sex incidence of heart failure cases
    5. Earliest symptoms and signs of heart failure
    6. Relative importance of various symptoms and signs
    7. Incidence and degrees of cardiac-enlargement encountered in patients with heart failure by the methods of palpation and percussion
    8. The importance of non-valvular heart disease and pulmonary diseases in the genesis of heart failure
    9. An analysis of the different forms of valvular lesions encountered
    10. An analytical study of various features by heart failure cases (i) murmurs (ii) edema (iii) hepatomegaly (iv) splenomegaly (v) blood count (vi) urine etc.
28. *Tuberculin in ophthalmic practice.* Regarding the above research, very encouraging results were obtained, so much so that attempts were made to evolve a therapeutic test for ocular tuberculosis with the help of old bovine tuberculin and success has been attained to a great extent in this direction.

Articles on medical subjects published by

the members of the Honorary, Professorial and other Staff during the year were as follows. (Articles published in the college magazine are not included.)

Serial No.	Name of article.	Contributed by.	Name of the Journal publishing it.
1	The Height, Weight and Chest Measurements Inquiry relating to some school children (Males) in Bombay.	Dr. Jivraj N. Mehta, M.D. (Lond.) M.R.C.P. (Lond.) Dr. K. S. Mhaskar, M.A., M.D. (Bom.) Mr. L. S. Vaidyanathan, M.A. F.I.A.	Journal of the Indian Medical Association, January 1941.
2	Early Diagnosis of Typhoid Fever ...	Prof. R. G. Dhayagude, M.D. (Bom.) ...	Medical Bulletin, April 20th, 1940.
3	Pathological Conditions of thyroid gland ...	Dr. R. G. Modak, M.D. (Bom.) ...	Medical Bulletin, April 6th, 1940.
4	Spirochaetal Jaundice in Bombay ...	Dr. K. D. Manohar, M.D. (Bom.). ...	Medical Bulletin, July 20th, 1940.
5	Some Unusual Manifestations of Acarus Infection.	Do. do. ...	Indian Journal of Venereal Diseases, January-March 1941.
6	Studies on Basal Metabolism in Bombay, Part II.	Prof. S. P. Niyogi, M.Sc., M.B. (Cal.) ... Mr. P. L. Powar, M.B.B.S. & Mr. M. V. Sirsat, M.B.B.S.	Indian Journal of Medical Research, October 1940.
7	Studies in Calcium and Phosphorus Metabolism, Part III.	Dr. V. N. Patwardhan, M.Sc. (Bom.), Ph. D. (Lond.). & Dr. R. G. Chitre, M.Sc., P.H.D.	Indian Journal of Medical Research, October, 1940.
8	Do. do. Part IV ...	Do. do. ...	Do. do.
9	Compounds of phosphorus in milk powders ...	Dr. B. N. Acharya, M.Sc., Ph. D. ... & Mr. S. C. Devadatta.	Journal of the University of Bombay, March, 1941.
10	A short historical review of the development of the present knowledge of Diabetes Mellitus.	Dr. C. C. Merchant, M.B.B.S. ...	Antiseptic, June, 1940.
11	Drugs used in the treatment of Asthma ...	Dr. C. C. Merchant, M.B.B.S. ...	Antiseptic, October, 1940.
12	Early recognition of sex in Human Embroyo.	Mr. D. S. Deshpande, M.Sc. ...	Read before the 28th Indian Science Congress, 1941.
13	On the Gigantism of Umbilical Hernia ...	Do. do. ...	Do. do.
14	On the Embryonic Depression of Palmer and Plants Pads in man.	Do. do. ...	Do. do.
15	Pulsation of Heart in Thalassema Bombayensis.	Do. do. ...	Do. do.
16	Excretory vesicles of Thalassema Bombayensis.	Do. do. ...	Do. do.
17	Locomotion of Thalssema Bombayensis ...	Do. do. ...	Do. do.
18	Olfaction in Snakes ...	Do. do. ...	Do. do
19	Feeding Habits of Cobras and Pythons ...	Do. do. ...	Do. do.
20	Intricacies of Ectopic Pregnancy ...	Dr. H. DeSa, M.D., F.C.O.G. (Lond.) ...	Journal of the University of Bombay, March 1941.
21	Blood Transfusion in Surgery ...	Dr. R. N. Cooper, M.S. (Lond.), F.R.C.S. (Eng.).	Medical Bulletin, July 1940.
22	Experiences with lesions of the kidney and the urether.	Dr. V. M. Kaikini, B.A. (Bom.), F.R.C.S. (Edin.).	Medical Bulletin, 4th May 1940.
23	Carcinoma Larynx ...	Do. do. ...	Antiseptic, October, 1940.
24	On the Estimation of Circulatory Efficiency ...	Dr. N. D. Patel, M.D. (Lond.), M.R.C.P. (Lond.).	Medical Bulletin, 6th July 1940.
25	Chemotherapy in Streptococcal Infections. ...	Dr. M. J. Shah, M.R.C.P. (Lond.), D.T.M. & H. (Lond.).	Medical Bulletin, 1st June 1940.
26	Intravenous Injection of Oxygen under Normal Atmospheric pressure.	Capt. Inderjit Singh, Ph.D. (Camb.) M.B. (Rangoon) and Dr M. J. Shah, M.R.C.P. (Lond.) D.T.M. & S. (Lond.)	"Lancet", 18th May 1940.
27	Calcium Gluconate in testing circulating time.	Dr. M. J. Shah, M.R.C.P. (Lond.), D.T.M. & H. (Lond.)	Medical Bulletin, 1st June 1940.
28	Some problems of Gujarati Vegatarian Food ...	Do. do. ...	Journal of Gujarati Research Society, 1940.
29	Consanguinity and Marriage ...	Dr. A. E. DeSa, F.R.C.S. (Eng.). ...	Medical Bulletin, 1st June 1940.
30	The Surgery of Diabetes ...	Do. do. ...	Medical Bulletin, 21st December 1940
31	An enquiry into Normal Blood Pressure Phenomena.	Dr. R. J. Vakil, M.D. (Lond.), M.R.C.P. (Lond.).	Medical Bulletin, February 1941.

Special classes for D.O. and D.O.M.S. were held during the year as in previous years. *A.R.P.* classes were held at this college for the medical practitioners and students, nurses, and the lay public. A second Refresher Course was held for the medical practitioners for two weeks in October 1940, under the joint auspices of the Seth G.S. Medical College and the Grant Medical College. Only 5 candidates took advantage of the course. Dr Jivraj Mehta commented: 'It is a matter for consideration if the teaching staff should be called upon to waste their energy with such poor response on the part of those for whom the course was organized, particularly when the fees were moderate.'

Triennial Inspection Committee

The triennial inspection of the college was carried out by a committee appointed by the University of Bombay. It commented favorably on the arrangements in the college for the instruction of students. The Inspectors in the subjects of Pathology, Forensic Medicine, and Hygiene appointed by the Medical Council of India also visited these institutions in December 1940 for the purpose of carrying inspection of the courses of instruction, facilities for teaching and examinations of this University in those subjects.

The Co-Operative Credit Society

The membership of the Society has risen to 261 by the end of April 1941 (257 on 30 April 1940). 22 Members have joined the Society. 18 retired during the same period. The share capital of the Society increased to Rs. 12,695-0-0 by the end of March 1941 (Rs. 10,056-4-0 on 30 April 1940). Fixed Deposits from non-members to the extent of Rs. 1,200 have been accepted. The sum of Rs. 1,950 has been refunded to some of the non-members who had deposited their amounts at the start of the Society. The Society still has Rs. 4,800 as Fixed Deposits from non-members.

The loans advanced by the Society to its members amounted to Rs. 20,910-0-0 while Rs. 19,274-5-0 were received from members as repayment of previous loans. Of the total loan advances about 55 per cent were given for liquidating past debts as against 75 per cent in the previous year. The labor staff appears to be steadily freeing themselves from money lenders. The average loan by a member during the year was Rs. 116-0-0 (Rs. 119-0-0 during the previous year).

At its 4th Annual General Meeting held on 8 October 1940, the Society declared a dividend of 6.25 per cent on the paid-up share capital for the year ending 30 June 1940. The net profits earned by the Society during the same year were Rs. 1,095-8-0. The reserve funds of the Society amount to Rs. 950-2-0. This amount includes the donation of Rs. 300-0-0 made by Managing Director of the Bombay Provincial Co-operative Bank, Ltd.

The Society which was hitherto in class 'B' has been promoted to class 'A'.

17

Annual Report (1941–1942)

Staff

THE COLLEGE AND HOSPITAL SENIOR STAFF

Dean

JIVRAJ N. MEHTA, ESQ., M.D. (Lond.), M.R.C.P. (Lond.), F.C.P.S. (Bom.).

Assistant Dean

R. E. DADACHANJI, ESQ., M.B.B.S. (Bom.).

Assistant Medical Officers

V. V. JADHAV, ESQ., M.B.B.S. (Bom.).
V. H. MAJMUDAR, ESQ., B.Sc., M.B.B.S. (Bom.).

Professor of Anatomy

R. P. KOPPIKAR, ESQ., M.S. (Bom.), F.C.P.S. (Bom.).

Assistant Professor of Anatomy

G. M. KURULKAR, ESQ., M.B.B.S. (Bom.).

Professor of Physiology

S. P. NIYOGI, ESQ., M.SC., M.B. (Cal.).

Assistant Professor of Biochemistry

V. N. PATWARDHAN, ESQ., M.Sc. (Bom.), Ph.D. (Lond.), A.I.I.Sc.

Assistant Professor of Physiology

A. FERNANDEZ, ESQ., M.B.B.S. (Bom.).

Professor of Pharmacology and Materia Medica

A. S. PARANJPE, ESQ., M.D. (Heidl.), D.T.M. (Lond.), M.B. CH. B. (Edin.).

Professor of Pathology and Bacteriology

R. G. DHAYAGUDE, ESQ., M.D. (Bom.).

Assistant Professors of Pathology and Bacteriology

R. G. MODAK, ESQ., M.D. (Bom.) upto 31-8-1941 (on leave from 9-6-1941 to 31-8-1941) preparatory to retirement.

B. M. AMIN, ESQ., M.D. (Bom.) From 10-7-1941 to 31-8-1941 on acting appointment. Appointed as Assistant Professor of Pathology and Bacteriology from 1-12-1941.

JOB MORDECAI, ESQ., M.D. (Bom.) From 8-5-1941. Resigned with effect from 1-3-1941 (Sic.).

Honorary Physicians and Lecturers in Medicine

M. D. D. GILDER, ESQ., B.A., M.D. (Lond.), F.R.C.S. (Eng.), F.C.P.S. (Bom.).
P. C. BHARUCHA, ESQ., M.D. (Lond.), B.S. (Lond.), F.C.P.S. (Bom.).
N. D. PATEL, ESQ., M.D. (Lond.), M.R.C.P. (Lond.).
N. K. SAHIAR, ESQ., M.D. (Lond.), M.R.C.P. (Lond.).
ABDUL HAMEED ESQ., M.D. (Bom.).
MANGALDAS J. SHAH, ESQ., M.B.B.S. (Bom.), M.R.C.P. (Lond.), D.T.M. & H. (Lond.).

Honorary Assistant Physicians and Lecturers in Medicine

P. RAGHAVAN, ESQ., M.D. (Bom.).
R. J. VAKIL, ESQ., M.D. (Lond.), M.R.C.P. (Lond.), F.R.F.P.S.
J. C. PATEL, ESQ., M.D. (Bom.), M.R.C.P. (Lond.).
E. R. DeMELLO, ESQ., M.D. (Bom.).

Honorary Surgeons and Lecturers in Surgery
R.N. COOPER, ESQ., M.S. (Lond.), F.R.C.S. (Eng.), F.C.P.S. (Bom.).
T. O. SHAH, ESQ., L.M. & S. (Bom.), F.R.C.S. (Eng.), F.C.P.S. (Bom.).
V. M. KAIKINI, ESQ., B.A., M.B.B.S. (Bom.), F.R.C.S. (Edin.), F.C.P.S.
A. V. BALIGA, ESQ., F.R.C.S. (Eng.).
K. G. MUNSIF, ESQ., M.B.B.S. (Bom.), F.R.C.S. (Eng.).

Honorary Assistant Surgeons
G. M. PHADKE, ESQ., M.B.B.S. (Lond.), F.R.C.S. (Eng.).
M. M. PANDYA, ESQ., M.B.B.S. (Bom.), F.R.C.S. (Eng.).
ARTHUR E. DeSA, ESQ., M.B.B.S., (Bom.), F.R.C.S. (Eng.).
S. H. CHITNIS, ESQ., M.B.B.S., M.S. (Bom.).
R. G. GINDE, ESQ., M.B.B.S., M.S. (Bom.).

Honorary Orthopedic Surgeon
R. J. KATRAK ESQ., B.A., B.Sc., (Bom.), F.R.C.S. (Eng.), M.Ch. Orthopaedics (Liverpool) as from 2-4-1942.

Honorary Assistant Orthopedic Surgeon
A. K. TALWALKAR, ESQ., F.R.C.S. (Eng.).

Honorary Aural Surgeon and Lecturer in Ear, Nose and Throat
HOMI D. GANDHI, ESQ., M.B.B.S. (Bom.), F.R.C.S. (Edin.).

Honorary Assistant Aural Surgeons
S. G. JOSHI, ESQ., M.S. (Bom.).

Honorary Gynecologists and Lecturers in Gynecology and Obstetrics
MISS P. C. DAROOWALLA, M.D. (Bom.).
SIR MANGALDAS V. MEHTA, KT., O.B.E., B.A., F.C.P.S.I., F.C.P.S., F.R.C.O.G., (Lond.), Ex-Officio Honorary Lecturer in Obstetrics.

Honorary Assistant Gynecologists
K. M. MASANI, ESQ., M.D. (Bom.), F.R.C.S. (Eng.).
B. N. PURANDARE, ESQ., M.D. (Bom.), F.R.C.S. (Edin.).

Honorary Ophthalmic Surgeons and Lecturers in Ophthalmology
G. T. MODY, ESQ., D.O. (Oxon.), M.R.C.S. (Eng.).

Honorary Assistant Ophthalmic Surgeon
S. N. COOPER, ESQ., M.B.B.S. (Bom.), D.O. (Oxon & Bom.), D.O.M.S. (Lond.).

Honorary Radiologist and Lecturer in Radiology and Electro-therapy
J. L. DESAI, ESQ., M.B.B.S. (Bom), D.M.R.E. (Cantab.).

Honorary Assistant Radiologist
Z. J. JOSEPH, ESQ., M.D. (Bom.), D.M.R.E. (Cantab.).

Honorary Anesthetist and Lecturer in Anesthesia
MOKSHA MADAN DESAI, ESQ., M.B.B.S. (Bom.), D.A. (Eng.).

Honorary Dental Surgeon and Lecturer in Dentistry
D. M. DESAI, ESQ., L.D.S., R.C.S. (Eng.).

Honorary Assistant Dental Surgeon
J. A. AVASIA, ESQ., L.D.S., R.C.S. (Eng.).

Honorary Dermatologist and Venereologist and Lecturer in Dermatology and Venereology
A. C. REBELLO, ESQ., M.B.B.S. (Bom.), D.T.M. & H. (Lond.).

Honorary Assistant Dermatologist and Venereologist
J. A. FERNANDEZ, ESQ., L.R.C.P. (Lond.), M.R.C.S. (Eng.), M.R.C.P. (Edin.).

Honorary Lecturer in Medical Jurisprudence and Toxicology
R. E. DADACHANJI, ESQ., M.B.B.S. (Bom.).

Honorary Lecturer in Hygiene and Preventive Medicine
R. K. MHATRE, ESQ., L.M. & S. (Bom.), D.P.H., D.T.M. & H. (Cantab.), up to 15-7-1941.

B. C. DAS-GUPTA, ESQ., B.Sc. (Hon.), (Cal.), M.B. (Cal.), M.R.C.P. (Ireland), D.T.M. & H. (Lond.), D.P.H. (Lond.) From 9-3-1942.

Honorary Lecturer in Psychiatry
K. A. J. LALKAKA, ESQ., M.B.B.S. (Bom.).

Honorary Staff

Dr R.K. Mhatre, Honorary Lecturer in Hygiene retired during the year and his place was taken by the new Executive Health Officer, Dr B.C. Das Gupta.

Dr R.N. Dixit, Honorary Assistant Surgeon resigned and Dr R.G. Ginde was appointed in his place.

Drs M.D.D. Gilder and P.C. Bharucha, Honorary Consulting Physicians and Honorary Lecturers in Medicine, were requested to continue to work in their respective posts in a purely honorary capacity for a further period of one year from 1 January 1942 which they kindly agreed to do.

The Hospital

432 beds, including six added for the tonsil ward, were generally always occupied.

Department.	Men.	Women.	Children.	Total.
Medical ...	108	36	10	154
Surgical ...	105	35	12	152
Gynaecological ...	...	35	...	35
Ophthalmic ...	16	16	...	32
Aural ...	10	3	8	21
Skin and Venereal ...	18	2	...	20
Casualty ...	6	...	...	6
Isolation ...	6	6	...	12
Total ...	269	133	30	432

The total number of inpatients admitted in the year was 13,135 (12,575 in 1940 and 11,932 in 1939).

On an average, 19 more outpatients attended the outpatient department of the hospital every day than in the year 1940. So far, as the inpatient work is concerned, there have often been 25 to 30 extra patients over the scheduled number in the hospital, the maximum number of inpatients on a single day being 503, making their nursing and care extremely difficult. Some relief by way of additional staff has however been sanctioned by the Corporation for the year 1942–43.

Particulars.	Figures for the year 1941.	Figures for the year 1940.	Figures for the year 1939.
(a) In-patients—			
1. Scheduled strength of beds	432	426	426
2. Daily average No. of in-patients	450.5	423	384
3. Total No. of new in-patients treated	13,135	12,575	11,932
4. Average No. of days each patient was resident	12.14	11.98	11.42
(b) Out-patients—			
1. Total No. of new out-patients	1,25,699	1,21,760	1,22,473
2. Daily average No. of new out-patients	393	383	386
3. Total No. of out-patient attendance	4,14,936	4,05,093	3,93,496
4. Daily average No. of out-patient attendance	1,326	1,307	1,262
5. No. of casualty patients included in No. 1 above	25,656	20,665	20,230
(c) Operations—			
1. Total No. of operations on in-patients	5,340	4,056	3,762
2. Total No. of operations on out-patients	11,450	10,201	10,209

Out of the total number of 13,564 inpatients (13,135 admitted during the year under report and 429 previous year's balance), 3,197 were cured, 6,870 were discharged relieved, 1,776 either left the hospital against medical advice or were otherwise discharged, and 1,271 died leaving a balance of 450 patients at the end of the year. Out of 1,271 deaths, 378 died within the first 24 hours of admission, 228 after 24 hours and within 3 days of admission, and the remaining 65 after 3 days of their admission into the Hospital. Likewise the highest number on a single day of old cases treated was 1,334, of casualty cases 107 and of inpatients admitted 65.

The highest number of outpatient attendance on any particular day during the year 1941 was 1,898, the highest

number of new admissions in the outdoor department on a single day being 517.

The total expenditure incurred on the maintenance of the hospital during the year 1941–42, including liabilities outstanding at the end of the year and exclusive of cost on the extension scheme was Rs. 6,72,239. This expenditure includes the cost of maintenance and treatment of inpatients, the outpatient department, the resident, medical, nursing, and labor staff as well as that of the administration and the maintenance and repairs of buildings etc.

The relative cost of inpatients and outpatients per patient, per day, during the years 1941–42, 1940–41, and 1939–40 respectively:

Particulars.	1941-42.	1940-41.	1939-40.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
(a) Average cost per in-patient per day ...	3 0 2	2 15 3	3 1 6
(b) Average cost per in-patient admission ...	38 0 3	36 7 2	30 0 5
(c) Average cost per out-patient attendance ...	0 6 8	0 6 0	0 5 8
(d) Average cost per out-patient admission ...	1 6 0	1 3 9	1 2 0

Cost per inpatient per day, for the years 1941–42, 1940–41 and 1939–40 will be seen from the following table:

Year.	Diets.	Drugs, dressings, surgical appliances etc.	Stores and Linen.	Heating and lighting.	Miscel-laneous.	Establish-ment.	Repairs to buildings and engi-neering.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1941-42	0 7 0	0 7 8	0 3 6	0 2 5	0 1 8	1 7 11	0 2 0	3 0 2
1940-41	0 7 5	0 6 8	0 2 8	0 1 1	0 1 11	1 9 6	0 2 0	2 15 3
1939-40	0 6 6	0 6 11	0 3 3	0 1 0	0 2 4	1 9 4	0 4 2	3 1 6

The average cost of every new outpatient admission completely treated during the year under report in comparison with that for the previous two years:

Year.	Drugs, dressings surgical appliances etc.	Stores and Linen.	Heating and lighting.	Miscella-neous.	Establish-ment.	Repairs to buildings and engi-neering.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1941-42	0 6 9	0 0 11	0 0 5	0 0 4	0 11 4	0 2 3	1 6 0
1940-41	0 7 0	0 0 9	0 0 2	0 0 4	0 10 3	0 1 3	1 3 9
1939-40	0 6 7	0 0 7	0 0 2	0 0 4	0 9 11	0 0 5	1 2 0

The actual cost incurred on patients (inpatients as well as outpatients) under drugs, surgical appliances etc. is more than that indicated in the above tables as the cost of some of the expensive drugs, injections, blood transfusions, etc. was met to the extent of Rs. 15,324-13-2 in this year, as in previous years, from the Poor Box Charity Fund.

The destitute and incurable patients of the hospital, as also those needing no active treatment but whose relatives would not take them away from the hospital, were sent to Lady Dhunbai Jehangir Home for Destitutes and King George V Infirmary for Incurables, respectively, which receive an annual contribution of Rs. 10.000 from the Municipal Corporation. During the year under report, 13 patients were transferred to the Destitute Home (6 last year) and 524 patients to the Infirmary (263 last year). 176 patients suffering from pulmonary tuberculosis were transferred to the Maratha Hospital and 1,159 patients suffering from various infectious diseases were transferred to the Arthur Road Hospital. 291 cases of enteric fever, 271 cases of dysentery, and 29 cases of meningitis had to be transferred there on account of congestion in the hospital. Four cases suffering from early pulmonary tuberculosis were sent to the Turner Sanatorium during the year. 68 female patients were transferred to the Nowrosjee Wadia Maternity Hospital.

Extensions of the Hospital

The War made it difficult to obtain building material. However, it was possible to complete, during this year, extensions to the outpatient department, hospital kitchen, and the observation ward.

Patients with Congestive Cardiac Failure

37 cases of congestive cardiac failures were treated as inpatients in 1941. Following the lines of classification as suggested by the American Heart Association, these cases have been grouped in three main classes which have been further sub-divided as shown below:

Particulars.	On admission.	On discharge.
CLASS I.		
Patients who are able to carry on their ordinary physical physical activities without discomfort	...	...
CLASS II.		
Patients who are unable to do so :—		
(a) Activities slightly limited	...	50
(b) Activities greatly limited	4	57
CLASS III.		
Patients with signs or symptoms of heart failure when at rest	233	20
Patients died	...	110
Total ...	237	237

Of the 237 cases admitted only 4 patients came under Class I (6). 233 were admitted with signs and symptoms of congestive cardiac failure when the patients were at rest. Of these, 20 left the Hospital in the same stage and 110 died. The remaining showed improvement and at the time of their discharge, 50 could be classified in Class I (a), and 57 in Class II (b).

Motor Accident Cases

During 1941, there has been a slight decrease in the number of accidents treated in the casualty department and an increase in the number treated as inpatients as compared with the previous years:

	1941.	1940.	1939.
1. Treated in the casualty department.	598	641	690
2. Treated as in-patients.	215	172	193

The largest number of motor accident cases that could be treated in the casualty or outpatients department or those severe enough to need admission to the hospital occurred in the age group 20–30. Women patients formed about 17% of the total number of motor accident cases.

Motor accident cases treated according to ages :—

(a) *Treated in the casualty department.*

——	Upto 5 years.	Between 5 and 10 years.	Between 10 and 20 years.	Between 20 and 30 years.	Between 30 and 40 years.	40 years and above.	Total.
Male ...	14	50	61	165	116	83	489
Female ...	9	29	10	16	19	26	109
Total ...	23	79	71	181	135	109	598

Admitted as indoor patients owing to the severity of injury:

——	Upto 5 years.	Between 5 and 10 years.	Between 10 and 20 years.	Between 20 and 30 years.	Between 30 and 40 years.	40 years and above.	Total.
Male ...	6	20	16	54	48	38	182
Female ...	2	9	5	5	4	8	33
Total ...	8	29	21	59	52	46	215

Mill Accident Cases

(a) *Treated in the casualty department.*

Particulars.	Male.	Female.	CHILDREN.		Total.
			Male.	Female.	
Hindus ...	2,696	63	...	...	2,759
Muslims ...	251	1	...	...	252
Christians ...	83	5	...	...	88
Others ...	46	...	...	...	46
Total ...	3,076	69	...	...	3,145

(b) Admitted as indoor patients from the casualty department on account of severity of injury.

Particulars.	Cured.	Relieved.	Left against medical advice, etc.	Died.	Total.
MALES—					
Hindus ...	16	99	13	3	131
Muslims ...	1	12	1	...	14
Christians ...	...	4	...	...	4
Others ...	...	2	...	...	2
FEMALES—					
Hindus ...	...	2	...	...	2
Muslims ...	...	...	...	...	...
Christians ...	...	...	...	...	...
Others ...	...	...	...	...	...
	17	119	14	3	153

3,913 certificates under the Workmen's Compensation Act and 325 certificates with medical opinion were issued during the year under report. The number of mill accident cases had greatly increased this year as the number of such cases treated last year was 1,984 and 16 against 3,145 and 153 patients treated in the casualty department and admitted as inpatients, respectively, during this year. This may have been due to the mills working double shift during the period under review.

Poisoning

ACIDS—		Brought over	... 248
Acid, Carbolic	... 1	Leaves of Arum Colocasia	... 1
" Hydrochloric	... 2	Liniment Camphor Co.	... 3
" Sulphuric	... 2	Nux vomica	... 1
Alcohol	... 182	Opium	... 7
Arsenic	... 2	Paranitraniline	... 2
Belladonna	... 6	Pheno-barbital	... 1
Canabis Indica	... 1	Phenyle	... 1
Carbon monoxide	... 5	Phosphorus	... 2
Chlorine	... 1	Soap	... 1
Copper Sulphate	... 1	Spirit methylated	... 2
Dhatura	... 7	Strychnine	... 1
Eucaliptus Oil	... 4	Unknown poisons	... 4
Food poisoning	... 25		
Iodine	... 6		
Kerosene	... 3		
Total	... 248	Total	... 274
		BITES—	
Insect	... 2	Snake	... 39
Rat	... 13	Tiger	... 3
Scorpion	... 3	Unknown animal	... 1
		Total	... 61

274 patients were treated in the Hospital for poisoning and 61 for bites during the year as shown.

Nurses

The results of the nursing examinations of the probationer nurses from this hospital by the Bombay Nurses, Midwives, and Health Visitors' Council:

Examination.	SEPTEMBER 1941.		FEBRUARY 1942.	
	Appeared.	Passed.	Appeared.	Passed.
1st Examination ...	10	9	6	6
2nd Examination ...	16	9	21	20

The cost of the nursing hospital per nurse, per month was Rs. 85-5-0 (Rs. 82-12-0 last year). The increase of Rs. 2-9-0 per nurse per month was largely due to the increased rates on account of the war for the supply of provisions for the nurses. The pro-rata rent for quarters provided to the support staff employed in the Nurses' Home and their Municipal Provident Fund contributions are not included in the above figures.

Nurses' Welfare Fund

3 socials and 2 picnics were arranged during the year.

The total collections to the fund by way of members subscriptions, donations, and interest was Rs. 6,366-13-0. Mention must be made of the handsome donation of Dr P.C. Bharucha, Honorary Physician, of the sum of Rs. 2,250 out of which Rs. 1,500 were ear-marked for meeting the cost of constructing the covered pathway for the use of the nurses going to the wards on

duty from the Nurses' Home and Rs. 750 for purchasing waterproof capes for the student nurses. The expenditure, inclusive of the cost of the construction of the covered pathway and that of waterproof capes, mentioned above amounted to Rs. 6,021-12-1.

Miss Kathleen E. Burrows, Matron, retired from Municipal service on 21 July 1941 due to superannuation. Miss P.S.D. Lakdawala, Assistant Matron, was appointed in her place from the same date. Dr Jivraj Mehta placed on record the valuable services Miss Burrows had rendered in developing he Nursing School of the hospital.

The post of Assistant Matron was vacant up to 28 February 1942. Miss K.M. Nowroji, Sister Tutor, was appointed to this position on 1 March 1942.

School Clinic

1,849 new children were treated in the different departments of the Hospital in addition to a large number of children who began their treatment in the previous year. The total number of children treated in the year was 7,774 (8,637 in the previous year).

Departments.	1941-42.			1940-41.		
	New cases.	Old cases.	Total.	New cases.	Old cases.	Total.
Medical and Surgical ...	490	2,413	2,903	559	2,955	3,514
Aural ...	352	602	954	449	864	1,313
Ophthalmic ...	296	1,796	2,092	344	1,616	1,960
Dental ...	456	254	710	423	414	837
Skin ...	255	860	1,115	338	675	1,013
Total ...	1,849	5,925	7,774	2,113	6,524	8,637

18 children were operated upon in the Aural department, seven in the Ophthalmic—one requiring major operation and the rest six minor. Eight minor operations were performed in the outpatient Minor Surgery Department and five fractures were corrected and plastered. Refraction was done on 82 children and glasses were prescribed to 80 children including one to whom a pair of dark glasses was given. 10 children with trachoma and five with phlyctenular conjunctivitis were treated with tuberculin injection with very encouraging results. 11 children were admitted in the wards and were treated for various disorders. Eight suffering from cervical adenitis and one with phlyctenular conjunctivitis were treated with ultra-violet rays along with cod liver oil. Children were screened and X-ray plates were taken whenever necessary. Laboratory investigations were done for a large number of children.

Three children bitten by a dog were referred to the Haffkine Institute for treatment and one child with diphtheria was transferred to the Arthur Road Hospital.

The total cost of the clinic at the K.E.M. Hospital amounted to Rs. 8,956-1-0. A detailed report of the School Clinic had been submitted to the Executive Health Officer.

Poor Box Charity Fund

The Poor Box Charity Fund from which relief was rendered to poor patients by providing them spectacles, crutches, trusses, artificial limbs, travelling expenses etc. has received steady support from the public and from the patients of this hospital. Besides relief by way of providing

K. E. M. HOSPITAL, BOMBAY.

Poor Box Charity Fund Statement of Accounts for the year 1941-42.

Dr. — RECEIPTS. — DISBURSEMENTS. — Cr.

Particulars.		Amount. Rs. a. p.
To balance in hand on 31st March 1941 ...		44 7 9
To balance with the Central Bank of India Ltd. ...		1,864 3 8
To collections from outpatient department boxes ...		1,107 11 0
To collections from the ward boxes ...		3,294 15 1
To donations ...		7,067 0 0
To Interest—		
Interest due during 1941-42	6,053 14 0	
Add interest due for 1940-41	3,023 8 0	
	9,077 6 0	
Less interest to be realised	1,351 0 0	
	7,726 6 0	
Less commission	0 11 0	
Interest received during 1941-42	7,725 11 0	
Less advance interest paid at the time of purchase of securities in 1940-41	21 13 7	
		7,703 13 5
To collections on account of issue of medical certificates ...		1,572 8 0
To part payment of spectacles ...		56 0 0
To part payment towards appliances ...		100 0 0
To miscellaneous receipts ...		43 9 0
To interest suspense account for advance interest paid at the time of purchase of Rs. 3,000/- 3½% G. P. Notes 1854-55 ...		21 13 7
To excess of receipts over payments in the deposit account ...		6 7 13 11
Total ...		23,513 15 5

Particulars.	Amount. Rs. a. p.
By appliances such as artificial limbs crutches, hernia belts, etc. ...	1,421 1 0
By supply of costly medicines to poor patients of the Hospital ...	10,768 4 2
By blood transfusion charges ...	2,920 0 0
By travelling expenses to poor patients etc. ...	252 15 3
By spectacles to patients ...	215 6 0
By printing and stationery ...	227 4 0
By miscellaneous expenses ...	331 0 0
By sundry creditors: M/s. Batliwalla and Karani being the balance due for the purchase of securities of the face value of Rs. 3000 on 31-3-1941. ...	401 13 7
By cash in hand on 31-3-1942 ...	36 4 0
By balance with the Central Bank of India Ltd. ...	6,959 15 0
Total ...	23,513 15 5

Balance Sheet of the Poor Box Charity Fund, K. E. M. Hospital as on 31st March 1942.

LIABILITIES.

		Rs. a. p.
Fund account Balance on 31st March 1941 ...	1,28,969 1 2	
Add—Excess of receipts over expenditure during 1941-42.	4,809 9 10	1,33,778 11 0
Suspense Account :—		
Mess deposits ...	1,631 10 0	
Patients' money ...	409 12 2	
Miscellaneous deposits ...	3,758 8 0	5,799 14 2
Note :—		
Interest to be realised in 1941-42 viz Rs. 1,351/— not collected during the year.		
		1,39,578 9 2

ASSETS.

			Rs. a. p.
Cash in hand		36 4 0	
Balance with the Central Bank of India Ltd. ...		6,939 15 2	6,976 3 2
Investments (at cost) :—			
(1) 3½% G. .P. Notes (1842-43) of the face value of	16,000		13,460 10 0
(2) 3½% G. P. Notes (1854-55) of the face value of	12,000		9,248 2 0
(3) 3½% G. P. Notes (1865) of the face value of ...	13,000		10,532 8 0
(4) 3½% G. P. Notes (1879) of the face value of ...	1,000		735 0 0
(5) 3½% G. P. Notes (1900-01) of the face value of ...	17,000		15,608 12 0
(6) 3% Loan (1951-54) of the face value of ...	6,000		6,210 0 0
(7) 4% Loan (1960-70) of the face value of	20,000		20,933 0 0
(8) 4% B.P.T. Debentures (1968) of the face value of ...	3,000		3,333 12 0
(9) 4% B.P.T. Debentures (1969) of the face value of ...	500		555 10 0
(10) 4% B.P.T. Debentures (1973) of the face value of ...	500		555 10 0
(11) 4% B.I.T. Debentures (1962) of the face value of	500		465 0 0
(12) 4% B.I.T. Debentures (1965) of the face value of ...	1,000		930 0 0
(13) 4% B.I.T. Debentures (1972) of the face value of	10,000		9,300 0 0
(14) 4% B.I.T. Debentures (1973) of the face value of ...	1,000		930 0 0
(15) 4% B.M. Debentures (1974) of the face value of ...	500		510 0 0
(16) 6% B.M. Debentures (1950-60) of the face value of ...	12,000		11,718 2 0
(17) 5% B.M. Debentures (1954-59) of the face value of	18,000		16,123 12 0
(18) 4% B.M. Debentures (1961) of the face value of (original B.I.T. Debentures) ...	500		510 0 0
(19) 4% B.M. Debentures (1962) of the face value of ...	2,000		2,040 0 0
(20) 4% B.M. Debentures (1967) of the face value of ...	6,500		6,862 8 0
(21) 4% B.M. Debentures (1965) of the face value of ...	1,500		1,530 0 0
(22) 4% B.M. Debentures (1968) of the face value of ...	500		510 0 0
		1,43,000 0 0	
			1,39,578 9 2

blood transfusion to 135 patients, costly drugs, medicines, injections, travelling expenses etc., the following appliances were provided to 154 patients at a total cost of Rs. 1,821-6-0 as shown below:

Particulars.		Nos.	
Hernia truss	...	2	Nos.
Obturators	...	2	,,
Crutches, adjustable	...	2	pairs.
Walking calipers	...	2	Nos.
Taylor's brace with crutches	...	2	,,
Fairbank's abduction splint	...	1	No.
Poroplastic jacket	...	1	,,
Jacket, cervical, for T. B. Spine	...	1	,,
Thomas's Knee splint	...	1	,,
Curtin's belt	...	1	,,

The Securities held by the Poor Box Charity Fund of the face value of Rs. 1,40,000 in favor of the Dean, K.E.M. Hospital, had been transferred in the name of the Municipal Commissioner for the City of Bombay and the Corporation had been approached to create a Trust of the Fund with a view to utilizing the same for the construction and maintenance of a Convalescent Home for the discharged patients from this Hospital. The matter was still under the consideration of the Corporation.

Other Donations During the Year

		Rs.
1.	Shantilal Mathuradas, Esq	2,001
2.	The Managing Agents, Dhanraj Mills Ltd.	1,000
3.	Messrs. Burmah-Shell Oil Storage & Distributing Co., Ltd.	400
4.	The Secretary, B.E.S. & T. Co., Ltd.	300
5.	Messrs. Bombay Dyeing & Manufacturing Company, Ltd.	251
6.	Messrs. General Motors (India), Ltd.	250
7.	Messrs. Killick Nixon & Co., Agents, Kohinoor Mills Co., Ltd.	200
8.	Messrs. Cowasji Jehangir & Co., Ltd., Agents, Hirji Mills	105
9.	Messrs. Zandu Pharmaceutical Works, Co., Ltd.	101
10.	Messrs. Kamala Mills, Ltd.	101
11.	Anonymous donor	100
12.	Messrs. Thackersey Mulji & Sons, Agents, Western India Spinning & Manufacturing Co., Ltd.	100
13.	Messrs. Damodar Thackersey Moolji & Co., Agents, Indian Manufacturing Co., Ltd.	100
14.	Messrs. Thackersey Moolji & Co., Ltd., Agents, Hindustan Spinning & Weaving Co., Ltd.	100
15.	Messrs. Digvijay Spinning & Weaving Co., Ltd.	100
16.	Anonymous donor	100
17.	Messrs. Tata Sons, Ltd.	100
18.	Messrs. Tata Sons, Ltd., Agents, Swadeshi Mills Co., Ltd.	100
19.	Messrs. Standard Vacuum Oil Co., Ltd.	100
20.	Messrs. Imperial Chemical Industries (India), Ltd.	100
21.	Messrs. James Finlay & Co., Agents, Swan Mills Ltd.	100
22.	Messrs. Finlay & Co., Agents, Finlay Mills Ltd.	100
23.	Messrs. Century Spinning & Manufacturing Co., Ltd.	100
24.	Dr Navroji D. Dhakmarwalla	51
25.	Dr Jivraj N. Mehta	50
26.	Messrs. Indian Oxygen & Acetylene Co., Ltd.	50
27.	Ambalal Sarabhai Esq.	50
28.	Managing Agents, Modern Mills Ltd.	50
29.	The Manager, Comptoir National D'Escompte De Paris	50
30.	The Director, Messrs. Gannon Dunkerley & Co.	50
31.	Messrs. H. J. Foster & Co., Ltd.	50
32.	Messrs. Volkart Bros.	50
33.	Messrs. Martin & Harris Ltd.	50
34.	S. J. Kantak Esq.	50
35.	J. A. D'Souza, Esq.	40
36.	Messrs. Godrej & Boyce Manufacturing Co., Ltd.	40
37.	R. S. Patankar Esq.	30
38.	Khimji Waghjee Esq.	30
39.	Bulsara Esq.	30
40.	Messrs. Madhusudan, Mills Ltd.	25
41.	Messrs. Jeewanlal (1929), Ltd.	25
42.	Murghappa Veerappa Esq.	25
43.	Messrs. Ford Motor Co., of India Ltd.	25
44.	Messrs. W. T. Henleys Telegraphs Ltd.	25

Hospital Pharmacopeia

The 3rd edition was in print.

The College

80 fresh admissions were made in June 1941. Their average age at the time of their admission was 19.82 (19 last year); it being 17.28 (17.2 last year) when they matriculated. 72 of these students were single, 3 married, and 5 betrothed. A statistical study of the occupations of their parents or guardians showed that 23 were dependent on service, 24 on business, 7 on medical profession, 6 on legal profession, 8 on pensions, 4 on landed property, 2 on agriculture, 2 on miscellaneous occupations, and 4 had no occupation.

The number of undergraduate students on the college roll at the close of the year was 367. This included 74 women students. There were 67 postgraduate and research students.

		Male students.	Female students.
1st M.B., B.S.	1st year ...	63	17
	2nd year ...	89	18
2nd M.B., B.S.	3rd year ...	53	12
3rd M.B., B.S.	4th year ...	53	17
	5th year ...	109	10
Total number of students	...	367	74
Post-graduates including research students	...	61	6
Grand total	...	428	80

The authorities of the Bai Jerbai Wadia Hospital for Children continued the facilities given to the students of this college for clinical instruction in the diseases of children.

In accordance with the University of Bombay's scheme of examining students medically, out of 464 students so examined, 291 students—62.7% (64.3 past year)—were placed under Class 'A', 172—37% (35% last year)—in Class 'B', and 1—0.3% (0.7 last year)—in class 'C. Those whose condition required treatment were referred to the Honorary Staff of the K.E.M. Hospital.

Examinations

Examinations.		Candidates sent up.	No. passing the whole examination.
1st M.B.B.S.	April 1941 ...	70	48
	Oct. 1941 ...	39	17
2nd M.B.B.S.	April 1941 ...	9	6
	Oct. 1941 ...	4	3
3rd M.B.B.S.	April 1941 ...	81	24
	Oct. 1941 ...	31	17
	Dec. 1941 ...	78	17
M.D. (Medicine)	April 1941 ...	3	...
	Oct. 1941 ...	2	1
M.D. (Pathology)	April 1941 ...	1	...
	Oct. 1941 ...	1	1
M.D. (Midwifery)	April 1941 ...	2	...
	Oct. 1941 ...	3	...
M.S.	June 1941 ...	3	1
	Oct. 1941 ...	2	...
D.O.	June 1941 ...	...	...
	Oct. 1941 ...	...	...
D.O.M.S.	June 1941 ...	4	2
	Dec. 1941 ...	6	1
B.Sc.	April 1941 ...	4	...
Ph.D.	Oct. 1941 ...	1	1

Special Classes for D.O. and D.O.M.S., were held as during earlier years.

Annual Cost and Revenue

The total expenditure of the college, including liabilities and expenditure on the hostels, came to Rs. 2,74,018 during the year (Rs. 2,77,087 last year). The revenue of the college in the form of tuition fees, hostel rent, and miscellaneous receipts amounted to Rs. 1,18,751 (Rs. 1,23,06 last year). The gross cost per student for the year was Rs. 621.3 (Rs. 650 last year) while the net cost was Rs. 352.1 (Rs. 361.5 last year). Fees received from the postgraduate students was Rs. 4,170.

Library and Museum

During the year, 241 (204 last year) new books were added to the library. Of these, 8 books were presented by their authors as complimentary copies. 15 volumes of medical journals were got bound during the year. The number of books issued to the medical students was 14,031 (12,034 last year). 2,935 books and journals were issued to members of the teaching staff and resident medical officers. Arrangements were being made to provide a special library room for the staff.

Dr J.A. Fernandez, Honorary Assistant Dermatologist and Venereologist at these institutions, presented 23 medical books to the library. Miss K.A. Dalal, a student of the college, presented 31 books in memory of her father, the late Seth Amerchand Kalidas Dalal, with the special object of making them available to the poor students to read them at home. Similarly, the Gujarati and Marathi Literary Societies of the college presented 63 books to the Library out of the proceeds collected by them from dramatic performances. One medical book was presented by Dr B.N. Purandare, Honorary Assistant Gynecologist, and one by Drs B.S. Pendse and S.V. Kanitkar of the Pharmacology Department.

40 new wet and dry specimens were added to the Anatomy Museum during the year and 75 old specimens were renewed. The total number of specimens in the Anatomy and Comparative Anatomy Section now came to over 1,590. Lack of space to keep more specimens was keenly felt and provision of further accommodation for this section of the museums was now necessary.

75 new specimens were added to the Pathology Museum while a number of old specimens which had deteriorated were discarded. 104 old specimens were remounted bringing the total to 1,350 at the end of the year.

260 photographs of patients, specimens etc, were taken by the Artists' Department during 1941.

Students' Hostels

The number of students residing in the hostel for male students during the year was 146 (130 during the previous year). The number of students resident in the women students' hostel was 28 (26 during the previous year). The total expenditure incurred on the Hostels, exclusive of non-recurring expenditure, was Rs. 10,780. The income derived in the form of rent was Rs. 18,630.

Gymkhana

The students participated in the inter-collegiate tournaments. In hockey, our college reached the finals, but lost to the St. Xavier's College after a good fight. In football too, we reached the finals and almost beat the St. Xavier's by one goal when the match was abandoned due to bad weather and failing light. In the replay, however, we were unlucky in not reproducing our previous performance due to the full complement of the Team not being present.

Research

In addition to their teaching duties, the following investigations were conducted by the staff in our various departments:

1. *Nutritive value of fish liver oils* (funded by IRFA)
   Liver oils of *mushi* (baby shark) and *ghol* (black-spotted croaker) which were previously analyzed for vitamin A colorimetrically, were subjected to biological assay both for vitamin A as well as D. Vitamin A assay was made by the growth method and D by the bone ash method.
   The results of the investigation indicate that both the samples of liver oil are rich in sources of vitamin A and *ghol* liver oil is richer in vitamin D than *mushi* liver oil.
2. *Metabolism of calcium in health and diseases* (funded by IRFA)
   The work on the above enquiry which was in progress for the last few years, was continued during the year under report. The investigation dealt with the alterations in the chemical constituents of blood due to the onset of rickets induced experimentally in animals. Blood samples of children suffering from rickets were also being analyzed to see if similar changes were observed in clinical rickets.
3. *Milk enquiry* (grant from the Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital Research Fund)
   The investigation was completed in early 1942. 539 samples including 236 individual and 303 herd samples of buffalo milk were analyzed for fat, protein, and sugar. The composition of milk was shown to undergo changes with the progress of lactation. Seasonal changes and feed influenced the fat content. The usual ranges for fat, non-fatty solids, and the specific gravity at 15°c. for herd samples were 7–9%, 9–10% and 1029–1032 respectively. A modification of Richmond's formula was suggested for calculating total solids from fat content and specific gravity.
4. *Diet survey in the city of Bombay* (grant from the Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital Research Fund)
   During the year 1941–42, diet surveys of 24 Mohammedan families, 13 Christian families, and 57 Gujarati families belonging to different groups of income were carried out. It was seen that the diets of the rich as well as those of poor were very ill-balanced. Deficiency of protein was marked amongst the vegetarians. The diets of poor families were deficient in total calories, proteins, and fat; poor in calcium, and the consumption of milk was very low. Amongst the non-vegetarians, the ratio of Ca:P was very high. The consumption of leafy vegetables was found to be very meager amongst Christian, Mohammedan, and Parsee families. Gujarati diets were rich in fat but poor in total and animal proteins.
5. *The role of corpus luteum in the maintenance of Vitamin C balance of the body in women* (grant from the Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital Research Fund)

6. *The incidence and causation of glycosuria in pregnancy* (grant from the Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital Research Fund)
7. *The effect of vitamin 'D' on the colloidal osmotic pressure of serum* (grant from the Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital Research Fund)
   This study was started in July 1941. Dogs from which serum was obtained were fed on diets containing vitamin and without it respectively. The colloidal osmotic pressure in both cases was determined. The apparatus employed was a modification of the original apparatus devised by Krought and Wakazawa [Sic.].
8. *Investigation on indigenous drugs* (funded by IRFA)
   The enquiry on indigenous drugs, which was being conducted during the last three years, was continued and work was done on the following drugs:
   1. *Solanum xanthocarpum* seeds
   2. *Vinca rosea* Linn, whole plant
   3. *Dregea extensa*, leaves.
   4. *Carica papaya*, seeds.

   The chemical and pharmacological investigations of drug No. 1 had been completed, while that of the remaining three was in progress. Reports on the results of the work of these drugs had been submitted to the Indian Research Fund Association from time to time.
9. *The species of frogs found in the neighborhood of Bombay and their peculiar relations to drugs* (funded by University of Bombay)
   This study was started last year and was completed by the end of the year. The report had been submitted to the University of Bombay.
10. *Determination of the exact period of ossification of bones amongst Indian school children* (funded by University of Bombay)
    This study, started last year, had been continued. X-ray photographs of 313 male students and 122 female students had been taken and the work was still in progress.
11. *Development of body parts of children between 6 and 11 years of age* (grant from the Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital Research Fund)
    During the year, anthropometric investigations by the department of anatomy were continued. Students of the Babu Pannalal Jain High School and Sir J.J. Schools at Parel were studied. 300 candidates of local police force also were measured thanks to the Police Commissioner and the Police Surgeon, Dr H.S. Mehta, M.S. From the anthropometric data so far collected, the study of the growth of foot length and pelvic width had just been completed. The findings were likely to be of much interest. Further studies on the relationship of the weight of the skeletons were being pursued.
12. Reliability of guinea-pig inoculation test in the Diagnosis of human tubercular affections (Originally funded by IRFA, and then by a grant from the Seth Gordhandas Sunderdas Medical College and King Edward VII

Memorial Hospital Research Fund)
A paper incorporating the work done so far was published in the *Indian Journal of Medical Research*. In order to complete the thesis, a few lacunae had to be filled. The investigations were now carried out with a view to fill these gaps.

13. *Enquiry into pathogenic and non-pathogenic flora and fauna of the Sewage Purification Works, Dadar* (funded by the Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital Research Fund)
It was found that raw sewage, activated sludge, digested liquor, and the effluents harbor typhoid germs in a quantity so as to render these materials dangerous to public health. Experiments carried out with flies caught round about the plant have shown that they might carry typhoid bacilli from these sources. Further work in regard to the significance of these findings was being continued.
14. *Enquiry into anaerobic wound infection* (funded by IRFA)
In addition to the study of pathogenic anaerobes found in deep seated wounds and gas gangrene cases, a bacteriological analysis of specimens of soil, manure, and street dust is being made to find out the nature of pathogenic anaerobes contained in them.
15. *A study of unrecognized type of nodules occurring in human spleens.*
The study was continued from the previous year. Adult filarial worm was demonstrated in the epididymis with microfilaria in the blood and typical nodules in the spleen. Experimental work on the production of nodules was being carried out.
16. *Enquiry into toxemia of pregnancy* (Originally funded by IRFA and since by Dr N.A. Purandare.)
Earlier findings on the effects on experimental animals of the albumin and globulin fractions of the autolyzed placental extract were confirmed by further experiments this year. The quantity of nitrogen in albumin and globulin fractions was determined by Kjeldahl's method with a view to determining quantitatively the amount of the protein fractions.
17. *Role of anaerobic streptococci in puerperal sepsis* (funded by University of Bombay)
In addition to the work on normal vaginal flora with reference to anaerobic streptococci, a study was made of septic puerperal cases in which no operative interference took place at the time of labor. Nowrosjee Wadia Maternity Hospital and the Cama and Albless Hospitals facilitated this study.

Publications on medical subjects by the members of the Honorary, Professorial, and other staff during the year under report as mentioned below. Essays published in the College Magazine are not included here.

Serial No.	Name of the article.	Contributed by.	Name of the Journal publishing it.
1	A General Survey of Substances influencing Blood Pressure and their Clinical Significance.	Prof. A. S. Paranjpe, M.D. (Hiedl.), D.T.M. (Lond.), ch. B., L.R.C.P. (Edir.).	Medical Bulletin, 7th March 1942 and 21st March 1942.
2	Preliminary Note on an Alkaloidal Substance Isolated from Carica Papaya Seeds. ...	Prof. A.S. Paranjpe, M.D. (Hiedl.), D.T.M. (Lond.). ch.B., L.R.C.P. (Edin.). Dr. T. B. Panse, M.Sc., Ph.D. (Bom.).	Rasayanam May, 1941.
3	Synthesis in the Furo-Conmaran Group ...	Dr. T. B. Panse, M.Sc., Ph.D. (Bom.) ...	Rasayanam, May 1941.
4	Some New Reactions of— (1) Benzylidene-Conmaran... ... (2) Ones —Part I	Do. do. ...	Journal of the Indian Chemical Society Vol. XVIII, November, 9, 1942.
5	Do. Part II ...	Do. do. ...	Journal of the University of Bombay November, 1941.
6	Studies on Basal Metabolism in Bombay, Part III	Prof. S P Niyogi, B.Sc. (Hons.), (Cal.), M.Sc. (Cal.), M.B. (Cal), F.R.S.E.	Indian Journal of Medical Research, April 1941.
7	Balanced Diets, Part II	Do. do. ...	
	Nutritive Value of Fish ...	Dr. V. N. Patwardhan, M.Sc. (Bom.), Ph.D. (Lond.), A.I.I.Sc. (Bangalore)	Indian Journal of Medical Research, April 1941.
8	Balanced Diets, Part III Effects of Parching on the Biological Value of the Proteins of some Cereals and Pulses.	Do do ...	Indian Journal of Medical Research January 1942.
9	Studies in Calcium and Phosphorous Metabolism, Part V	Df. V. N. Patwardhan, M Sc (Bom.), Ph.D. (Lond.), A.I.I.Sc. (Bangalore)	Indian Journal of Medical Research, January 1942
10	Unusual Rhinosporidial Infections in Man...	Prof. R. G. Dhayagude, M.D. (Bom.) ...	Indian Medical Gazette, September 1941
11	The Reliability of Guineapig Inoculation test and the Diagnosis of Human Tubercular Affections	Prof. R. G. Dhayagude, M.D. (Bom.) ... Dr. C. B. Dhurandhar, D.O., M.B., B.S. (Bom.).	Indian Journal of Medical Research, July 1941.
12	Nutritional Status of Gujarati Children ...	Dr. G. M. Kurulkar, M.B., B.S. (Bom.)...	Journal of the Gujarati Research Society October 1941.
13	Abdominal Bulge in Health, (Males) ...	Do do ...	Essays in Ahthropology presented to Rai Bahadur Saratchandra Roy Calcutta, March 1942.
14	Climatic and Dietetic Factors in the treatment of Pulmonary Tuberculosis	Dr. M. J. Shah, M.B, B.S. (Bom.), M.R.C.S (Eng.), L.R.C.P. (Lond.), M.R.C.P. (Lond) D.T.M. & H. (Lond.).	Medical Bulletin, April 19, 1941.
15	Pancreatic Calculi	Do. do. ...	Medical Bulletin, September 1941.
16	Personal Observations on High Blood Pressure	Dr. R. J. Vakil, M.R.C.S., L.R.C.P. (Eng.), M.R.C.P. (Lond.), F.R.F., P.S.G. (Glas.), M.D., D.T.M. & H. (Lond.).	Medical Bulletin, April 18, 1942.
17	Tuberculosis	Do. do. ...	Medical Bulletin, March 21, 1942.
18	Vaginal Hysterectomy	Dr. B. N. Purandare, M.D. (Bom.), F.R.C.S. (Edin.).	Journal of Indian Medical Association, October 1941.
19	A method for ascertaining the overlapping of the pubis by the head by means of Abdominal Examination alone.	Do. do. ...	Indian Medical Gazette, December 1941.
20	Aetiological Incidence of Heart Disease in Bombay—Analysis of 4335 Autopsies.	Dr. P. Raghavan, M.D. (Bom.). ...	Journal of Indian Medical Association. June 1941.

The War

Towards the latter half of the year, the eastern part of the world was engulfed in the cauldron of the second world war with sudden attacks by Japan on the Pearl Harbor in Hawaii and the British Possessions in Malaya and Singapore. The events moved with such rapidity that the end of the official year saw the war approaching the eastern gates of India. Revolutionary techniques of warfare were in use and civilians could no longer claim to be immune from the actual combat

zone. Aerial bombardment of cities and towns had wrought unprecedented havoc on civilian property and life. To be forewarned therefore, is, to be forearmed and it was necessary that civilians should be on their guard.

The civilian casualties caused on an unprecedented scale by ruthless aerial bombardments had placed tremendous strain and responsibility on the medical profession for prompt action to relieve human suffering. The college and hospital were therefore being organized to meet a sudden calamity. Several air-raid precautions (A.R.P.) had been organized by augmenting the staff, giving them special training, constructing blast walls, providing additional beds to meet civilian casualties, constructing special shelters, and providing sand bags, stirrup pumps, and other necessary equipment to fight incendiary bombs. Shadows of war were hovering over us and it had become extremely difficult to obtain medical supplies and other materials for the relief of patients in sufficient quantity with the result that the cost on these items was increasing by the day.

It had also adversely affected the extension scheme of the hospital to which a detailed reference was made in the last year's report. Several of the extension works had to be postponed for want of funds and building materials and because of the urgent needs of A.R.P. works.

Cooperative Credit Society Ltd.

The Co-operative Credit Society of the labor staff of the hospital and college has been working satisfactorily and has continued to be in class 'A' since its promotion to it.

The share capital of the Society, which was Rs. 12,695 on 31 March 1941, had risen to Rs. 15,496 by the end of March 1942, Rs. 5,274 having been collected by way of monthly subscriptions. Rs. 2,473 were refunded to retiring members. Due to the steady increase in the share capital, the Society was able to refund fixed deposits to the extent of Rs. 2,110. During the same period, fresh deposits of Rs. 1,050 were accepted. The Society still had Rs. 3,750 as deposits from non-members.

During the period under report, the loans advanced by the Society to its members amounted to Rs. 20,225 against which Rs. 22,007 were received from members towards the repayment of previous loans. The average amount borrowed by a member during the period was identical to that of the previous year, viz., Rs. 116 to Rs. 117 per head.

The loans were granted after making detailed inquiries. The Chairman and members of the Managing Committee had been taking personal interest in individual cases of members, in clearing off their past debts by inviting their creditors to the office of the Society, and settling their debts on terms favorable to members.

At its 5th Annual General meeting held on 14 October 1941, the Society declared a dividend of 6.5% on the paid-up share capital for the year ending 30 June, 1941. The net profits earned by the Society during the same period were Rs. 1,266-

6-6 (Rs. 1,095 in the previous year). The Reserve Fund had been increased from Rs. 950-2-0 to Rs. 1,279-10-6. The other miscellaneous funds amounted to Rs. 673-8-0.

The total membership was reduced from 261 to 248 by the end of March 1942. 31 members joined the Society. 26 retired during the same period. The decrease in the membership was mainly due to the members retiring from service.

The Society received a generous donation of Rs. 201 from Dr G.T. Mody, Honorary Ophthalmic Surgeon at the Hospital, in appreciation of the services rendered by the labor staff of the Hospital to his late son, Mr Ramniklal.

The Last Report

This will be the last report, it will be my privilege to submit. The college and hospital were started 16 and 17 years ago and it is with a feeling of pleasure that I am able to record that the whole period has been one of progressive development enabling them to take the foremost place amongst corresponding institutions in the country. They have also set a pace for others to follow and a model to copy.

Before as well as soon after they were established, efforts were made from the highest quarters in the Province to have them handed over to a senior officer of the Indian Medical Service for initial organisation and administration to be returned later to the Municipality for Indian hands to manage! The Indian Medical Service was in those days still in the fore-front of privilege and power both in teaching and in consulting practice. Seventeen years' effective work by the staff of these and other institutions has left its mark on the city so deeply that so far as medical education and consulting practice are concerned there is hardly a trace of influence of that Service to be noticed in the city, except in administrative matters. This is a triumph of Indian organisation and co-operative effort of which the city Corporation as well as the citizens may well feel proud.

The institutions have grown beyond my expectations when the Corporation elected me as their Chief over 17 years ago. Almost every department of the college has expanded considerably. The credit for this goes mainly to the heads of those departments. Both our Anatomy and Pathology Museums are excellent and contain a variety of valuable specimens in spite of the limited space to which they are confined. The area occupied by the Museums is now a little over three times the limited space to which they were confined in 1925, thanks to the generous donation of Rs. 1,10,000 from the Trustees of the late Seth Jamnadas Lallubhai for the construction of the Pathology Museum Hall. There is however hardly any room for expansion in the Anatomy Museum. Every department of the hospital has also considerably expanded.

The Out-patient Department now offers commodious space for almost all its sections. A. new section has been started by adding the Orthopedic department. The X-ray and Electrotherapy section

has now all its component parts housed in a large and spacious new X-ray Block. The Ophthalmic Department has been provided with a new operation theater and considerable facilities for refraction work have been made available. The Skin and Venereal section now occupies about five times the space it did in 1926 and so also the Aural Department area has expanded four times. Tonsil Ward has been constructed and also an observation ward for psychopathic cases.

Clinical Laboratory has been expanded. A new Operation Theater Block was planned and almost sanctioned but the sudden onset of war upset this arrangement as well as the construction of two additional ward pavilions and the remodelling of the hospital laundry with the construction of a small workshop for hospital requirements. The Hospital Extension Scheme was to cost Rs. 51 lacs out of which over Rs. 6 lacs have already been spent and the extensions so far carried out, the cost of which will ultimately amount to about Rs. 8 lacs. These will be of invaluable help in providing efficient medical relief in case of air or naval attacks by the enemy.

Arrangements have been made for providing comforts and costly medicines, etc., to the patients of this Hospital and the Poor Box Charity Fund which was started in 1926 has steadily grown.

Its permanent fund now amounts to over Rs. 1,40,000 and a proposal has been put up for the approval of the Corporation to accept this amount and to set it aside for the construction of a Convalescent Home for the patients of King Edward VII Memorial Hospital.

Various amenities have been also provided for the staff of the institutions. New quarters have been provided for the administrative, medical, nursing, ministerial, engineering and dispensary staff. Quarters for the labor staff were planned at a cost of Rs. 4,89,950 but the war came in the way and the work of construction had to be held in abeyance.

The hostel accommodation for students has also been enlarged by adding a third floor to the hostel building for male students in the year 1931, and by the construction of a new Hostel for Women Students in 1938. The college and hospital have been continuously provided with modern and up to date equipment and apparatus though perhaps not to the extent that each individual member of the staff would wish but certainly on a scale which the members of the staff of many similar institutions in the country may envy.

With the growth of the institutions, the extent of medical relief given by the hospital has likewise considerably increased. For example, while the daily average number of in-patients in 1927 was 266.6, it has now increased to 450.6. The number of in-patients admitted in the hospital in the former year numbered 5,923 and it has increased to 13,135 in 1941. In the matter of outpatients, the number has increased from 39,698 in 1927 to 1,00,048 in 1941: the total outpatient attendance being 1,16,375 and 4,14,936, respectively in the two years. The progress made by

the hospital in the last 17 years can be also judged from the number of operations performed. These numbered 1947 on in-patients and 1,650 on outpatients in 1927 as against 5,340 and 11,450, respectively, in 1941.

The College was permitted to admit 60 students to the first-year class in 1925. This number was increased to 70 admissions in 1951 and to 80 in 1941. The college started with 46 undergraduate students and has to-day 497 students on its roll.

All this development could be brought about because of the smoothness with which it was, on the whole, possible to run the administration (no doubt there have been awkward occasions and troublesome times on and off), thanks to the co-operation which the senior staff and the loyalty which the junior medical, nursing. Ministerial and similar staff as well as the labor staff have extended.

Such progress has been helped by the co-operation I received from the Heads and other staff of the other Municipal departments (though there have been here and there awkward occasions and difficult times) and to the unstinted support which I received from the successive Municipal Commissioners from the time of Mr (Now Sir) Hugh Clayton, through Mr (Now Sir) A.R. Dalal, Mr H.K. Kirpalani, Mr I.H. Taunton to Mr M.D. Bhat—not to mention those officers who held the post for short periods of time. All the progress achieved would not however have been possible had it not been for the pride with which the college and hospital have been looked upon by the City Fathers and the generosity with which they have on the whole met their financial demands and the sympathy with which they have looked at all schemes of development put up for their sanction.

There was a time when they were looked upon by a certain section of the City Fathers and even a section of the Press as *White Elephants*. Such words of reproach are no longer heard. Their value and utility era now well established. The institutions have built up a reputation not only for the excellence of the teaching imparted and for the excellence of arrangements for the treatment of patients, the variety of difficult and skillful operative and other work carried out therein but also for the research work which they have systematically taken up.

Outside the School of Tropical Medicine at Calcutta, which was organized mainly with the object of fostering medical research, ours are the only teaching medical institutions in the country where funds on fair scale are made available from various sources for the conduct of various scientific inquiries.

But the work we do, though more compared to what is done in other corresponding institutions in the country, is little compared to what is done in similar institutions abroad. Research requires plenty of monetary assistance and much patience. A beginning has however been made and we have now a Research Fund of about half a lakh of rupees, and an annual expenditure of 15

to 20 thousand rupees a year is met by way of research grants from the Indian Research Fund Association (IRFA), the Bombay University and various other bodies. Some of the researchers on our own staff have also come forward from time to time to help in this connection. It was my ambition to collect an Endowment of a substantial amount to place our research organisation on a sound basis but as in many other things concerning the development of these institutions as well as others similarly placed, the war has unfortunately come in the way.

Besides my inability to arrange for a Research Fund of the required size for the College, I much regret not to have been able to secure a playground for our students. Though the Corporation have seen the necessity of providing one, it is a matter of regret that circumstances have somehow conspired against the realization of this good intention. It is to be hoped that this need for a playground will be satisfied as early as possible.

In the last year's annual report a detailed statement showing the extent of development in each section of the college and hospital in the last 17 years was given which shows that though much has been achieved, much remains to be done. The progress made so far requires to be consolidated and some internal rearrangement has to be taken in hand, due to the growth of the College and Hospital and the increase in the number of staff.

For all the progress and development I would like to place on record my sincere thanks to all those who have contributed to it and to whom I have already referred to above. There is one name I would like particularly to mention and that is of the Assistant Dean, Capt R.E. Dadachanji, who has worked loyally throughout the 14 years and over that he has been on the staff of the College and Hospital and has ably and materially helped in making them a success.

- Dr Jivraj Mehta

Image courtesy: Girish Parmar

Index of Appendices

Appendix	*No.*	*Description*
	1.	*List of the College and Hospital Senior Staff.*
Do.	*2.*	*Summary of in-patients classified according to departments.*
Do.	*3.*	*Summary of outpatients classified according to departments.*
Do.	*4.*	*Chart illustrating in and out-patient admissions by months.*
Do.	*4A.*	*Chart illustrating in and out patient admissions during the years 1927, 1931, 1936 and 1941.*
Do.	*5.*	*Summary of patients according to sex, age and caste with a chart illustrating this summary.*
Do.	*6.*	*Summary of discharges and deaths classified according to principal diseases or conditions treated.*
Do.	*7.*	*Classification of patients suffering from Tuberculosis according to principal sites.*
Do.	*8.*	*Classification of patients suffering from malignant neo-plasms according to type of growth, sex and age—discharges and deaths.*
Do.	*9.*	*Classification of patients suffering from malignant neo-plasms—discharges and deaths classified according to site and sex.*
Do.	*10.*	*Classification of operations performed in the surgical department.*
Do.	*11.*	*Classification of fracture cases treated in the surgical department.*
Do.	*12.*	*Classification of head injury cases treated in the surgical department.*
Do.	*13.*	*Summary of patients treated for diseases of female generative organs, with results.*
Do.	*14.*	*Classification of operations performed in the gynecological department.*
Do.	*15.*	*Classification of operations performed in the Ophthalmic department.*
Do.	*16.*	*Classification of operations performed in the Ear, Nose and Throat department.*
Do.	*17.*	*X-ray and electro-therapy report.*
Do.	*18.*	*Skin and Venereal department report.*
Do.	*19.*	*Electro-cardiograph department report.*
Do.	*20.*	*Clinical Laboratory report.*
Do.	*21.*	*Poor Box Charity Fund—Statement of accounts and Balance sheet.*

18

The Art of Administration of a Medical College and Teaching Hospital by Dr Jivraj Mehta

Mehta Jivraj: The art of administration of a medical college and teaching hospital. *Souvenir: St. John's Medical College, Bangalore. Dedication Ceremony. 29 September 1968* Pages 54–61.

(Dr Jivraj N. Mehta, has been former Dean of G.S. Medical College and K.E.M. Hospital, Bombay, Minister of Finance and Public Works Department, Government of Bombay, Chief Minister of Gujarat and finally High Commissioner for India in England, to mention a few brilliant facets of a most versatile career. G.S. Medical College and K.E.M. Hospital, Bombay, is the premier and pioneer institution in this country, mainly in the field of education and research. Dr Jivraj N. Mehta with his iron discipline and great vision, has been the sole architect who planned and maintained this institution to perfection. He can only be described as a phenomenon and a legend). -Ed

It is a privilege to be asked by Dr M.V. Bansod to send him an article on the "Art of Administration of a medical college and teaching hospital," for publication in le Souvenir Volume to be issued on the occasion of the dedication ceremony of the new buildings of the St John's Medical College, Bangalore, based on the experience of the administration of the Seth G.S. Medical College and K.E.M. Hospital, Bombay, which he describes in his letter to me as a "Pioneer Institution."

In this context one may remember the day when the formal opening of the Seth G.S. Medical College and the K.E.M. Hospital was performed by the then Governor of Bombay, Sir Leslie Wilson, on the 22nd January, 1926. Doubts were expressed at the time in the ability of an Indian to run such a medical college and hospital. The suggestion that the institution might be given to an I.M.S. Officer, naturally a Britisher, to be later handed over to the Dean who had been already appointed for the purpose, was promptly turned down by Shri Joseph Baptista, the then President of the Bombay Municipal Corporation which had constructed the College and Hospital and was to maintain them.

In this connection it would be also interesting to recall that while the Corporation had undertaken to construct and maintain the Hospital as a memorial to the late King Edward VII, a munificent offer of Rs. 14 lakhs was received early in 1916 on behalf of the late Seth Gordhandas Sunderdas of the famous Moolji Jetha family for the construction of a medical college which could be associated with the proposed K.E.M. Hospital on condition that the College was to be named after Seth Gordhandas Sunderdas and was to be permanently maintained by the Corporation, and with the further condition, among others, "that the Professors and Teachers to be

employed at the College should all be properly qualified independent Indian Gentlemen not in Government service." Such a conditional offer was made to and accepted by the Corporation, thanks to late Sir Pherozeshah Mehta, popularly known as the Father of the Bombay Municipal Corporation, because highly qualified Indians who had returned from England after receiving post-graduate degrees of the London University and/or the diplomas of Fellowship of the Royal College of Surgeons, England, could not secure a suitable appointment at the Grant Medical College and Sir J.J. Group of Hospitals which were under Government control and management.

Seth G.S. Medical College

So far as the construction of the G.S. Medical College and its various departments is concerned, a pattern different from that adopted till then in the other medical colleges in the country was followed. It happened to be the 12th medical college to be constructed in the country as against over 90 at present. All the medical colleges till then, excepting the one now known as the KAR Medical College in Calcutta and perhaps the Lady Hardinge Medical College in Delhi, were government institutions. The usual practice till then was for the departments of Anatomy, Physiology and Pathology to be located, each, in separate buildings of their own. The Principal of the College, as the Head of the Institution was called in those days, often had his administrative office located in a different building in the college campus.

By a strange coincidence the suggestion to construct the G.S. Medical College in one single compact building came to be made by me in the year 1916 when I happened to return from London after completing my post-graduate studies at the London University and the Royal College of Physicians. It happened this way. The Bombay Municipal Corporation had sought the advice of the Bombay Medical Union with regard to the requirements of the College building and its various departments to be constructed from funds provided out of the Seth Gordhandas Sunderdas estate. The Executive Committee of the Bombay Medical Union had kindly invited me to discuss this matter at a dinner meeting when I strongly pleaded for this mode of construction, placing the anatomy department on the top floor. I urged this mode of construction in a single compact block of building to facilitate a close relationship between the staff, particularly the heads of departments, as also to enable the Head of the Institution to walk into any department at any time without inviting comment which would ordinarily be the case if the various departments were placed or located in isolated buildings. This pattern had also the further advantage in that the students' time would be saved. I urged, from running from one building to another for attendance in different classes, which was found obnoxious during my student days at the Grant Medical College, particularly during the rains which are heavy in Bombay. This suggestion was approved by the Executive Committee of the Bombay Medical Union and accepted ultimately by the Corporation.

I never dreamt that on the opening of the college in 1925, it would be my privilege to

serve as head of such an institution, whose construction and equipment had by 1927 cost over Rs. 74 lakhs (18 lakhs of rupees for the College and its hostels, and Rs. 54 lakhs for the Hospital). These were very large sums of money in those days, but they seem to be paltry when the present day institutions require some crores to construct and equip.

The planning of the K.E.M. Hospital was done in pavilion form connected by wide covered corridors on the lines of the recently constructed King's College Hospital in London. Though this building had the advantage of being in a way a compact building compared with the other teaching hospitals in the country which were generally constructed in separate blocks for ophthalmic, obstetrics, and gynecology, and other sections as well as with separately constructed out-patient department of their own, it was located separately from the College building until I provided a direct covered passage between the hospital and the college in the expansion scheme which was taken up ten years later. Thus the staff and students could move freely from the hospital to the college building and vice versa, if they so liked, during the heavy monsoon season.

Teaching Staff

It is not only upon the facilities and Conveniences provided in an institution but also on the calibre of the staff that success is assured in its management and progress. Fortunately for the G.S. Medical College and K.E.M. Hospital, the Bombay Municipal Corporation had selected through its Medical Relief Committee a highly eminent and experienced senior staff (all Indians on the clinical as well as the non-clinical side). They formed a body of persons devoted to the cause of medical education and keen on making a success of these institutions in every possible way. We used to merge either all together or in groups, as necessary, to work out the details of equipment and apparatus for the college and hospital. We also spent several useful hours, often till late in the night, week after week, to frame rules and regulations for the working of the college and hospital as well as for the guidance of the junior staff, laying down in fair detail the duties of what the house physicians and house surgeons were expected to do in their respective sections. Duties of the casualty officers, the resident anesthetists, the resident accouchers, the resident pathologists, and the registrars and such other staff were also laid down. In fact, we prepared the manual of hospital rules which was largely based on our own experience during our studies in England. This helped us in establishing a good routine work in the wards, in the various sections of the out-patient department, in the operation theaters and in the central clinical laboratory. Conventions were also laid down as regards the conduct of the senior stall themselves, and their hours of work. We had likewise planned duties for the nursing staff and details of their training.

Selection of Junior Medical Staff

Great pains were also taken in the selection of the junior medical staff which was done with the help of the Advisory Medical Board, which had as

its members the representatives of the whole-time professors and the senior honorary staff. Records were kept of the work of the resident medical staff under the different units. Their promotion to progressively higher posts in the institution and ultimately as Assistant Honoraries or Assistant Professors in course of time, was based on the strength of their work in the various departments of the hospital and college. The Municipal Corporation's sanction was also obtained for travel grants to Assistant Professors and Assistant Honorary Staff for advanced studies and experience abroad, so that they were well equipped to compete for the posts of Professors or Honorary staff positions in the college and hospital. During such training abroad they were debarred from studying and appearing for any examination. It was our aim right from the beginning, that we should so train our resident medical staff in one post after another that in course of time they could replace us with ease on the clinical side. Similar care was also taken in the training of the demonstrators and tutors on the non-clinical side to facilitate their recruitment as Assistant Professors and even on higher posts in course of time.

Most of the surgeons in the different departments saw to it that their house surgeons and registrars got ample scope for operative work under their supervision and to tackle emergencies under their guidance. We had soon the satisfaction to see our sister institutions adopt a similar practice later on. This has been indeed a very successful experiment in that almost the whole of the senior teaching staff has since come from the institution's own alumni. It is also a matter of great satisfaction that in the case of those of our students who decided to settle down in private practice, they began to do extremely well, thanks to the training they received, and particularly the experience they gained in practical or operative work. All over Maharashtra, Gujarat, Madhya Pradesh, Mysore and Rajasthan as well as elsewhere they have been doing very well in their practice; and a number of them participate also in public activities following the example of some of their teachers on the Honorary Staff.

Student Admissions

Though the college was constructed with a view to provide ultimately for 80 admissions a year, we took up just over 40 students in the first year. This gave us ample time to organize the routine work in the different departments in the college and to prepare specimens for the anatomy, pathology, pharmacy, toxicology, medical jurisprudence and public health sections of the museum so necessary for the proper instruction of students. Fortunately, we were able to get a handsome donation from the trustees of the late Seth Jamnadas Lallubhai for the construction of a separate museum building connected with the main college building by a covered corridor. This gave us a splendid museum constructed and developed under the able guidance and care of Professor V.R. Khanolkar.

As we got more and more organized, the student admissions were increased to 50 and then to 60–70. Later on the admissions were increased to 80 during my period of Deanship. Merit Scholarships were

introduced for students who had secured highest marks amongst those admitted, in order to induce the best talents for admission in the college. Also, with a view to help poor but deserving students in meeting their expenses, efforts were made to secure assistance for payment of their tuition fees very often from the Honorary member of the staff under whom the student may be working.

So long as there were 60 admissions a year, I was able lo keep in contact with almost all the students of the college who would number well nigh over 300 on the whole, apart from the post-graduates. But with the increase of admissions to 80 students a year, it became well nigh impossible to maintain a personal contact with many of them. Their number became far too big for the purpose. I do not envy those Deans or Principals of Colleges where the annual admissions are now between 100 and 150 and in some cases even over that number.

Hospital Expansion

The K.E.M. Hospital was originally planned for 320 beds. But as the wards had wide verandas inside outer walls, it was easily possible to put in additional beds in almost each ward; and in some cases even to place convalescent cases on the floor to provide beds for acute cases.

To start with, we opened the hospital with 125 beds in 1926 which strength was increased to 267 a year later. The bed strength was progressively increased within another year to 334 and 354 and later on to 370. On account of the increasing demand for the admission of patients into the hospital, I moved the Corporation in 1933-1936 to approve of the expansion scheme at a total cost of Rs. 15 lakhs which was quite a large sum in those years. The bed strength was to be increased by 106 beds by constructing wards on a higher floor over the existing pavilions. The out patients' department was also to be expanded in its various sections. Arrangements were made by which the section for the old medical cases and for surgical dressings was constructed in a separate block, thus facilitating the early disposal of old cases and providing more elbow room for the instruction of students on new or interesting old cases. The Specialties of E.N.T. and Orthopaedics were established as separate disciplines for the first time in Bombay Hospitals.

The hospital expansion program had well begun before I retired in 1942, but it was subsequently considerably handicapped on account of difficulties arising out of the Second World War. Thanks to the assistance from the Rockefeller Foundation full time departments of Medicine and Surgery with research cells have since been established, and thanks to Dr B.N. Purandare a research section has been provided in the Obstetrics and Gynecological section, named after his distinguished father Dr N.A. Purandare who had in the earlier years of the Institution very generously donated a magnificent stadium to the College on a large plot of land in Parel, not far from it. All the extensions have since been completed and I understand that the hospital has now over 1,100 beds with arrangements for a further addition of about 200 beds, including those for the

separately constructed orthopedic hospital and the hospital for thoracic diseases, which are located in plots across the roads.

Nurses' Home

This expansion scheme included the construction of a new Home for the Nurses across the road on the east side of the hospital, with arrangements provided therein for the need of a training school in nursing. We had also provided a Nurses Welfare Fund to help in various recreational and other activities of the Nursing Staff. The original building thus vacated by the nursing staff became available for the residence of the resident medical staff much to their convenience. They were accommodated till then in scattered rooms in the administration block and elsewhere on the hospital premises.

Common Mess for the Resident Medical Staff

Right from the commencement of the hospital it was laid down that all resident officers from the housemen to the registrars should compulsorily join the R.M.O.'s Mess, a feature that did not exist at the time in any other teaching hospital in the country, so far as I can recollect. This enabled the resident medical staff to be in constant touch with one another and create an esprit de corps in them. They could also come more easily to know about interesting cases admitted under other Chiefs. Their resident quarters being in a block close to the wards, connected by a covered corridor, they could be easily sent for in case of any emergency in the wards.

Scientific Meetings of the Staff

Soon after the main organisation of the hospital and college work was over, arrangements were made for starting a staff society. It was made compulsory for all the members of the teaching staff to meet one evening a month, to have a common dinner on the college premises and then have the staff meeting either for reading a paper or for discussion or for the examination of interesting cases, as per program worked out from time to time. This became quite an interesting and exhilarating feature of the institution. Papers of researches that may have been carried out by any member of the staff used to be discussed at these meetings. As apart from these monthly scientific meetings, the surgeons and physicians used to have weekly or fortnightly meetings of their own in a room provided in the Administrative Block where interesting cases were demonstrated. These meetings were also much appreciated by the post-graduate students. Arrangements were likewise made for the teaching staff to take meals in the R.M.O.'s Mess so that the juniors could thus come in frequent contact with the members of the senior staff.

Poor Box Charity Fund

Apart from placing charity boxes in the wards and the various sections of the out-patients department for the collection of whatever money the grateful patients and/or their relatives or friends may put into them, I had introduced an arrangement from the very start of the K.E.M. Hospital in 1926, to maintain a record of the addresses of all those persons

who may have sent recommendations to the Head of the Institution or to any of its departments about patients they may wish to have attended to in the Hospital. At the time of the respective New Year of the persons so recommending patients for admission, etc., letters used to be sent to them by me personally asking for their contribution to the poor box charity fund of the Hospital. From this fund was provided assistance to the patients in need of costly drugs or special injections recommended by the staff, or such assistance as blood transfusion, an artificial limb, Hernia truss, crutches, spectacles and even travelling expenses and clothings for needy patients after discharge from the hospital. I also kept myself in touch with the various textile mills, engineering establishments and other factories in the neighboring area requesting them every year at Christmas time, to send donations for our Poor Box Charity Fund. This enabled us to give relief of various kinds to our patients which could not be ordinarily met out of the annual Municipal grant to the Hospital for its maintenance. By such efforts as these we were able to spend not only large sums of money every year for the needs, comforts and welfare of our patients, but I was also able to lay by, every year, a fair amount to form a separate Corpus in form of the Patients Welfare Fund. With such savings I built up the Fund with a view ultimately to provide a convalescent home near Borivali for our patients in need of a long period of convalescence, particularly fracture or paraplegia cases. Ultimately the amount which I had handed over to the Bombay Municipal Corporation at the time of my retirement in 1942, was utilized in constructing a convalescent home, later utilized as orthopedic hospital in close vicinity, thus enabling the K.E.M. Hospital proper to take a larger number of patients suffering from more acute conditions. It also gave some relief from the over crowding of its wards.

Research Facilities

Funds were likewise necessary for taking up research activities at the Institution which could not be met from the regular grants for maintenance. Proposals used here fore to be submitted for research grants to the Indian Research Fund Association, now known as Indian Council of Medical Research. But to start with, I used to request the senior members of our staff, such as Drs P.C. Bharucha, N.A. Purandare, M.D.D. Gilder, R.N. Cooper, T.O. Shah and others for assistance to pay stipends to Research Fellows in the college and hospital. The proposals submitted to the I.R.F.A. after some preliminary work by the Research Fellows in this way were more readily acceptable to that organisation. We had thus several such research proposals taken up each year at our Institution. We also arranged to get assistance from manufacturing chemists for taking up investigations of various kinds.

Later on when the Bombay Municipal Corporation agreed to levy a contribution fee of Rs. 500 per annum, for every student admitted to the G.S. Medical College from the then State of Central Provinces and Berar, the Corporation was pleased to agree to place these caption fees, at the Dean's disposal for establishing a small Research Fund of our own. Since 5 such

students were admitted every year, and as the course of studies extended over a period of five years, the number of such students went upto 25 in a year. I was thus able to yet the sum of Rs. 12,500 every year for a number of years to build up our Research Fund, as apart from the grants from the I.R.F.A. and the Medical Research Council. The corpus of this Fund still exists from whose interest some investigations are taken up at the college and hospital. I may add here that out of the students then admitted from C.P. and Berar some have since held such high positions as the Superintendent, J.J. Group of Hospitals and Dean, Grant Medical College, the Surgeon General with the Government of Maharashtra and been holders of many other important posts in the medical department not only in Maharashtra and Gujarat, but also in distant Rajasthan, Madhya Pradesh and Mysore.

Cooperation of Municipal Authorities and Officers

For the management and development of such an institution, one had also to bear in mind the details of administrative problems to be submitted to the higher authorities, which in our case were the Municipal Commissioner and the Bombay Municipal Corporation with some of its Statutory Committees, like the Standing Committee and the Medical Relief Committee.

This was particularly so, while planning one's program for the administration and development of the Institution, and in finding out ways and means of seeking Constant their approval of the same. Efforts to seek the cooperation of such Municipal Officers as the Chief Accountant and the City Engineer in our case, and their assistants, also greatly helped in seeing that the various needs of the Institution were attended to in good time and our work was thus expedited.

Contact with Other Bodies

It is not only the Governing Body and its various administrative links that one had to think of in assuring smooth administration, but also of the University which controls its academic side, as well as such bodies as the Medical Council of India, and the Medical Research Council. In the case of the latter body, its assistance was very helpful in taking up and fostering research activities in the Institution as already mentioned. Likewise we had to maintain contacts with the professional organizations, such as the Indian Medical Association and particularly those professional organizations which are concerned with the various specialties in the medical curriculum.

The ability to keep as close a contact as possible with all such bodies and organizations, as well as with the factors relating to the Institution's internal administration discussed below, associated with a cool temperament and capacity to go fully into the essentials of relevant matters, as apart from details, are factors which constitute the "Art of Administration of a Medical College and Teaching Hospital."

Internal Administration

As apart from the frequent conferences with the members of the Advisory Medical

Board and senior members of the teaching staff, whether singly or in groups, e.g, all the physicians or surgeons etc., as the case may be, it is essential for efficient administration that the Head of the Institution goes round not only the wards on stated days and otherwise, but also in the other sections of the Institution such as the general stores, the medical stores, the food and milk department, etc., paying surprise night visits in the hospital as well as in the student's Hostel. It is also necessary to have frequent conferences with the senior members of the staff on the hospital and the college side, to work out the year's program of class work and to ascertain from them their needs by way of fresh or additional equipment and apparatus. With the senior teaching staff, discussions used to be held as to the nature and quantum of the work done by housemen and other junior medical staff under them. This was duly and properly assessed subsequently at the meetings of the Advisory Medical Board, and these assessments were particularly helpful in appointments to be made on the higher posts previously referred to.

All this—what has been called an unusually outstanding development for a new medical college and teaching hospital in those days in India, in the early years of the Institution's existence—was possible because of the highly eminent staff that we fortunately possessed both on the clinical and non-clinical side which was so devoted to make this, the first non-government Medical College and teaching hospital on this side of India, a great success; and also because of the long period of time I had the privilege of presiding right from the start, over these institutions extending over a period of almost 18 years. Frequent changes of the Head of an Institution like this are indeed a great handicap in carrying out various developmental activities and in forging contacts with people in all walks of life, so essential in securing assistance of various kinds necessary for smooth, efficient and progressive administration in a medical college and a teaching hospital, where problems of various kinds often arise. Those who can hold such posts for a few years only, suffer thus from a great handicap, which fortunately for me was avoided owing to the long term of my appointment, which at first was renewed for periods of five years and later on, made permanent.

Economics in Hospital Administration

A very important point in the consideration of the hospital administration is the economic aspect of its maintenance. An effort should be made to see that every rupee spent on such maintenance brings a sixteen annas worth of return. Great care has therefore to be taken to see that tenders that are issued for the supply of articles for the hospital dietary for the patients and for the mess of the Nursing staff, as well as for the supply of medicines, surgical dressings, general stores and other requirements of the hospital and college including equipment and apparatus are properly made and scrutinized. As the preparation of such tenders can be easily manoeuvred vis-a-vis the likely actual requirements for the next year, great care was taken by me to scrutinize the demands for such supplies put up by the various

sections of the Institution. Constant care was also exercised in checking the receipt and disbursement of various articles in the relevant sections of the Institution's various stores. This helped naturally the economic management of the Institution. Arrangements were made by which certain registers and records were regularly submitted to me every week, fortnight, month, or quarterly, as the case may be, so as to help in keeping control over all the sections of the hospital and college to assure their smooth and efficient working. One often hears of complaints in such institutions about delays in payment of outstanding bills. Efforts were therefore made to check the disposal of such bills. Monthly statements were asked for from departments concerned about bills received during the month and their disposal, with explanations for each bill in case of late disposal or non-disposal of the bill in time. Statements of such arrears were carefully checked. Columns were provided in the register showing date of receipt of the bills and of its disposal, with a remarks column for explanation where necessary. A check had also to be exercised on the demand for additional staff put up by the various sections, as almost 50% of the hospital's cost is on account of salaries and allowances of the staff employed. This became possible not only on account of the constant visits, including surprise visits during day and night paid to the various departments, including the various sections of the hospital stores already referred to, but also on account of the frequent conferences or discussions which I used to have with the matron and heads of the different sections on the administrative side. In this connection, I had the benefit of assistance of a very competent Assistant Dean the late Dr Rustomji E. Dadachanji who also kept the hospital and college gardens in excellent trim. It was such cooperation from all sections of the staff including the nursing staff, which facilitated the economic management of the institution. It compared very well in cost compared to similar other institutions in the neighbourhood in those years.

The Components of the Art of Hospital Administration

Thus what is required in hospital administration is a deep study of the problems as they arise, a constant and if necessary, even a 24 hour devotion to the work of the Institution, associated with a constant effort to keep in touch with the patients, be it in the wards or the out-patients, as also with their relations and friends. A friendly approach is equally necessary in matters concerning the studies and conveniences of the students as well as in matters regarding the difficulties of the staff, whether medical, nursing, administrative, or labor. A constant effort has to be made to find a solution of the problems as they arise, avoiding at the same time the clash of interests affecting the different categories of the staff.

Frequent rounds in the different departments of the college and hospital, surprise visits during the day as well as at any time in the night, in short a complete immersion of oneself in the affairs of the institution, with the sympathy of the wife who not only does not grudge but permits one to be completely immersed in one's administrative duties, looking after the

children herself—along with good public relations with various organizations as detailed earlier, were also some of the factors, which helped in making a success of the G.S. Medical College and the K.E.M. Hospital, so kindly referred to as a "Pioneer Institution" by Dr Bansod in his letter to me.

19

Annual Report (1944–1945)

Staff

Dr R.P. Koppikar was Dean.

Dr C.S. Worah was appointed Assistant Surgeon from 29 May 1944 in a newly created post.

Dr R.J. Vakil, Assistant Honorary Physician was on leave from 29 August to 23 November 1944. Dr J.K., Mehta was appointed as Acting Honorary Physician from 21 September 1944 in this leave vacancy.

APPENDIX NO. I.
THE COLLEGE AND HOSPITAL SENIOR STAFF

Dean
R. P. Koppikar, Esq., M.S. (Bom.), F.C.P.S. (Bom.).

Assistant Dean
V. V. Jadhav, Esq., M.B.B.S. (Bom.).

Assistant Medical Officers
V. H. Majmudar, Esq., B.Sc., M.B.B.S. (Bom.). On leave preparatory to retirement from 1-12-43 to 31-5-44.
S. V. Joglekar, Esq., M.B.B.S. (Bom.)
G. S. Ambardekar, Esq., M.B.B.S. (Bom.). From 1-12-1943.

Professor of Anatomy
R. P. Koppikar, Esq., M.S., (Bom.) F.C.P.S. (Bom.).

Assistant Professor of Anatomy
G. M. Kurulkar, Esq., M.B.B.S. (Bom.).

Professor of Physiology
S. P. Niyogi, Esq., M.Sc., M.B. (Cal.).

Assistant Professor of Biochemistry
V. N. Patwardhan, Esq., M.Sc. (Bom.), Ph. D. (Lond.), A.I.I.Sc.

Assistant Professor of Physiology
A. Fernandez, Esq., M.B.B.S. (Bom.).

Professor of Pharmacology and Materia Medica
A. S. Paranjpe, Esq., M.D. (Heidl.), D.T.M. (Lond.), M.B., Ch. B. (Edin.).

Professor of Pathology and Bacteriology
R. G. Dhayagude, Esq., M.D. (Bom.).

Assistant Professors of Pathology and Bacteriology
B. M. Amin, Esq., M.D. (Bom.) Resigned from 25-3-45.
Y. M. Bhende, Esq., M.D. (Bom.)
L. Monteiro, Esq., M.D. (Bom.). Appointed from 25-3-1945.

Honorary Physicians and Lecturers in Medicine
N. D. Patel, Esq., M.D. (Lond.), M.R.C.P. (Lond.).
N. K. Sahiar, Esq., M.D. (Lond.), M.R.C.P. (Lond.).
Abdul Hameed, Esq., M.D. (Bom.)
Mangaldas J. Shah, Esq., M.B.B.S. (Bom.), M.R.C.P. (Lond.), D.T.M. & H. (Lond.).
P. Raghavan, Esq., M.D. (Bom.)

Honorary Assistant Physicians and Lecturers in Medicine
R. J. Vakil, Esq., M.D. (Lond.), M.R.C.P. (Lond.), F.R.F.P.S.

J. C. Patel, Esq., M.D. (Bom.), M.R.C.P. (Lond.).
E. R. DeMello, Esq., M.D. (Bom.)

Honorary Surgeons and Lecturers in Surgery
R. N. Cooper, Esq., M.S., (Lond.), F.R.C.S. (Eng.), F.C.P.S. (Bom.).
V. M. Kaikini, Esq., B.A., M.B.B.S. (Bom.), F.R.C.S. (Edin.), F.C.P.S. (Bom.).
A. V. Tilak, Esq., F.R.C.S. (Eng.).
K. G. Munsif, Esq., M.B.B.S. (Bom.), F.R.C.S. (Eng.).
G. M. Phadke, Esq., M.B.B.S. (Lond.), F.R.C.S. (Eng.)
M. M. Pandya, Esq., M.B.B.S. (Bom.), F.R.C.S. (Eng.)

Honorary Assistant Surgeons and Lecturers in Surgery
ARTHUR E. DESA, ESQ., M.B.B.S. (Bom.), F.R.C.S. (Eng.).
S. H. CHITNIS, ESQ., M.S. (Bom.).
R. G. GINDE, ESQ., M.S. (Bom.).
P. K. SEN, ESQ., M.S. (Bom.).
R. H. KARMARKAR, ESQ., (Bom.), F.R.C.S. (Eng.).
C. S. WORAH, ESQ., M.S. (Bom.), from 29th May, 1944.

Honorary Orthopedic Surgeon
R. J. KATRAK, ESQ., B.A., B.Sc., (Bom.), F.R.C.S. (Eng.), M.CH. Orthopaedics (Liverpool).

Honorary Assistant Orthopedic Surgeon
A. K. TALWALKAR, ESQ., M.B.B.S. (Bom.) F.R.C.S. (Eng.).

Honorary Aural Surgeon and Lecturer in Ear, Nose, and Throat
HOMI D. GANDHI, ESQ., M.B.B.S.(Bom.), F.R.C.S. (Eng.).

Honorary Assistant Aural Surgeon
S. G. JOSHI, ESQ., M.S. (Bom.).

Honorary Gynecologists and Lecturers in Gynecology and Obstetrics
MISS P. C. DAROOWALLA, M.D. (Bom.).
SIR MANGALDAS V. MEHTA, KT., O.B.E., B.A., F.C.P.S.I., F.C.P.S., F.R.C.O.G., (Lond.), Ex-Officio

Honorary Lecturer in Obstetrics
K. M. MASANI, ESQ., M.D. (Lond.), F.R.C.S. (Eng.).

Honorary Assistant Gynecologist
B. N. PURANDARE, ESQ., M.D. (Bom.), F.R.C.S. (Edin.).

Honorary Ophthalmic Surgeon and Lecturer in Ophthalmology
S. N. COOPER, ESQ., M.B.B.S., D.O. (Bom.), D.O. (Oxon), D.O.M.S. (Lond.).

Honorary Assistant Ophthalmic Surgeon
C. B. DHURANDHAR, ESQ., D.O. (Bom.)

Honorary Radiologist and Lecturer in Radiology and Electro-therapy
J. L. DESAI, ESQ., M.B.B.S. (Bom.), D.M.R.E. (Cantab.).

Honorary Assistant Radiologist
Z. J. JOSEPH, ESQ., M.D. (Bom.), D.M.R.E. (Cantab.).

Honorary Anesthetist and Lecturer in Anesthesia
MOKSHA MADAN DESAI, ESQ., D.A. (Eng.).

Honorary Dental Surgeon and Lecturer in Dentistry
D. M. DESAI, ESQ., L.D.S., R.C.S. (Eng.).

Honorary Assistant Dental Surgeon
J. A. AVASIA, ESQ., L.D.S., R.C.S. (Eng.).

Honorary Dermatologist and Venereologist and Lecturer in Dermatology and Venereology
A. C. REBELLO, ESQ., M.B.B.S. (Bom.), D.T.M. & H. (Lond.).

Honorary Assistant Dermatologist and Venereologist
J. A. FERNANDEZ, ESQ., L.R.C.P. (Lond.), M.R.C.S. (Eng.), M.R.C.P. (Edin.).

Honorary Lecturer in Medical Jurisprudence and Toxicology
V. V. JADHAV, ESQ., M.B.B.S. (Bom.).

Honorary Lecturer in Hygiene and Preventive Medicine
B. C. DAS-GUPTA, ESQ., B.Sc. (Hon.), (Cal.), M.B. (Cal.), M.R.C.P. (Ireland), D.T.M. & H. (Lond.) D.P.H. (Lond.).

Honorary Lecturer in Psychiatry
K. A. J. LALKAKA, ESQ., M.B.B.S. (Bom.).

The Hospital

510 beds of the hospital were fully occupied during the year.

Department.	Men.	Women.	Children.	Total.
Medical	132	44	12	188
Surgical & Orthopedic	126	41	16	183
Gynecological	...	35	...	35
Ophthalmic	20	12	...	32
Aural	12	3	8	23
Skin and Venereal	18	4	2	24
Isolation	6	3	...	9
Tetanus	5	3	2	10
Casualty	6	...	...	6
Total	325	145	40	510

The total number of inpatients during the year was 16,745 (14,894 in 1943 and 12,782 in 1942).

There were often extra patients over the scheduled number of beds, the maximum on a single day being 621, thus making nursing and care extremely difficult.

Particulars	Figures for the year 1944	Figures for the year 1943
(a) IN-PATIENTS		
1. Scheduled strength of beds	510	456
2. Daily average No. of in-patients	547.3	481.4
3. Total No. of new in-patients treated	16,745	14,804
4. Average No. of days each patient was resident	10.87	10.61
(b) OUT-PATIENTS		
1. Total No. of new out-patients	1,46,450	1,32,639
2. Daily average No. of new out-patients	414	333.59
3. Total No. of out-patient attendance	4,75,725	4,71,136
4. Daily average No. of out-patient attendance	1542.7	1505.59
5. No. of casualty patients included in No. 1 above	27,155	29,255
(c) OPERATIONS		
1. Total No. of operations on in-patients	5,606	5,960
2. Total No. of operations on out-patients	11,899	12,067

Out of the total number of 17,252 inpatients (16,745 admitted during the year under report and 507 previous year's balance), 6,418 were cured, 5,945 were discharged relieved, 2,797 either left the hospital against medical advice or were otherwise discharged and 1,592 died leaving a balance of 502 patients at the end of the year. Out of 1,592 deaths, 519 died within the first 42 hours of admission, 336 died after 42 hours but within 3 days of admission, and the remaining 737 after 3 days of admission into the hospital.

The highest number of outpatient attendance on any one day during the year 1944 was 2,280, the highest number of new admissions in the outdoor department on a single day being 653. Likewise the highest number on a single day of old cases treated was 1,537, of casualty cases 255, and of inpatients admitted 137.

The total expenditure incurred on the maintenance of the hospital during the year including liabilities outstanding at the end of the year and exclusive of cost of the extension scheme, amounted to Rs. 10,76,905 including grain compensation allowance of Rs. 1,12,271. This expenditure includes the cost of maintenance and treatment of inpatients, cost of outpatient department, of the resident, medical, nursing, and labor staff as well as that of the administration and of the maintenance and repairs of buildings etc.

The following table illustrates the relative cost per inpatient and outpatient per day during 1944–45, 1943–44. and 1942–43 respectively.

Particulars.	1944-45.	1943-44.	1942-43.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
(a) Average cost per in-patient per day	4 3 4	3 15 10	3 4 8
(b) Average cost per in-patient admission	50 14 11	46 11 10	42 6 1
(c) Average cost per out-patient attendance	0 7 11	0 7 2	0 7 2
(d) Average cost per out-patient admission	1 9 6	1 8 5	1 9 11

The details of the cost per inpatient per day, for 1944–45, 1943–44 and 1942–43 is shown in the following table:

Year.	Diets.	Drugs, dressings, etc.	Stores and Linen.	Heating and lighting.	Miscel-laneous.	Establish-ment.	Repairs to buildings and Engi-neering.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1944-45	0 14 11	0 10 9	0 2 8	0 2 3	0 1 10	1 15 7	0 3 4	4 3 4
1943-44	0 13 10	0 10 2	0 2 6	0 2 5	0 1 4	1 14 10	0 2 9	3 15 10
1942-43	0 8 10	0 8 6	0 2 11	0 2 6	0 1 6	1 10 2	0 2 3	3 4 8

The average cost of every new outpatient admission completely treated during the year in comparison with that for the previous two years:

Year.	Drugs, dressings, etc.	Stores and Linen.	Heating and lighting.	Miscel-laneous.	Establish-ment.	Repairs to buildings and Engi-neering	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1944-45	0 8 11	0 0 11	0 0 4	0 0 6	0 14 6	0 0 4	1 9 6
1943-44	0 8 4	0 1 1	0 0 4	0 0 5	0 13 11	0 0 4	1 8 5
1942-43	0 7 10	0 1 2	0 0 5	0 0 7	0 15 4	0 0 7	1 9 11

The actual cost incurred on patients (inpatients as well as outpatients) under drugs, surgical appliances etc. is exclusive of the cost of the injections, blood transfusions etc. met out of the Poor Box Charity Fund amounting to Rs. 25,185-9-6 during the year.

Motor and Mill Accident Cases

—	Motor Accidents.				Mill Accidents.			
	Treated in the casualty department.		Admitted.		Treated in the casualty department.		Admitted.	
	1944.	1943.	1944.	1943.	1944.	1943	1944.	1943.
Male ...	378	461	105	162	4,263	3,199	168	131
Female ...	51	51	19	24	121	99	4	1
Children Male	40	55	9	19	...	...	...	...
Children Female	22	20	8	11	...	...	...	...
Total ...	491	587	141	216	4,384	3,298	172	132

5,655 certificates under the Workmen's Compensation Act and 879 certificates with medical opinion were issued during the year.

Poisoning

145 patients were treated for poisoning and 78 for animal bites:

Nature of poisons.	Cured.	Relieved.	Otherwise.	Died.	Total.
Metals and their salts ..	3	4	1	...	8
Non-metals and their compounds ..	14	2	...	3	19
Organic poisons ..	64	14	5	3	86
Food poisoning ..	16	...	3	...	19
Poisonous gases and vapours ..	6	6	2	...	14
Unknown poisons ..	...	...	...	...	...
Total ..	103	26	11	6	146
Animal bites ..	57	9	9	3	78

Nurses

64 nurses were trained out of whom 50 had passed the nursing examination held by the Bombay Nurses Midwives and Health Visitors' Council.

The cost of the nursing establishment is Rs. 104-13-7 per nurse per month (Rs. 108-2-0 last year). The pro-rata rent for quarters provided to the support staff employed in the Nurses' Home and the Municipal Provident Fund contributions are not included in the above figures.

School Clinic

The treatment of school children attending Municipal Primary Schools was continued 1,255 new children were treated in the different departments of the hospital in addition to a large number of children who began their treatment in the previous year. The total number of children treated in the year was 8,799 (11,535 in the previous year). 81 school children were operated upon in the Aural department and 24 in the Ophthalmic department. 4 fractures were corrected and treated. Refraction of vision was done in 84 cases and glasses were prescribed to 75 children, including 5 to whom dark glasses were given. 1 child was given an eye shade. 6 children were treated for trachoma and phlyctenular conjunctivitis. The latter were given tuberculin injection with encouraging results. 6 children were admitted as inpatients and treated for their disorders.

20 children suffering from cervical adenitis were treated with ultra-violet rays and cod-liver oil. The children were screened and X-ray films used where necessary. Laboratory tests were also done for a number of children. One child bitten by a dog and another by a monkey were referred to Haffkine Institute for treatment.

The total cost of the clinic at the K.E.M. Hospital amounted to Rs. 10,103-3-0. A detailed report of the School Clinic had been forwarded to the Executive Health Officer.

Poor Box Charity Fund

Balance Sheet of the Poor Box Charity Fund, K. E. M. Hospital as on 31st March 1945.

Liabilities.	Rs. a. p.	Rs. a. p.
Fund account Balance on 31st March 1944	... 1,58,180 2 5	
Add—Excess of receipts over expenditure during 1944-45.	11,371 4 11	1,69,551 7 4
Deposit Account :—		
Patients' money	... 142 8 3	
Miscellaneous deposits	... 35 8 0	178 0 3
(Note :—Interest to be realised during 1944-45 not collected Rs. 1,517 13 0		
Total		1,69,729 7 7

Assets.		Rs. a. p.	Rs. a. p.
Cash in hand		428 5 0	
Balance with the Central Bank of India, Ltd.		14,651 0 7	15,079 5 7
Investments (at cost):—			
(1) 3½% G. P. Notes (1842-43) of the face value of		41,000	38,304 6 0
(2) 3½% G. P. Notes (1854-55) of the face value of		9,000	6,368 2 0
(3) 3½% G. P. Notes (1865) of the face value of	...	13,000	10,532 8 0
(4) 3½% G. P. Notes (1879) of the face value of	...	1,000	735 0 0
(5) 3½% G. P. Notes (1900-01) of the face value of	...	17,000	15,608 12 0
(6) 3% Loan (1951-54) of the face value of	...	6,000	6,210 0 0
(7) 4% Loan (1960-70) of the face value of		20,000	20,933 0 0
(8) 4% B.P.T. Debentures (1968) of the face value of	...	3,000	3,333 12 0
(9) 4% B.P.T. Debentures (1969) of the face value of	...	500	555 10 0
(10) 4% B.P.T. Debentures (1973) of the face value of	...	500	555 10 0
(11) 4% B.P.T. Debentures (1962) of the face value of		500	465 0 0
(12) 4% B.P.T. Debentures (1965) of the face value of	...	1,000	930 0 0
(13) 4% B.P.T. Debentures (1972) of the face value of		10,000	9,300 0 0
(14) 4% B.P.T. Debentures (1973) of the face value of	...	1,000	930 0 0
(15) 4% B.M. Debentures (1974) of the face value of	...	500	510 0 0
(16) 6% B.M. Debentures (1950-60) of the face value of	...	12,000	11,718 2 0
(17) 5% B.M. Debentures (1954-59) of the face value of		18,000	16,123 12 0
(18) 4% B.M. Debentures (1961) of the face value of (original B.I.T. Debentures)	...	500	510 0 0
(19) 4% B.M. Debentures (1962) of the face value of	...	2,000	2,040 0 0
(20) 4% B.M. Debentures (1967) of the face value of	...	6,500	6,862 8 0
(21) 4% B.M. Debentures (1965) of the face value of	...	1,500	1,530 0 0
(22) 4% B.M. Debentures (1968) of the face value of	...	500	510 0 0
Advance interest paid at the time of purchase of securities of the face value of		Rs. 25,000	84 0 0
		1,65,000 0 0	1,69,729 7 7

Besides relief in the shape of blood transfusion, costly drugs, medicines, injections, travelling expenses etc., the following appliances were provided to 88 patients at a total cost of Rs. 810-0-0 as shown below:

Particulars.	Nos.	Particulars.	Nos.
Elephant boots ...	2	Thomas's collar ...	1
Hernia trusses ...	9	Abduction Splint with head trachimeter ...	1
Artificial legs ...	5	Crutches adjustable ...	1
Dentures ...	2	Walking sticks with rubber tips ...	2
Abdominal belt ...	1	Abdominal support for hernia after operation...	1
Pilchers bags ...	1 pair.	Spectacles ...	63 pairs.

It was possible to provide blood transfusions to 152 patients with the help of donors to whom payment was made from this fund. The following donations were received and acknowledged during the year:

Serial No.	Name.	Amount. Rs.	a.	p.
	The Secretary, Mill-owners' Association, Bombay ...	1,400	0	0
2	Manak S. Velinkar, Esq. ...	1,200	0	0
3	V. H. Hazrat, Esq. ...	1,000	0	0
4	Dr. Francis Collaco ...	1,000	0	0
5	Messrs. Jam Manufacturing Company, Ltd.	1,000	0	0
6	Messrs. Volkart Brothers ...	700	0	0
7	The General Secretary, Indian Red Cross Society ...	605	8	0
8	The Secretary, American Women's Club of India ...	600	0	0
9	Messrs. Bombay Dyeing & Manufacturing Co.	501	0	0
10	Messrs. General Motors (India), Ltd. ...	450	0	0
11	Messrs. Burmah Shell Oil Storage & Distributing Company (India), Ltd. ...	400	0	0
12	Bapalal J. Mehta, Esq. ...	300	0	0
13	H. D. Billimoria, Esq. ...	300	0	0
14	Messrs. Killick Nixon & Co. Agents Kohinoor Mills, Ltd. ...	300	0	0
15	Messrs. Bombay Electric Supply and Tramways Co. Ltd. ...	300	0	0
16	Messrs. Madhavji Dharamsi Manufacturing Co. Ltd. ...	250	0	0
17	Sir Shapurji Broacha Mills, Ltd. ...	250	0	0
18	Ismail Mahomed Kasam, Esq. ...	250	0	0
19	The Managing Trustee, Seth Bhaidas Sakhidas Charity Fund ...	240	0	0
20	Messrs. Saksaria Cotton Mills, Ltd. ...	201	0	0
21	A. D. Engineer, Esq. ...	201	0	0
22	Messrs. Standard Vaccum Oil Company ...	200	0	0
23	V. G. Mokashi, Esq. ...	200	0	0
24	S. S. Sawaba, Esq. ...	200	0	0
25	The Agents, Western India Spinning and Manufacturing Co. Ltd. ...	200	0	0
26	The Agents, Hindustan Spinning and Weaving Mills, Ltd. ...	200	0	0
27	The Agents, Indian Manufacturing Co. Ltd.	200	0	0
28	Raja Dhanaraj, Esq. ...	200	0	0
29	The members of the Concord of S. S. "Dampur". ...	180	0	0
30	Dr. D. N. Daftary ...	150	0	0
31	Raja Yog Singh, Esq. ...	149	6	0
32	Laxman Narsappa Padamsali, Esq. ...	125	0	0
33	Govind Prasad, Esq. ...	120	0	0
34	Dr. I. S. Patel ...	120	0	0
35	Messrs. Rotary Club of Bombay ...	115	0	0
36	Meer Zahud Hussein Shah, Esq. ...	105	0	0
37	The Manager, Habib Bank, Ltd. ...	101	0	0
38	Messrs. Zandu Pharmaceutical Works Co. Ltd. ...	101	0	0
39	The Director, J. L. Morrison Son Jones (India), Ltd. ...	101	0	0
40	Messrs. Tata Mills, Ltd. ...	100	0	0
41	Shamji Nathoobhoy, Esq. ...	100	0	0
42	Messrs. Digvijay Spinning & Weaving Co. Ltd. ...	100	0	0
43	Messrs. Modern Mills, Ltd. ...	100	0	0
44	Messrs. Mysore Chemical & Soap Works ...	100	0	0
45	S. H. Merchant, Esq. ...	100	0	0
46	Messrs. F. M. Chinoy & Co. ...	100	0	0
47	Mrs. Margaret M. Pakenham ...	100	0	0
48	Messrs. Tata Sons, Ltd. ...	100	0	0
49	Messrs. H. J. Foster & Co. Ltd. ...	100	0	0
50	Messrs. Finlay Mills, Ltd. ...	100	0	0
51	Messrs. The Swan Mills, Ltd. ...	100	0	0
52	Messrs. Tata Mills, Ltd. ...	100	0	0
53	Abdul Aziz Patel, Esq. ...	100	0	0
54	Mrs. C. Jagose ...	75	0	0
55	A. N. Limaye, Esq. ...	60	0	0
56	Messrs. F & C. Osler, Ltd. ...	60	0	0
57	Mahomedbhoy M. Rowjee, Esq. ...	51	0	0
58	The Manager, Morarji Gokuldas Spinning & Weaving Co. Ltd. ...	51	0	0
59	T. B. Daroowala, Esq. ...	51	0	0
60	M. P. Nadkarni, Esq. ...	51	0	0
61	Amulakh Harilal Shah, Esq. ...	51	0	0
62	Messrs. Jeewanlal (India), Ltd. ...	51	0	0
63	N. D. Arwan, Esq. ...	51	0	0
64	Sohrab Mody, Esq. ...	51	0	0
65	N. C. Dalal, Esq. ...	51	0	0
66	V. R. Bagwe, Esq. ...	50	0	0
67	Messrs. Indian Oxygen & Acetylene Co. Ltd.	50	0	0
68	The Secretary, Maharaja of Banswara State	50	0	0
69	Ghelabhai H. Kothari, Esq. ...	50	0	0
70	Messrs. Godrej & Boyce Manufacturing Co. Ltd. ...	50	0	0
71	Dr. H. S. Chaturvedi ...	50	0	0
72	Dr. G. L. Waingankar ...	50	0	0
73	The Manager, Comptoir National D'Escompte de Paris ...	50	0	0
74	The Director, Gannon Dunkerley & Co. ...	50	0	0
75	Messrs. Martin & Harris, Ltd. ...	50	0	0
76	Govind Pandurang Barve, Esq. ...	50	0	0
77	S. J. Kantak, Esq. ...	50	0	0
78	Dr. R. G. Dhayagude ...	50	0	0

Other minor donations of less than Rs. 50 are not shown above.

The College

86 fresh admissions were made in June 1944. Their average age at the time of admission was 19.6 (19.5 last year); it being 17 when they matriculated. 85 of these students were single, and 1 betrothed. The occupations of their parents or guardians showed that 26 were dependent on service, 18 on business, 15 on medical profession, 6 on legal profession, 11 on pensions, 2 on landed property, and 8 on miscellaneous occupations. The number of undergraduate students on the college roll at the close of the year was 491, which included 114 women students, and the number of postgraduate and research students was 76.

		Male students.	Female students.
1st M.B., B.S. 1st year	...	57	30
do. 2nd year	...	88	34
2nd M.B., B.S. 3rd year	...	62	13
3rd M.B., B.S. 4th year	...	63	14
do. 5th year	...	107	23
Total number of students	...	377	114
Post-graduates including research students	...	72	4
Grand total	...	449	118

In accordance with the scheme of examining students medically, as inaugurated by the University of Bombay, out of 492 students so examined, 315 students (64%) were placed under class 'A', 176 (35.8%) in class 'B', and 1 (0.2%) in class 'C'. The percentages of students classified as belonging to 'A','B', and 'C' classes in 1943–44 was 68.3, 31.5. and 0.2 respectively. Those whose condition required treatment were referred to the honorary staff of the K.E.M. Hospital.

The results of the various examinations for which students were sent up by the college were as follows:

Examinations.			Candidates sent up.	No. of passing the whole examination.
1st M.B.B.S.	April 1944	...	96	40
	Oct. 1944	...	64	37
2nd M.B.B.S.	April 1944	...	51	51
	Oct. 1944	...	29	20
3rd M.B.B.S.	April 1944	...	105	30
	Oct. 1944	...	95	54
M.D. (Medicine)	April 1944	...	7	3
	Oct. 1944	...	5	1
M.D. (Pathology)	April 1944	...	3	2
	Oct. 1944	...	2	1
M.D. (Midwifery)	April 1944	...	2	...
	Oct. 1944	...	5	...
M.S.	June 1944	...	8	2
	Oct. 1944	...	10	...
D.O.	June 1944	...	...	...
	Oct. 1944	...	1	1
D.O.M.S.	June 1944	...	5	3
	Dec. 1944	...	5	1
F.C.P.S.	April 1944	...	4	3
Ph.D.	April 1944	...	1	1

With a view to organizing postgraduate training in medical subjects, an attempt has been made at this college from this year to take two courses of 3 months and 1 month's duration in a year in surgery for the M.S. Examination.

Annual Cost and Revenue

The total expenditure of the college, including the expenditure on the hostels, was Rs. 2,62,375 (Rs. 2,66,386 last year). In addition to the above expenditure, the amount spent on payment of dearness allowance came to Rs. 26,158 during the year. The revenue of the college in the form of tuition fees, hostel rent and miscellaneous receipts amounted to Rs. 1,35,433 (Rs. 1,31,367 last year). The gross cost per student for the year was Rs. 534.4 (Rs. 535 last year) and the net cost was Rs. 258.5 (Rs. 271 last year). The amount of fees received from the postgraduate students was Rs. 5,745.

Library and Museum

210 new books (174 last year) were added

to the college library. Of these, 15 books were presented to the library by their authors as complimentary copies. A student of this college presented 3 books to the library and Prof A.S. Paranjpe presented one book. The number of books issued to the medical students was 19,548 (18,700 last year). 3,489 books and journals were issued to members of the teaching staff of the college and resident medical officers of the K.E.M. Hospital.

25 new wet and dry specimens were added to the Anatomy Museum during the year under report and 50 old specimens were renewed. The total number of specimens in the Anatomy and Comparative Anatomy Section now came to over 1,650. The present space in the Museum was found quite insufficient to keep more specimens and the museums had to be extended as early as possible.

A number of specimens which had been collected could not be mounted owing to the difficulty of getting museum jars. Only 27 new specimens were added bringing the total number of specimens in the Pathology Museum to over 1,435. The total number of diapositives exhibited in the Museum were 148.

The Artist Department took 503 photographs of patients, specimens etc. during the year.

Students' Hostels

The number of students residing in the hostel for male students during the year was the same as in the preceding year—146. The number of women students residing in the hostel during the year was also the same as in the previous year—28. Accommodation was provided to 16 more women students in vacant rooms in the new Nurses' Home. Both the hostels were thus fully occupied and some of the applicants for rooms had to be rejected. There was need for extension of both hostels. The total expenditure incurred on the hostels was Rs. 12,738 while the income derived in the form of rent was Rs. 18,342.

Gymkhana

A combined medical team consisting of students from the Seth Gordhandas Sunderdas Medical College and the Grant Medical College entered the Bombay and Parel Hockey League Tournament and won the B-division Hockey League championship.

Mr George Fernandez secured the first place in discus throw and maintained his reputation by again winning the same place in the inter-group sports held at Belgaum.

Research

1. *Use of bacteriophage in typhoid fever (Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital Research Fund)*

   This work continued. 25 patients had been observed with adequate controls. It was planned to study at least another 25 cases before the results could have any value. The Superintendent of Arthur Road Hospital had cooperated in this work.

2. *Variation in the virulence of M. tuberculosis (This inquiry was being*

conducted under the I.R.F.A.)

The results obtained so far indicated that there was a difference in the virulence of different strains of human M. Tuberculosis. It could not, however, be correlated to the clinical condition of the patients from whom these strains were isolated. Further work was being carried on.

3. *Enquiry on anaerobic wound infections (funded by I.R.F.A.)*

   Whilst continuing this project, an attempt was being made to estimate colorimetrically the different enzymes produced by toxic and atoxic strains of Cl. Welchii.

4. *Bacteriological and biochemical study of the aroma producing micro-organisms in butter, curds and other milk products (Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital Research Fund)*

   Different factors concerned in the production of maximum aroma in samples of butter had been worked out. Employment of pure starters incorporating strains of streptococci which produce diacetyl and its combination with other lactic acid bacilli in certain proportions together with the adjustment of the acidity appeared to be the important factors in the development of good aroma in samples of butter and ghee.

5. *Optimum and minimum requirements of dietary fat (funded by I.R.F.A.)*

   i) *Experiments on rats*

      Growth experiments were being conducted on rats by feeding them butter fat, hydrogenated groundnut oil, and refined groundnut oil. Metabolic experiments had been done on rats by feeding butter fats at 5, 12, and 19% levels.

   ii) *Human experiments*

      The rates of absorption of different fats in human subjects were being studied by chylomicron count technique.

6. *Biological value of soya bean and other pulse proteins (funded by I.R.F.A.)*

   The biological values of proteins of three new varieties of soya bean had been compared with those of common pulse proteins. Vitamin A, B1, B2, nicotinic acid and carotene contents of these varieties of soya bean together with those of Bengal gram had been estimated.

7. *Analysis of foodstuffs (funded by I.R.F.A.)*

   Analyses of certain foodstuffs not commonly known outside the province were being done for the proximate principles and vitamins.

8. *Researches on Vitamin 'D' (funded by I.R.F.A.)*

   A study of induced rickets in dogs and rats was in progress in order to find out the metabolism of the epiphyseal cartilage of rachitic and normal bones *in vitro* by micro respiration technique.

9. *Studies on phosphatase activity in serum in normal and rachitic animals (funded by I.R.F.A.)*

   Investigations were in progress on dogs and rats to study the correlation between the ionic product of calcium phosphate and the phosphatase activity in serum.

10. *Time constants of excitation and accommodation in nerves (Seth*

Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital Research Fund)

The study was being made by using linear and exponential currents. The effects of ions such as K, Ca, Cl, etc. on the value of above constants were being investigated.

11. *Enquiry into the incidence and causation of glycosuria of pregnancy.* (Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital Research Fund)

540 cases of pregnancy had been studied and the enquiry had been concluded. It was found that the glycosuria was due to some toxic factor associated with the deficiency of Ca and Vitamin C in the maternal blood. The fetus abstracts large quantities of these materials during the later months of pregnancy and lowers their concentration in the maternal blood. Where women subsisted on a diet poor in these constituents, the deficiency of Ca, and Vit. C brought about a state of renal glycosuria which disappeared on administration of suitable doses of Vitamin C and Ca.

Publications by members of the honorary, professorial, and other staff are shown below. Articles published in the college magazine are not included here.

Serial No.	Name of the article.	Contributed by	Name of the Journal publishing it
1	Some observations on Tetanus ...	Dr. N. K. Sahiar, M.D., M.R.C.P. (Lond.)	Indian Physician, April 1944.
2	Congestive Cardiac failure its management ...	Dr. P. Raghavan, M.D. (Bom.) ...	Antiseptic, March 1945.
3	Filariasis (Read before the Second Bombay Medical Congress, 1944).	Dr. A. V. Baliga, F.R.C.S. (Eng.) ...	Medical Bulletin, August 5, 1944.
4	Regional Ileitis (Read before the Second Bombay Medical Congress, 1944).	Dr. V. M. Kaikini, F.R.C.S. (Edin.) ...	Medical Bulletin, August 18, 1944.
5	Surgery of the Thyroid Gland (Read before the G.S. Medical College Staff Society).	Dr. K. G. Munsif, F.R.C.S. (Eng.) ...	Indian Physician, September 1944.
6	Sub-conjunctival Injections of Soluseptasin in Ocular Sepsis.	Dr. S. N. Cooper, D.O., D.O. M.S. (Eng.)	Indian Physician, May 1944.
7	Evolution of a Common Sex Symbol ...	Dr. K. A. J. Lalkaka, M.B., B.S. ...	Indian Physician, November 1944.
8	Six cases of Kala-Azar in Bombay—Sodium Antimony V Gluconate in its treatment.	Dr. J. C. Patel, M.D., M.R.C.P. (Lond.), Ph.D. (Lond.).	Do. do.
9	Blood transfusion ...	Dr. J. K. Mehta, M.D., M.R.C.P. (Bom.)	Indian Physician, February 1945.
10	Perforated Peptic Ulcer of the Stomach and Duodenum.	Dr. P. K. Sen, M.S. (Bom.) ...	Indian Physician, January and February 1945.
11	Convulsion Therapy in Mental disorders ...	Dr. N. S. Vahia, M.D. (Bom.) ...	Indian Physician, August 1944.
12	The Role of Anaerobic Streptococii during pregnancy, Labour and Puerperium.	Dr. B. N. Purandare, M.D. (Bom.), F.R.C.S. (Edin.).	Indian Physician, June 1944.
13	The Value of Sulphonamide Drugs in Medicine	Prof. A. S. Paranjpe, M.D. (Heidelburg), L.R.C.P., D.T.M. & H. (Lond.).	Medical Press and Circular, London, July 12, 1944.
14	Review of Pharmacological Researches in India during 1943.	Do. do. ...	Annual Review of Biochemical and Allied Research in India, 1944.
15	Erythroblastic Anaemia of Cooley (Familial Erythroblastic anaemia).	Prof. R. G. Dhayagude, M.D. (Bom.) ...	American Journal of Diseases of Children, April 1944.
16	Behaviour of Typhoid Bacteriophage in the presence of body fluids and exudates.	Do. do. ...	Read before the Indian Science Congress, Nagpur, January 1945.
17	Structural Abnormalities ...	Prof. G. M. Kurulkar, M.B., B.S. ...	Indian Physician, December 1944.
18	Preliminary Report on the Third Gujerat Pre-historic Expedition and Human Remains discovered so far.	Do do	Published by the Deccan College Research Institute Poona.
19	Studies in Calcium and Phosphorus Metabolism Part VI.	Dr. V. N. Patwardhan, M.Sc., Ph.D. (Lond.).	Indian Journal of Medical Research May 1944.
20	Studies on Basal Metabolism in India ...	Do. do. ...	Special Report published by the Indian Research Fund Association, New Delhi, December 1944.
21	Basal Metabolism of Indians (Read before the G.S. Medical College Staff Society).	Do. do. ...	Indian Physician, October 1944.

The Co-operative Credit Society, Ltd.

This society of the labor staff of the hospital and college had functioned satisfactorily and continued to be in the 'A' class in the classification of the Registrar of Societies. The total number of members on the roll at the end of March 1945 was 372 (345 the previous year). 70 new members joined the society and 43 left during the year owing to death or termination of service.

The share capital of the society increased from Rs. 17,658-5-0 to Rs. 27,207-13-0. The amount of loans granted was Rs. 39,795 and that refunded was Rs. 27,488. The average amount of loan granted was Rs. 165. The society held no deposits from outsiders since its inception.

The Society held its last Annual General Meeting on 11 October 1944 and declared a dividend of 5% for the year ending 30 June 1944. The net profit during the year amounted to Rs. 1,444-14-3. The Reserve Fund of the Society on 31 March 1945 stood at Rs. 2,383-11-6 and net total of other funds at Rs. 1,334-0-6. The accounts of the Society had been checked by the Government Auditor up to 31 December 1944.

INDEX OF APPENDICES.

Appendix No. 1.—List of the College and Hospital Senior Staff.

Do. 2.—Summary of in-patients classified according to departments.

Do. 3.—Summary of out-patients classified according to departments.

Do. 4.—Chart illustrating the summary of patients according to sex, age and caste.

Do. 5.—Summary of discharges and deaths classified according to principal diseases or conditions treated.

Do. 6.—Classification of patients suffering from Tuberculosis according to principal sites.

Do. 7.—Classification of patients suffering from malignant neo-plasms according to type of growth, sex and age—discharged.

Do. 8.—Classification of patients suffering from malignant neo-plasms—discharged and deaths classified according to site and sex.

Do. 9.—Classification of fracture cases treated in the surgical department.

Do 10.—Classification of head injury cases treated in the surgical department.

Do. 11.—Summary of patients treated for diseases of female generative organs, with results.

Do. 12.—Classification of operations performed in the surgical department.

Do. 13.—Classification of operations performed in the gynaecological department.

Do. 14.—Classification of operations performed in the Ophthalmic department.

Do. 15.—Classification of operations performed in the Ear, Nose and Throat department.

Do. 16.—X-Ray and electro-therapy report.

Do. 17.—Skin and Venereal department report.

Do. 18.—Electro-cardiograph department report.

Do. 19.—Clinical Laboratory report.

Do. 20.—Poor Box Charity Fund—Statement of Accounts and Balance Sheet.

Addenda

Addendum I

Gleanings From the Appendices to Annual Reports

As noted in the earlier sections, each annual report carried a number of appendices packed with data. Here, we analyze the data at five-yearly intervals that let us understand the diseases prevalent then and the variety of operations carried out in the hospital. It is interesting to note the classification of diseases and terminology in use.

Diseases	Remained in-patients	Admitted in-patients	Admitted out-patients	Total treated in-patients
Infective Diseases				
Dysentery	1	163	464	164
Enteric Fever	4	58	64	62
Gonorrhoea	2	22	302	24
Kala Azar	..	..	1	..
Leprosy	..	..	22	..
Malaria	2	275	3,704	277
Plague	..	2	2	2
Pneumonia	2	160	181	162
Pyrexia of uncertain origin	3	98	28	101
Rheumatic Fever and Rheumatism	3	32	168	35
Small - pox	..	..	4	..
Syphilis (Primary and Secondary)	1	50	348	51
Tubercle of the lung & other tubercular diseases	13	374	680	387
All other infective diseases	2	75	272	77
Other General Diseases				
Anemia	1	74	151	75
Diabetes	..	15	19	15
Scurvy	..	4	9	4
Non - malignant, new growth	2	53	93	55
All other infective diseases	2	75	272	77
Other General Diseases				
Anemia	1	74	151	75
Diabetes	..	15	19	15
Scurvy	..	4	9	4
Non - malignant , new growth	2	53	93	55
Malignant , new growth	3	101	105	104
All other general diseases	3	119	1,004	122
Systemic Diseases				
Diseases of the nervous system	5	174	566	179

Diseases	Remained in-patients	Admitted in-patients	Admitted out-patients	Total treated in-patients
Diseases of the eye	6	351	2,090	357
Diseases of the ear	..	17	368	17
Diseases of the nose Diseases of the circulatory system	.. 2	64 88	321 131	64 90
All diseases of the respiratory system except pneumonia and tubercle of the lungs	11	192	1,241	203
Dyspepsia	..	8	353	8
Diarrhoea	2	63	366	65
Abscess of Liver All other diseases of the Liver	1 ..	55 10	69 47	56 10
Appendicitis	3	66	114	69
All other diseases of the digestive system	12	342	2,194	354
Inflammation and suppuration of lymphatic glands	1	18	232	19
Goitre	..	2	7	2
Bright's disease	..	20	17	20
All other diseases of the urinary system	6	87	202	93
Hydrocele	..	95	199	95
Other diseases of the generative system	6	999	867	228
Diseases of the organs of locomotion	4	54	492	58
Diseases of the connective tissues	6	152	555	158
Ulcers	..	29	812	29
Other diseases of the skin	2	19	514	21
All other local diseases	...	79	5,887	79
Injuries general and local	2	145	1,013	147
Poisoning by opium	..	4	..	4
Do. by other poisons	..	34	68	34
Labor				
Normal	7	313	271	320
Abnormal	..	..	..	..
Total	**118**	**4,378**	**26,627**	**4,496**

Nature of Operation	Principal	Secondary	Total	Cured	Relieved
TUMORS					
Removal by Excision	31		31	23	4
Removal by Diathermy	8		8	2	43
CYSTS					
Removal by Excision	4	..	4	4	..
by Enucleation	2	:	42	42	:
ABSCESS					
Acute - Incision & Drainage	64	..	64	55	2
Chronic Incision & Drainage	4	..	4	2	2
Chronic Aspiration	17	..	17	8	9
FOREIGN BODIES					
Removal in the natural passage	62		62	5 62	
Removal in the tissues (impacted)	2		2	62	
ARTERIES					
Inj. of Alcohol into arterial sheath	5	..	5	2	3
VEINS					
Excision of varicose veins	72		4	4	
Inj. of Soda Salicylas into veins	2		42	1	1
LYMPHATICS					
Incision & drainage of Lymph glands	2	..	2	2	..
Removal of Lymph glands for T. B.	42	..	42	35	2
Removal of Lymph glands for other purposes	4	..	4	4	..
NERVES					
Souttar's Operation	2	..	2	..	2
Stoffel's Operation	2	..	2	..	1
Skin and Subcutaneous Tissues Plastic- Skin grafting by Thiersch method	6	..	6	6	2
Skin and Subcutaneous Tissues Plastic- Skin grafting by Thiersch (Pedicle)	4	..	4	4	..
Boils and Abscesses	4	..	4	4	..
Ulcers or sinus - scraping	8	..	8	5	2
Suture of wounds	6	..	6	6	..
Cellulitis, Incisions Guinea Worm incisions	17 4	.. ..	17 4	12 4	2 ..
Carbuncle Worm Incisions	2	..	2	2	..
Excision of nail	1	..	1	1	..
Excision of corns, warts etc. Excision of Ganglion	2 5	.. ..	2 5	2 5	.. ..

Nature of Operation	Principal	Secondary	Total	Cured	Relieved
T. B. Sinus - Scraping	14		14	11	3
Whitlow - Incision & drainage	..	..	..	..	..
Muscles, Tendons, Fascia etc.					
Adherent cicatrix Excision	2	..	2	2	..
Elephantiasis - Kondoleon's Operation	5	..	5	1	4
BONES					
Osteotomy	5	..	5	3	2
Sequestrotomy	9	..	9	6	2
Osteomyelitis - Incision	2	..	2	1	1
Abscess - Incision and drainage	1	..	1	1	..
Sinus scraping Tuberculosis - removal of	4 24	.. ..	4 24	2 12	1 10
Correction of deformity by Fracture..	9	..	9	7	2
Reduction of Fracture and Splint Application					
Bone grafting**	5	..	5	..	..
Talipes - operation for	2	..	2	2	..
Bone scraping	10	..	10	7	..
Plaster of Paris application	..	..	..	..	..
JOINTS					
Reduction of shoulder	1	..	1	1	..
Reduction of other dislocations	..	..	..	..	..
Reduction of dislocation by operation shoulder	3		3	3	..
EXCISION OF JOINTS					
(a) Clavicle	3	..	3	3	..
(b) Shoulder joint	2	..	2	1	..
(c) Elbow	1	..	1	1	..
(d) Knee	1	..	1	..	..
(e) Metacarpal	1	..	1	1	..
(f) Temporo - Mandibular joints	1	..	1	..	..
Tapping or Aspiration	1	..	1	1	..
Breaking down adhesions for Ankylosis	7	..	7	7	..
Arthrectomy	2	..	2	2	..
SKULL					
Trephining	1	..	1	1	..
Decompression of skull	2	..	2	1	..
SPINE AND SPINAL CORD					
Laminectomy	2	..	2	..	..

Nature of Operation	Principal	Secondary	Total	Cured	Relieved
Epidural injection of saline for incontinence of urine	3	..	3	3	..
AMPUTATIONS					
(1) Arm	2	..	2	1	..
(2) Finger	6	..	6	6	..
(3) Thigh	3	..	3	2	..
(4) Leg	9	..	9	9	..
(5) Foot (Syme's) (6) Toe	3 4	.. ..	3 4	3 4	.. ..
(7) Forearm	2	..	2	2	..
(8) Hip	1	..	1	1	..
FACE					
Rhinoplasty	2	..	2	1	..
Hare lip	2	..	2	2	..
BREAST					
Abscess Incision and drainage	2	..	2	2	..
Cyst - Removal	1	..	1	1	..
Amputation of breast	3	..	3	3	..
Amputation of breast with Lymphatic glands for carcinoma	8	..	8	5	..
THORAX Empyema - Incision and drainage	3	..	3	2	..
Resection of rib and Incision..	1	..	1	..	..
ABDOMEN Laparotomy - Tuberculosis	11	..	11	3	3
Laparotomy - Exploratory Purposes	3	..	3	2	..
Laparotomy - Replacement of Intestines	1	..	1	1	..
Extra Peritoneal Incision and drainage Iliac abscess	22	..	22	..	..
Mucous Fistula - Excision	2	..	2	..	..
STOMACH AND INTESTINES					
Gastro - Enterostomy	6	..	6	4	1
Gastrostomy	2	..	1	1	..
Intestinal Anastomosis	3	..	3	1	1
Intestinal Obstructions	1	..	1	1	..
Appendicectomy	26	..	26	19	1
Appendicular Abscess Incision and drainage	4	..	4	3	..
Hernia-Inguinal - Radical cure	68	..	68	62	..
Hernia-Strangulated - Radical cure	11	..	11	6	..
Hernia-Ventral - Radical cure	4	..	4	4	..

Nature of Operation	Principal	Secondary	Total	Cured	Relieved
Hernia-Femoral - Radical cure	2	..	2	2	..
Hernia-Umbilical - Radical cure	1	..	1	1	..
Sigmoidoscopy	7	..	7	5	2
Colotomy	3	..	3	..	1
Fecal Fistula	1	..	1	1	..
Gastropexy	1	..	1	1	..
Duodenal Ulcer perforated - Suture	1	..	1	..	..
RECTUM AND ANUS					
Imperforate Anus	2	..	2	2	..
Fistula - in - ano - Excision	27	..	27	23	3
Fissure - in - ano Excision	20	..	20	20	..
Piles Internal Radical Cure	33	..	33	31	2
Piles Internal Inj. Carbolic	4	..	4	2	..
Piles External - Excision	8	..	8	8	..
Ischio - Rectal Abscess Incision	4	..	4	3	1
PANCREAS					
Cyst - Marsupialization	1	..	1	..	1
LIVER Abscess - Incision and drainage	7	..	7	6	..
Hydatid Cyst Marsupialization	1	..	1	..	1
Congenial Cysts	1	..	1	..	..
Cirrhosis of Liver Ascites Omentopexy	4		4		1
Suture of wounds	1	..	1	..	..
REMOVAL SPLENIC ABSCESS					
Incision and drainage	1	..	1	..	1
KIDNEYS AND URETERS					
Nephro Lithotomy	4	..	4	1	1
Pyonephrosis - Incision and drainage	2	..	2	2	..
Pyelography	7	..	7	4	3
BLADDER					
Suprapubic Cystotomy	2	..	2	1	1
Perineal Cystotomy	1	..	1	..	..
Suprapubic Lithotomy	10		10	9	1
Litholapaxy	8	..	8	8	..
Cystoscopy	21	..	21	15	4
PROSTATE SUPRAPUBIC					
Removal	2	..	2	1	..

Nature of Operation	Principal	Secondary	Total	Cured	Relieved
URETHRA					
Stricture Urethra, Wheelhouse's Operation	1	..	1	..	..
Urethroplasty Dilatation of stricture	2 6	.. ..	2 6	2 3	.. 2
Internal Urethrotomy	4	..	4	2	1
External Urethrotomy	2	..	2	2	..
Urethral Fistula Repair Cock's operation of Perineal section	1 1	.. ..	1 1	1 ..	.. ..
Stone removal	1	..	1	1	..
Urethroscopy	3	..	3	3	..
Peri Urethral Abscess	1	..	1	1	..
MALE GENERATIVE ORGANS					
Orchidopexy	2	..	2	2	..
Circumcision	5	..	5	5	..
Amputation of Penis partial	9	..	9	7	..
Amputation of Penis complete	1	..	1	1	..
Paraphimosis - Incision	..	..	..	..	..
Hydrocele - Tapping	..	..	..	..	..
Hydrocele Radical Cure	78	4	82	69	8
Pyocele - Incision and drainage	8	2	10	6	2
Hematocele	5	1	6	5	..
Castration	8	..	8	8	..
Stenckel's Operation	1	..	1	..	1
	900	**7**	**907**	**692**	**107**

Classification of Maternity Cases and Obstetric Operations

Note - "After the opening of Nowrosjee Wadia Maternity Hospital, maternity cases ceased to be admitted at this hospital from 1 March, 1927. During the 11 months of the year 313 patients were admitted as under. Of the 313 patients delivered at or near term, there were 272 normal labors and 41 abnormal labors."

Delivered at or near full term	213
Admitted after delivery	6
Discharged undelivered	65
Died undelivered	2
Abortions	27.
Of the 41 abnormal labors, there were:	
Twin Labors	3
Persistent Occipito - Posterior Positions	3
Breech presentations	2

Transverse lies	8.
Prolapse of the Funis	3
Prolapse of the arm	1
Brow and face presentation	1
Placenta Praevia	4
Contracted pelvis (Forceps)	2
External Podalic Version	1
Internal Podalic version	6
Bipolar Podalic version	2
Impacted shoulder presentation	1
Eclampsia	2
Retained placenta	1
Adherent placenta	1
Maternity Mortality	
Puerperal sepsis (admitted after delivery)	2
Eclampsia	1
Pregnancy (full term) Anemia -- undelivered	2
Obstetric shock - natural forces - anemia	2
Instrumental delivery - decapitation	2
Pregnancy anemia after delivery	4

Obstetric Operations			
Forceps Delivery			
Indication.	**No. of cases**	**Result to mother**	**Result to child**
Contracted pelvis	4	L	L
Occipito - Posterior	3	L	2L,1D
Delayed vertex	2	L	L
Version			
Placenta Previa	3	L	2L,1D
Transverse Lie	6	L	4L, 2D
Mento - Posterior	1	L	L
Decapitation			
Impacted shoulder presentation	..	1	Mother D
Craniotomy			
Transverse Lie-after coming Head	..	1	Mother L

Classification of Gynecological Operations	Indoor				
Nature of Operation	**Principal**	**Secondary**	**Total**	**Cured**	**Relieved**
Oophorectomy (ovarian cyst)	7		7	7	
Removal of Broad Ligament Cyst	3		3	3	
Salpingo-Oophorectomy Salpingostomy	24	8	32	19	1
Salpingostomy		3	3		
Draining of Pyosalpinx	2	2	4		2.
Ventrisuspension Uteri by Gilliam's method	3		3	3	
Method Ventrisuspension modified Gilliam's	2		2	1	1
Ventrisuspension Dudley's method	4		4	2	
Ventrifixation Uteri	1	1	2	1	
Myomectomy	1		1	1	
Hysterectomy-subtotal	9		9	7	
Hysterectomy-total	3		3	2	
Wertheim's Operation	1		1	1	
Ectopic Gestation	6	6		4	
Salpingectomy for Salpingectomy	1	3	4	1	
Removal Uterine Polypus	3		3	2	
Removal Cervical Polypus	2				32
Removal Cervical Polypus	2		2	2	2
Amputation of cervix		8	8		
Dilation and Curettage	38	6	44	22	12
Repair of Vesico cervical Fistula	1		1	1	
Repair for vaginal atresia	1		1	1	
Dilatation cervix	2	1	3	2	
Cauterization cervix	2	1	3	2	
Colporrhaphy	13		13	13	
Colpoperineorrhaphy	6	10	16	5	
Perineorrhaphy	3		3	1	
Colpotomy	1		1		1
Incision of septum					
Vaginitis	2		2	2	
Removal of Bartholinian Cyst	1		1	1	
Appendicestomy	1	2	3	1	
Exploratomy Laparotomy for T. B. Peritonitis	5		5		4
Scraping of Post Operative sinuses	1		1	1	
Cystoscopy	1		1		
Scraping and suturing of septic Abdominal Wound	1		1	1	
Removal Urethral Caruncle	1		1	1	
Total	**153**	**46**	**199**	**111**	**21**

Classification of Ophthalmic operations

Nature of Operation	Principal	Secondary	Total	Cured	Relieved
Entropion	1	..	1	1	..
Trachoma Expression	..	..	..	..	..
Removal Meibomion Cyst	..	..	..	..	..
Stye	..	..	..	..	..
Tarsectomy	..	..	..	..	..
Pterygium	2	..	2	2	..
Lacrymal Abscess - incising	1		1	1	
Lid Abscess	..	..	..	..	..
Washing the Anterior Chamber	2	3	5	2	..
Extirpation, Lacrymal Sac	14	5	19	14	..
Scheimomich's Section	17		17	..	16
Weiber's Operation	1		1	1	
Peritomy	6	2	8	5	1
Iridectomy	68	3	71	36	29
Cauterization - Corneal Ulcer	6	13	19	1	2
Cauterization - Iris	..	1	1	..	..
Paracentesis	15	..	15	5	10
Needling	26	56	82	12	12
Extraction - Cataract	150	..	150	107	18
Extraction Foreign Body	..	..	..	..	..
Evisceration of Eyeball	5	4	9	5	..
Cyanide Injections	..	..	..	..	..
Saline Injections	..	..	..	..	..
Nosalvarsan Injections	..	..	..	..	..
Trephining	19	..	19	2	15
Lagrange's Operation	1	..	..	1	..
Enucleation of Eyeball	10	4	14	10	..
Sclerotomy	1	..	1	1	..
Descemetocele - removal of	..	..	..	..	..
Tenotomy	1	..	1	1	..
Tumor	1	..	1	1	..
Canthoplasty	1		1		
Skin Grafting	1		1		1
Operation for Symblepharon	1		1		1
Total	**350**	**91**	**441**	**207**	**106**

Classification of Operations on Ear, Nose, and Throat					
Nature of Operation	**Principal**	**Secondary**	**Total**	**Cured**	**Relieved**
MOUTH					
Excision of Uvula	..	..	..	..	..
Tonsils and Adenoids Removal	8		8	8	..
Nose and Accessory Sinuses					
Deviated Septum - Resection	43	..	43	41	..
Polypus - Removal	1	..	1	1	..
Maxillary Sinus - Puncture	1	..	1	1	..
Antrostomy - Single	13	..	13	12	..
Antrostomy - Double	7	..	7	6	..
Turbinectomy	..	..	..	..	..
Turbinal's Cauterization	..	..	..	..	..
Ethmoid Cells - Curetting	3	..	3	..	3
Naso-Pharynx - Removal of new growth					
(Benign)					
Ear-Mastoid Abscess					
Radical Cure - Stakes' Operation	8	..	8	8	..
Mastoid Abscess - Schwartze's Operation	3	..	3	3	..
Myringotomy	3	..	3	3	..
Plastic Operation	3		3	3	..
Tracheotomy	3		3	1	1
Removal of Malignant Growth - Larynx	1	..	1	..	1
Pharynx and oesophagus					
Pharyngitis - Cauterization Dilatation of Stricture Esophagus	.. 1	.. ..	.. 1	.. ..	.. 1
Esophagoscopy	1	..	1	..	..
Total	**99**	**..**	**99**	**87**	**6**

Addendum II

Construction of the Various Edifices On the Campus

Building	Year Of Completion
Seth Gordhandas Sunderdas Medical College	1925
King Edward Vii Memorial Hospital	1926
Hostel For Men Students	1926
Seth Jamnadas Lallubhai Museum	1933
Additional Second Floor Over The Hospital	1936
Hostel For Women Students	1938
Quarters For Labor Staff	1939
Dean's Bungalow	1940
Assistant Dean's Bungalow	1940
New Nurse's Home	1941

From: *Bombay University Calendar1928–1930* Bombay: Kamat Printing Press 1931

Addendum III

From: *Bombay University Calendar1928–1930* Bombay: Kamat Printing Press 1931

Endowments

1) *Endowment from Mr. Chaturbhuj Gordhandas Sunderdas* for a scholarship to be called "*Bai Gangabai Gordhandas Sunderdas Scholarship*" of Rs. 15 per mensem to a student entering this College with the highest number of marks at the Inter Science Examination of the University of Bombay.

2) *Endowment from Mr. Chaturbhuj Gordhandas Sunderdas* for a scholarship to be called "*Chaturbhuj Gordhandas Sunderdas Scholarship*" of Rs. 15 per mensem to the student of this College who stands highest in Anatomy at the Inter M. B., B. S. Examination of the University of Bombay.

3) *Endowment from Mr. Lalji Naranji* for a scholarship to be called "*Lalji Naranji Scholarship*" of Rs. 15 per mensem to the student of this College, who stands highest in Physiology in the Inter M. B., B. S. Examination of the University of Bombay.

4) *Endowment from Mr. Tulsidas H. Parekh* for a scholarship to be called "*Bai Bachoo Bai Thakoredas Entrance Scholarship*" of Rs. 13 per mensem to a Gujerati Hindu lady student of this College who secures the highest number of marks at the Inter Science Examination of the University of Bombay.

5) *Endowment from Mr. Jehangir Ratanshaw Dadabhoy* for a scholarship of Rs. 13 per mensem to be called "*Ratanshaw Dadabhoy Scholarship*" to the student of this College who stands highest in Medicine at the College competitive examination in the 4th year's course of studies.

6) *Endowment from Dr Mrs. Dossibai Jehangir Dadabhoy* for a scholarship of Rs. 13 per mensem to be called "*Awabai Ratanshaw Dadabhoy Scholarship*" to the lady student of this College who stands highest in Midwifery at the College competitive examination in the 4th year's course of studies.

7) *Endowment by the Honorary Staff and whole-time Professors of the College and Hospital* for a scholarship of Rs. 13 per mensem in commemoration of the late Dr K. N. Bahadurji and to be named after him.

8) *Endowment from the Bhavnagar State* for a scholarship of Rs. 20 per mensem to be called "*The Bhavnagar State Entrance Scholarship*" to be awarded to a newly admitted student for the Inter. M. B., B. S. Class at this College, who gets the highest number of marks at the Inter Science Examination (Medical Group) of this University provided that no student who has been awarded another scholarship from other similar Endowments in connection with this College, shall be eligible.

9) *Endowment from the "Shirwalkar Memorial Fund"* for a scholarship to be called "*The Dr Shirwalkar General Proficiency Scholarship*" of the value of Rs. 15 per mensem to be awarded annually on the results of the examination to be held every year in the month of December in Anatomy and Physiology, to a student who secures the highest number of aggregate marks in these subjects and provided the Examiners recommend the award of the said scholarship to the student concerned.

10) "*The Dr Shirwalkar Junior Clinical Medicine and Junior Clinical Surgery Gold and Silver Medals*" (8 in all) of the approximate value of about Rs. 35/- and Rs. 12/- respectively, to be awarded, twice a year, at the result of Clinical and Oral Tests to be held in Junior Clinical Medicine and Junior Clinical Surgery, at the end of each Term—Monsoon and Winter. The student standing highest in merit in the respective subject will be awarded the Gold Medal, and the student next in merit the Silver Medal.

11) *The award of a Gold Medal by H. H. Maharana Shri Sir Daulatsingji, K. C. I. E., Thakore Saheb of Limbdi,* to be named "*His Highness Sir Jawanatsingji Limbdi Gold Medal*" to a student of the College who stands first among the students of the College at the Final M. B., B. S. Examination.

12) "*Sir Nusserwanji Choksey Memorial Prize Medal (Gold)*" to be awarded to a candidate of the College after special Competitive Examination in Medicine, from among the candidates who may have passed the Final M. B., B. S. Examination of the Bombay University in the previous year.

From: *Bombay University Calendar1936–1938* Bombay: Kamat Printing Press 1931

1) The award of a Gold Medal by Dr H. DeSa, M. D., (Bom.), Hon. Gynecologist K. E. M. Hospital in memory of his deceased wife to a regular student of the College who passes the III M. B. B. S. examination of the Bombay University at its main session by obtaining the highest number of marks in the subject of Midwifery and Gynecology.

2) Endowment from Mr. B. N. Dhume for a prize to be called "Narayan Dhume Prize" to be awarded to a student of the Bombay University entering the Seth G. S. Medical College with the highest number of marks at the Inter. Science Examination and passing at the first attempt provided that such a student is not in receipt of any other similar scholarship with the Seth G. S. Medical College shall be eligible.

CONFLUENCE - The Academic Extravaganza

World Bioethics Day Celebration

Freshers Hike - When you take a hike too seriously!

Mismatch day - Abnormal is the norm

Face Painting - Making faces as an adult

TEDx GSMC

20

Biography of Pioneers

These biographies (of pioneers) have been curated, researched, and written by Late Dr Sunil K. Pandya, unless specified otherwise.

Dr Ardeshir Pestonji Bacha (1881–1945)

Dr A.P. Bacha

He was born in Navsari, then part of Baroda, to Pirojbai and Pestonjee. He attended Navsari High School and entered the Grant Medical College in 1898. He obtained the L. M. & S. qualification of the University of Bombay in 1903, having passed all his examinations in the first class and obtained several prizes, medals, and scholarships. He worked for a short period with Dr H.M. Masina at his hospital in Byculla before applying for the J. N. Tata scholarship for further training in Britain.

He studied at University College Hospital in London and obtained his British medical qualifications—M.B.B.S. in 1907 and F.R.C.S. in 1909. He returned to India in 1910. His sense of propriety and ethics made him write the following letter to *The British Medical Journal* (now *BMJ):*

A PROTEST.

MR. A. P. BACHA, M.B. (London, S.W.), writes: Kindly allow me to protest, through the JOURNAL, against the publication of a flattering short sketch of my career in one or two lay papers in Bombay simply because I happened to pass a certain examination. One cannot rightly object to the publication of examination results, but when these editors take upon themselves to publish biographical sketches of some of the medical men which may amount to anything from a small paragraph to one or two big columns, and often accompanied with their photographs, they forget that they are doing a very great harm to the medical men concerned, and are violating their best and sacred ideals of professional conduct and etiquette. I myself would not have cared to take notice of this, but unfortunately this custom had grown to such an extent that it has become a positive evil, and, what is more to be regretted, is that so far, to my best knowledge, there is no united or individual protest from among the medical profession in Bombay against the same, which is nothing short of an advertisement.

The British Medical Journal 8 January 1910, page 120

He was a member of the first batch of consultants appointed to Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital. He was appointed examiner by the University of Bombay for the M.S. (Surgery). He instituted a medal for the best student qualifying at this examination each year.

Courtesy: Dr Nobhojit Roy, recipient of this medal.

Dr Bacha resigned from his position at the Seth Gordhandas Sunderdas Medical College in July 1936. He started his own private hospital named the Bellevue Clinic on the present Maharshi Karve Road at Marine Lines and soon had a lucrative practice.

He was a member of the Bombay Branch of the *British Medical Association* for 40 years and took active part in the meetings, including those for laying down the draft rules for the branch. At some of these meetings, the chairperson was Lt Col C.H.L. Meyers. Other members included Drs Sorab Nariman, Annette Benson, D.M. Gagrat, M.B. Patel, J.M. Vazifdar, J.M. Meher-Homjee, Sorab K. Engineer, J.B. Mama, D.R. Bardi, and J.N. Duggan.

Throughout his career, he was the epitome of the scholarly physician, keeping abreast of advances in medicine and surgery through subscriptions to British and American journals whilst building an admirable personal library at considerable expense. In view of his deep ties with these institutions, he bequeathed the vast majority of his books and journals to the library of Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital along with a sum of Rs. 25,000 to be used towards subscriptions for journals.

He was appointed President of the Bombay Medical Union. He was a staunch nationalist. During the later years of his life, he deplored the disruptive and communalist tendencies gaining strength. Along with his distinguished contemporaries, he offered his services for the care of the wounded soldiers sent to Bombay for treatment during the World War (1939–1945). He was designated Honorary Lieutenant Colonel, Indian Army Medical Services. Colonel Sir Jamshedji N. Duggan, the head of the War Hospital in Bombay, specially thanked him for his efforts which continued almost till the end of his life.

His obituarist, J.B.D., concluded his note with these sentences:

'He cherished the highest ideals of our profession and was very strict and uncompromising in his observance of those ideals. I had the privilege of an unbroken intimate relationship with him for fifty years. He was a pioneer Indian surgeon who has set a very high standard for others to follow—one who would have been acclaimed as an outstanding surgeon in any country.'

Personal Life

On 27 September 1915, Dr Bacha married Mithibai Tehsildar, daughter of the of the revenue ministers to the Nizam of Hyderabad. She survived him with two

sons. Bacha lived at Bellevue, Chowpatty Road, and later at La Citadelle, Queen's Road, Bombay. He died in Bombay on 5 June 1945.

Suggested Reading

- Anonymous: A.P. Bacha, M.B., B.S. F.R.C.S. Obituary. *The British Medical Journal* 8 September 1945, page 336.
- Royal College of Surgeons of England: Bacha, Ardeshir Pestonjee (1881-1945). Plarr's Lives of the Fellows. 2013.
- https://livesonline.rcseng.ac.uk/client/en_GB/lives/search/detailnonmodal/ent:$002f$002fSD_ASSET$002f0$002fSD_ASSET:375971/one?qu=bacha+ardeshir&ic=true&te=ASSET&dt=list Accessed on 1 January 2024.

Dr Phiroz Cooverji Bharucha 1882–1952

Dr P.C. Bharucha

He was born in 1882 in Mhow and was educated in the local high school. His father, Cooverji, was a school principal. His undergraduate medical education was at the Grant Medical College. He graduated L.M. & S. in 1903. At the age of 22 years, he went to England for further education and obtained the M.D. degree from the University of London in 1911.

Returning to Bombay the following year, he started practice and was appointed Consulting Physician at the Parsee General Hospital. His attempt, along with such colleagues as Dr A.P. Bacha to secure appointment on the teaching staff at his *alma mater* in Bombay were frustrated by the prevalent attitude of the officers of the Indian Medical Service. His advocacy of equal treatment of Indian physicians contributed to the formation of the Seth Gordhandas Sunderdas Medical College, which allowed advancement of Indian doctors to positions of greater responsibility.

In 1926, Dr P.C. Bharucha was appointed Honorary Physician and Lecturer in Medicine, Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital along with Drs Jivraj Mehta, M.D.D. Gilder, A.S. Erulkar, and P.T. Patel. This group of highly motivated teachers set the standards that have since then enlivened these institutions.

Dr Bharucha was generous in his donations and contributed especially to the development of the Nurses' Home and the college library. He soon gained a reputation as an excellent physician who relied principally on a detailed history and thorough clinical examination of the patient. He practiced the art of bedside medicine and his clinics were well-attended. His patients included Mr M.K. Gandhi and Mr Mohammed Ali Jinnah.

It was widely known that he had an especially soft corner for poor patients,

whom he never charged even at his consulting rooms in the Fort.

In 1928, on the foundation of the Jerbai Wadia Hospital for Children, he was appointed Honorary Physician. (Dr R.N. Cooper was the Honorary Principal Medical Officer.)

Report on Plague in Borsad 1935

In 1935, Sardar Vallabhbhai Patel asked Mr D.N. Bahadurji, Advocate-General of Bombay, to form an independent committee to enquire into the care provided by Government to victims of the plague in Borsad Taluka, near Anand as deaths from the plague continued to increase from 1932–1935. Mr Vaikunth L. Mehta was Secretary and Dr M.D.D. Gilder and Dr P.C. Bharucha were the medical experts on the Committee. They visited several parts of the affected area and recorded evidence from witnesses. The note by the medical members of the Committee was appended and can be found from pages 40–62 of the report. It is of interest that parts of the report reproduced findings in Gujarati. The note was signed by 'M.D.D. GILDER M.D. (London) F.R.C.S., (England) M.L.C.; PHIROZ C. BHARUCHA, M.D. (London) Physicians, Parsi Fever Hospital, Bombay.'

The final report of the Committee was damning to the Government:

'From what we have stated so far as regards the charges and evidence thereon, the results appear to be that during the inter-epidemic periods in the years 1932-33-34, the authorities concerned failed to adopt even the measures that the Government recommended in their communique dated the 27th May 1935.

During the actual prevalence of plague, the only measures adopted were disinfection of houses to a limited extent and inoculation to a still more limited extent. We have no indication as 'to the extent to which evacuation was carried out and there was just some pretense at rat destruction.

According to the reports of the Medical Officers, there was no clinical treatment whatsoever of any plague patients in any part of the Taluka during the years 1933–34 and upto the middle of May 1935·

The authorities do not appear to have ever attempted or even thought of fighting plague by the adoption of measures-insufficient as they are suggested by the Assistant Director of Public Health, in his Note of the 8th April 1935.'

In 1938, he was elected Member, Bombay Medical Council and the Senate, University of Bombay. He was appointed Sheriff.

Personal Life

He married Bachhabai, daughter of Mr Nadirshaw Edulji Dinsha of Karachi.

Her father was a contractor for the British Army and made his fortune during the Second Afghan War. By the late nineteenth century, he was reputed to own around half of the city of Karachi. Her brother, Nadirshaw, remained in Karachi after 1947. Framroze E. Dinshaw came to Bombay. He practiced law and was considered the most brilliant man Mr J.R.D. Tata had ever met. He was one of the founders of the Associated Cement Company. He also advocated cremation for Parsees in 1922—a proposal shot down by more traditionalist members of the community.

She passed away on 24 May 1919, soon after the birth of her son.. After her death, he decided to live in a suite at the Taj Mahal Hotel and had, as his official address '352–353 Taj Mahal, Bombay'.

Their son, Dr Eddie P. Bharucha, was born on 28 December 1916. As a child, following the death of his mother, he spent most of his youth in Bombay with his father, an English governess, and a Jack Russell terrier called Bobbie. He was later to set up the department of neurology at Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital.

On Sunday, 25 May 1952, *The Times of India* carried this announcement:

Dr. P. C. Bharucha

The death occurred on Saturday night at his summer residence at Juhu, Bombay, of Dr. Phiroze Cuverji Bharucha, a well-known physician. He was 71 years of age.

Dr. Bharucha, a former Sheriff of Bombay, was ailing from heart trouble for some time.

The funeral will take place at Hodiwalla's Bungli, Dongerwadi, at 3 p.m. on Sunday.

In his will, he left a considerable sum for research in medicine and for the benefit of poor Parsis.

Suggested Reading

- Borsad Plague Relief Enquiry: *Report of Borsad Plague Relief Inquiry Committee, 1935* http://hdl.handle.net/10973/34272
- Peters Thomas (Editor): *Famous Business Houses and Who's Who in India & Pakistan*. Bombay: Modern Press & Publicity. 1949.

Bombay Medical Union 1883–1958

India's first ever society of medical professionals—the Bombay Medical Union—was founded in Mumbai on 22 December 1883 at a meeting held at the Great Western Hotel, Bombay. Its principal objectives included promotion of friendly association and exchange of views between its members and promoting the advancement of medical sciences. Its office was in Blavatsky Lodge, French Bridge, Chowpatty.

The pioneers of the Union included Drs D.B. Master, J.J. Cursetjee, B.S. Shroff, J.C. Lisboa, Atmaram Pandurang, Cowasjee Hormusjee, and other well-known medical graduates of the Bombay University.

In 1887, Sir Dinshaw Petit donated Rs. 7,000 to the Union for a Medical Library which was intended for the use of not only the members of the Union but also the entire medical profession and even common men. The library was named after the donor. During the subsequent period, it received several other contributions.

The Union consistently worked for a high standard of medical education. It was instrumental in the institution of an M.B.B.S. degree instead of L.M.S. in 1912, when the first batch of students received this degree. The Union was also instrumental in evolving important medical legislation and a code of conduct for medical profession.

At a meeting of the Bombay Medical Union in November 1892, Dr J.A. da Gama asked the Government to change the rules laid down half a century earlier in respect of appointments to the Grant Medical College to permit members of the local profession who were found duly qualified to fill up posts hitherto reserved for men employed by the Indian Medical Service. He argued that there was a time when no medical men were available in Bombay except members of the Indian Medical Service and they had over the last half century discharged the duties assigned to them in a most able, efficient, and conscientious manner. However, when the local profession counted amongst them several eminent men who were able and willing to occupy the several professorial chairs, the Government must be asked that the appointments hitherto held by the service men must be kept open for members of the local profession of approved merit and ability. By pursuing such a course, Government would not only be giving a stimulus to the profession, but they would, at the same time, be raising the status of the local profession. Dr K.N. Bahadurji then proposed his resolution:

'That this meeting is of the opinion that for the advancement of medical science and scientific work and for raising the dignity and status of the local medical profession and encouraging graduates of the local and other universities, appointments to the Grant Medical College and Jamsetjee Jejeebhoy Hospital should be thrown open to all who by reason of special merit... should be qualified to hold the same and not limited to any class or service irrespective of the necessary qualification... the time has come for modifying the existing order of things which is unsuited to the circumstances and requirements of the times.'

'… Our own service and profession recognize no 'covenant' for its cultivation and advancement beyond that of faithful work and this covenant has no limitations of caste or creed or class but is extended to recruits from all ranks and conditions of man: the only standards of admission being capacity and merit…. The doors of institutions for scientific and medical work—the colleges and hospitals could not, from their very nature, be closed to any but those who are disqualified by reason of incapacity and unfitness for the work, not can such institutions be reserved for any special category of professional men…'

The Grant Medical College was founded as a center for the rearing up of a medical profession in India. It was the principle of humanity which governed our rulers that made them form the College and Hospital. It was not founded, said Sir Erskine Perry, ' for any government of executive needs' but the great object of the state was not only to supplant the ignorant *vaids* and *hakims* by dispensary doctors taught in the English language but to 'provide opportunity of promoting the diffusion of knowledge amongst your countrymen…'

… All honor to men whose broad and sympathetic views, who never missed an opportunity of advancing and encouraging their own pupils by raising them to places for which they were qualified and in which they might be useful, without any narrow-minded prejudices about so-called prestige and dignity. Strange as it may appear in these days, it must be mentioned that such a distinguished scholar as Peet was pleased to serve under his own pupil as Vice-President of a Society in which Professors and practitioners were members. I mean the Grant College Medical Society, of which Peet was content to be the Vice-President, allowing the honor of the Presidential Chair to his distinguished pupil, the late Dr Bhau Daji.

The subject of a new medical college was first brought forward for discussion by one of the oldest members of the medical profession, Dr Atmaram Pandurang, who had made it one of the most cherished aims of his life. As early as 1885, Dr Atmaram read a paper on that subject at the Grant College Medical Society which elicited a warm and useful discussion. Since then circumstances have arisen which have all the more forcibly impressed upon them the necessity of having such a college. The Grant Medical College has been carefully preserved up to this time as a close monopoly for the army medical men. The profession as a whole has been excluded from any part or share in the teaching of the institution and … had been denied opportunities of acquiring practical training and experience. Any admission of outsiders, however qualified, was resented in the most illiberal and bitter spirit. He therefore thought that the time had now arrived when an earnest and steady attempt should be made by all those who had the honor and the interest of the profession at heart to accomplish that object…. They had the requisite trained material amongst them even at that moment. All they wanted was union, organization and money…

In the year 1895 the All India Body of Medical Men was formed in Calcutta. During 1895–1900 two medical conferences were held; one each in Bombay and Calcutta & provincial associations were formed in many cities.

Recognizing the need for greater facilities for medical education, the Union had in its mind the foundation of a second medical college in Bombay. When the donation of Seth Gordhandas Sunderdas came to be known, some members of the Union worked actively to channel this donation towards a medical college and also to persuade the Bombay Municipal Corporation to accept it in conjunction with the King Edward VII Memorial Hospital and so came into existence the Seth Gordhandas Sunderdas Medical College and the King Edward VII Memorial Hospital administered and run by the Municipal Corporation of Bombay. The Union had planned a Tropical School of Medicine in Bombay, but the First World War broke out and the scheme was dropped.

(Platinum Jubilee Souvenir 1958)

It was at the 5th All India Medical Conference held at Calcutta on 28 December 1928 under the Presidentship of Dr G.V. Deshmukh of Bombay, when a resolution was adopted forming an All-India Medical Association with the objects

of promotion and advancement of medical and allied sciences in their different branches, improvement of public health and medical education in India, and maintenance of honor and dignity of the medical profession. In 1930, the All-India Medical Association was renamed the Indian Medical Association and the body was duly registered under the Societies Registration Act, XXI of 1860.

Suggested Reading

- Anonymous: *Bombay Medical Union 1883-1958. Platinum Jubilee Year*. 1958: The Times of India Press. Bombay.

FOUNDERS OF THE UNION

Dr. D. B. Master

Dr. J. J. Cursetjee

Dr. B. S. Shroff

Platinum Jubilee Year

BOMBAY MEDICAL UNION

The Bombay Medical Union was founded to look after the interests of the medical profession on the 22nd December, 1883, at a meeting held at the Great Western Hotel, Bombay, under the Chairmanship of Dr. Dossabhoy Bezonji.

Since its inception, it has assiduously worked for its objective and, though it had its share of troubles and dark days, has on the whole a proud record of its achievements.

It served as a rallying point for the medical profession in Bombay and as it was the spearhead for the rest of India, it can be said for the whole country.

Education and organisation of the profession, rightful place of the profession on the staff of colleges and hospitals and public health administration, the throwing off of foreign control, lead and guidance to the public in times of crises have been the facets of its activities in these seventy-five years of its existence.

The Union collected a library in 1886 and in 1887, Sir Dinshaw Petit, Bart. donated a sum of Rs. 7,000 to the Union and since then the Library has been named after him. Further donations from members and allocation from funds of the Union have contributed to maintain an efficient distributing library of great help to its members. The education of the profession has been pursued by clinical meetings, symposia, lectures, exhibition of films, all through the year. Research has been encouraged by the award of special medals and prizes like the Bhalchandra Prize, Shroff Medal, Choksy Prize, and recently the S. N. Bhansali Lecturership for original work.

The Union has taken an active interest in shaping medical education. Many of its members have been active members of the University and Medical Councils. The Union has always stood for the maintenance of standards.

OFFICES OF THE BOMBAY MEDICAL UNION

Ready Money Building

Ripon Building

Alice Building

Blavatsky Lodge

PAST PRESIDENTS

Dr. A. P. Casa 1905 | Dr. K. N. Bahadurji 1907 | Dr. Sir Bhalchandra Krishna 1908 | Dr. J. J. Curmuthe 1913 | Dr. Sir Nasserwan H. Choksy 1914 | Dr. B. S. Shroff 1915 | Dr. K. M. Dubash 1917

Dr. S. S. Batliwalla 1918 | Dr. F. N. Kapadia 1919 | Dr. D. B. Master 1920 | Major S. K. Engineer 1921 | Dr. D. M. Gagrat 1922 | Dr. M. D. D. Gilder 1923

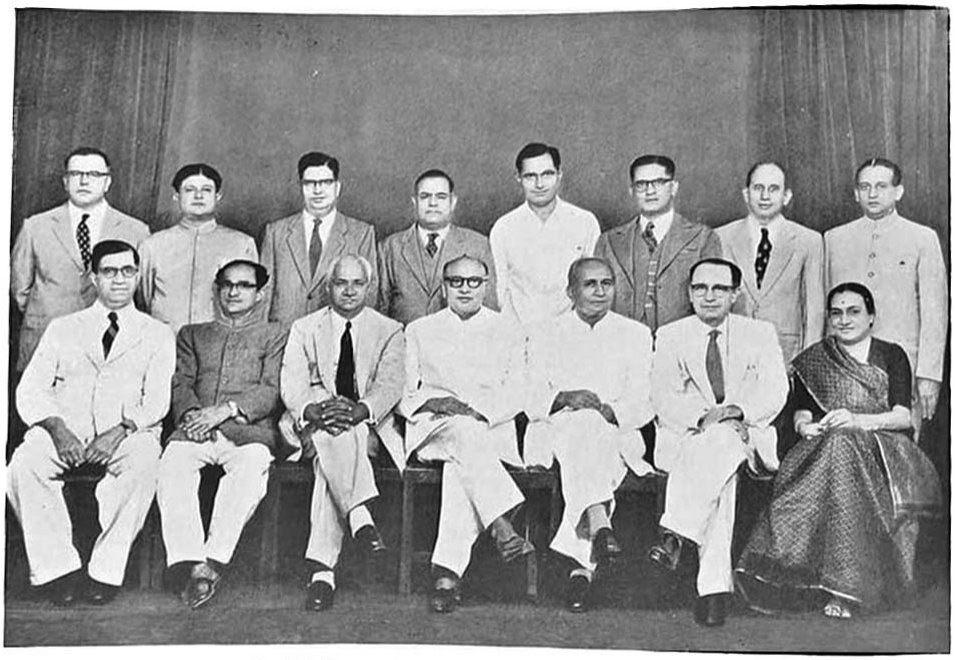
Dr. S. P. Kapadia 1926 | Dr. A. K. Contractor 1927 | Dr. R. D. Mody 1928 | Dr. G. V. Deshmukh 1929 | Dr. V. G. Rele 1931 | Dr. K. K. Dadachanji 1932 | Dr. Abraham S. Erulkar 1933

Some of the past Presidents whose photographs are not available:

Dr. Dossabhoy Bezonjee | Dr. Dorabji Hormusjee | Dr. Dadabhoy Jamasji | Dr. Atmaram Pandurang

BOMBAY MEDICAL UNION

MANAGING COMMITTEE OF THE PLATINUM JUBILEE YEAR 1958-59



Standing :—Dr. B. S. Moos, Member, Dr. N. V. Vijaykar, Jt. Hon. Secretary, Dr. R. S. Chogle, Jt. Hon. Librarian, Dr. D. S. Alreja, Member, Dr. J. C. Patel, Member, Dr. Thos. C. D'Silva, Member, Dr. J. S. Varde, Member, Dr. B. K. Vibhakar, Jt. Hon. Secretary.

Seating :—Lt.-Col. N. S. Variava, Hon. Treasurer, Dr. R. A. Vaidya, Jr. Vice-President, Dr. M. D. Amonkar, Sr. Vice-President, Dr. H. G. Patel, President, Dr. N. J. Modi, Member, Dr. N. J. Dodhi, Jt. Hon. Librarian, Dr. Miss K. P. Thacker, Member.

BOMBAY MEDICAL UNION

Donors of the Platinum Jubilee Lecturership Awards
1958

Donors

Dr. D. S. Alreja
Dr. A. V. Baliga
Dr. B. P. Banaji
Dr. R. B. Billimoria
Ciba Pharma Private Ltd.
Dr. G. Coelho
Dr. Khurshed J. J. Cursetjee
Dr. D. N. Daftary
Dr. Hussein A. Doctor
Dr. Hiralal K. Doctor
Dr. G. V. Deshmukh
Dr. A. S. Erulkar
The Fairdeal Corporation Private Ltd.
Dr. M. D. D. Gilder
Dr. S. R. Joglekar
Shree J. J. Kapadia
Messrs. Khatau Valabhdas & Co.
Dr. A. J. Kohiyar
Dr. M. C. Kothary

Donors

Shree Nyalchand Monshibhai
Messrs. Parke Davis & Co. Ltd.
Dr. V. L. Parmar
Shree Piramal Chaturbhuj
Dr. A. C. Rebello
Dr. P. V. Rele
Dr. V. H. Salaskar
Dr. Mohanlal H. Shah
Therapeutic Pharmaceuticals
Unichem Laboratories
G. S. Ambu Jugatram Vaidya & Shree Haresh Jugatram Vaidya
Dr. S. K. Vaidya
Dr. Rustom Jal Vakil
Shree S. R. Vakil
Dr. B. K. Vibhakar
Dr. Mrs. N. N. Vijayakar
Dr. B. B. Yodh
The Zandu Pharmaceutical Works Ltd.

Printed at the Times of India Press, Bombay, India.

Dr Rustam Nusserwanji Cooper (1893 – 1966)

Dr R.N. Cooper
(Photograph: Courtesy Ms Meher Marfatia)

Born to a humble marine engineer, Rustam Nusserwanji Cooper had eight siblings. Studying nights under streetlamps, he understood the expenses and sacrifices parents make for their children He shone in science and Shakespeare classes alike at Bharda High School. He went on to earn an M.B.B.S., graduating from Grant Medical College and Sir J.J. Hospital. Unswerving focus and dedication saw him meticulously dissect as many as 17 cadavers during the initial years alone, with the neatness, skill, and speed for which he was soon to become legendary. He completed his education in England on a government scholarship. He was the first Indian recipient of the Master of Surgery degree from the University of London. He also obtained the F.R.C.S.. There he struck a lifelong friendship with Dr B.C. Roy, later Chief Minister of Bengal. Subsequently meeting every year, they collaborated successfully on progressive medical research initiatives across the country (*Times of India*, 6 April 1966).

On his return to India, he was invited to join a committee established by the Bombay Medical Union for planning the proposed Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital. Mr G. Wittet, the architect, recommended purchase of the necessary equipment of these institutions from Britain. The equipment committee (consisting of Dr Rustam Cooper, Dr P.T. Patel, and Col Hamilton) insisted on obtaining most items from Bombay.

Ironically, after four years of practice in the best British hospitals (competent doctors were in demand during the First World War), on his return, Dr Cooper was refused appointment at his alma mater, which accepted only British surgeons on its staff. Fortunately, as soon as it was founded, the relatively new Seth Gordhandas Sunderdas Medical College and King Edward Memorial Hospital invited him to join as Honorary Surgeon and Lecturer in Surgery.

The first batch of teachers at Seth Gordhandas Sunderdas Medical College included Dr R.N. Cooper, Dr M.D.D. Gilder, Dr P.C. Bharucha, Dr A.S. Erulkar, Dr P.T. Patel, Dr G.V. Deshmukh, Dr V.L. Parmar, Dr N.A. Purandare, Dr V.R. Khanolkar, and Dr B.B. Yodh. Dr Jivraj Mehta felt these were individuals of the highest capability and deepest integrity. There was a great bond of striving towards a common aim—ensuring a brilliant success for these institutions.

Dr Cooper was a surgeon par excellence and a great teacher. He groomed several specialists, including Drs N.A. Purandare, A.V. Baliga, R.G. Ginde, P.K. Sen, and Homi Dastur. He taught surgical pathology with passion, precision, and humor enough to have admiring students affectionately dub him 'Daddy Cooper', while he called each 'Sonny'. Dr N.H. Keswani recalled in the Golden Jubilee Souvenir of these institutions that Dr Cooper modified Astley Cooper's aphorism on the attributes of a good surgeon. 'To be a good surgeon you should have an eagle's eye, a lady's hand, and a lion's heart.' Dr Cooper added, 'And a camel's back and an elephant's feet.' He also provided other anecdotes in his inimitable manner.

Dr Tehemton Udwadia narrated this anecdote to illustrate the degree to which he helped his students: Dr Cooper firmly believed that the students' time should never be wasted. To this end, when he was due to deliver a lecture, he came to the hall half an hour before the scheduled time. He would then draw the diagrams, write the text and place whatever else he wished on the blackboard. By the time the students entered, the blackboard was already full with all that Dr Cooper needed to illustrate his talk.

Dr Ginde narrated another example of the way he helped his juniors. Realizing that Dr Ginde was hard up for funds, he invited him to look after his private patients who needed a blood transfusion. Dr Ginde would ensure that there were no side effects. Dr Ginde would sit by the side of the patient till the transfusion was completed, re-examine the patient, make his notes on the patient's case sheet and leave. He was well compensated for his efforts.

Dr P.P. Karnik was struck by Dr Cooper's concern for patients under his care at K.E.M. Hospital:

'One day a patient involved in a car accident was admitted in our ward. He had developed kidney failure due to crush injury. Dr R.N. Cooper came to see him in the evening and told me that he had read an article on how to handle such cases in a book on recent advances in surgery. I regretted my inability to get hold of the book as the library was closed by that time, Dr Cooper was not satisfied with my answer. He told me to call him up at his residence at 9 p.m. When I did so, he read out the entire chapter of that book to me slowly, asking me to jot down the relevant treatment modalities. Such was his devotion to his profession and his concern for patients.'

Dr Ginde also described the first spinal cord tumor that Dr Cooper removed with his help in 1940, the localisation having been made by air myelography. He also told of the laminectomy for prolapsed lumbar disc at L2-3 that was first carried out by them in 1945. The disc contents were excised through the transdural approach.

Not many are aware of the role that Dr Cooper played in getting Dr Ginde into Bombay Hospital. Dismayed by the treatment meted to Dr Ginde by the authorities at the K.E.M. Hospital, Dr Cooper prevailed upon Mr G.D. Birla to appoint Dr Ginde to the Bombay Hospital in 1954. This hospital had been set up in 1949 and was inaugurated by Sardar Vallabhbhai Patel.

'He was all things to all persons. His behavior and approach to the humblest patients, servants and subordinates was the same as to Viceroys, Governors, Maharajas, statesmen and industrialists consulting him,' noted *The Bombay Samachar* editor Jehan Daruwala in his popular column, *Parsi Tari Arsi*, for the birth centenary of Dr R.N. Cooper: 3 April 1993. He was flown to Iran *en famille* to operate on Empress Farah Diba—the Shah offered carpets and gold coins in gratitude.

He slipped small envelopes of money under the pillows of poor patients he treated for free. Conducted with quiet generosity, the second kindness was a follow-up to tide them over days of staying home with prescribed bed rest. Small wonder that he was widely revered by patients and admired by the medical fraternity (Marfatia 2022).

Dr Cooper was called to Poona to treat an old and indigent patient. Cured, she insisted on paying. To save her embarrassment, he quoted an oddly precise sum, a few rupees and some annas. When a relative asked how he computed that exact amount, he explained it was his train fare.

Ms Gulserene Dastur told us about how her grandfather, a staunch follower of Mahatma Gandhi, convinced Dr Cooper to buy a large stock of khadi bandages for his clinic. Out of respect, Dr Cooper did so only to find these bandages far more voluminous and difficult to use than the standard bandages. Eventually Mrs Cooper had to step in and put an embargo on further similar purchases.

He was an avid reader and kept abreast of the latest developments in surgery till the end of his career. He was also a scholar in Persian and Gujarati and in his middle age took up the study of Russian. Education was very close to his heart in spite of his busy professional life. He started the Charak Clinic at Marine Lines and found time to be the Chairman of the J.B. Petit School for Girls and the Jai Vakil School for Children in Need of Special Care. The latter owes much of its standing today to his indefatigable efforts.

Dr Cooper's contribution to surgery in Bombay was well recognized and the Bombay Municipality honored him by naming the Municipal Hospital at Juhu as the R.N. Cooper Hospital to perpetuate his memory.

Bai Jerbai Wadia Hospital For Children

Before the onset of Paediatrics as an independent discipline, childcare was limited to using adult medication on children, who were seen merely as mini versions of adults. It was in 1928 that Sir Ness Wadia and Sir Cusrow Wadia decided to provide specialized pediatric and neonatal care for children and as strong believers in the idea that the need for quality healthcare is universal, they vowed to provide affordable world-class medical services to children in every section of the society. They built The Bai Jerbai Wadia Hospital for Children in memory of their mother Bai Jerbai Wadia.

In the first board meeting held by the Trust in February 1928, Sir Cusrow Wadia was selected as the Chairman of the board consisting of his brother Sir Ness Wadia and six other members. Dr R.N. Cooper was appointed as Honorary Principal Medical Officer. The foundation stone for the hospital was laid on 7 March, 1928 and it was declared open on 12 December 1929 by the Governor of Bombay at the time, Sir Frederick Sykes.

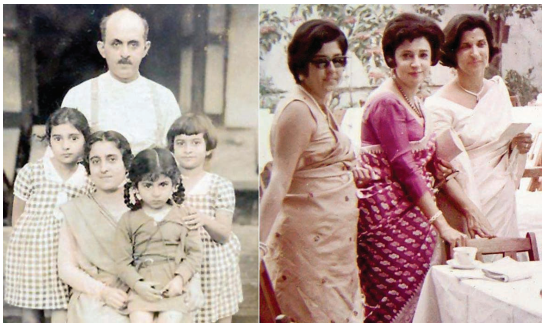
Association of Surgeons of India

Along with such stalwarts as Lt Col K.G. Pandalai and Dr Sir A. Lakshmanaswamy Mudaliar, Dr Cooper was one of the founders of this association in 1938. Other members from Bombay included Dr S.R. Moolgaokar, Dr S.R. Joglekar, and Dr Arthur E. de Sa. He was its President in 1944.

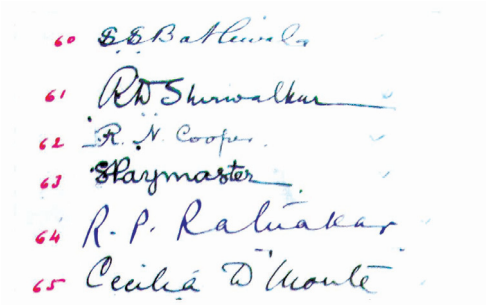
Parsee General Hospital

He was a prominent surgeon at this hospital and was, for some years, head of the hospital. He donated his entire collection of books to its library.

Dr Rustam Nusserwanji Cooper and wife Minnie on the verandah of their home on Cumballa Hill. (Photograph: courtesy Ms Meher Marfatia)



An early photograph with their three daughters; Hilloo Dalal, Gooloo Sethna and Mehroo Dastur at a family navjote in 1970 (Photographs: courtesy Ms Meher Marfatia).



Dr Cooper's signature on the rolls of the College of Physicians and Surgeons, Bombay.

A Personal Experience

As a student of the Grant Medical College, I developed an interest in the history of medicine. I knew of the once-a-month dinner meetings he used to organize at the Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital where the topics were often related to the history of medicine. He had, of course, retired from these institutions by then. I had also heard of his own, enviable collection of books on the subject.

With the audacity of youth, I wrote to him requesting permission to study them. I was surprised by the prompt, courteous and kind reply that invited me to meet him in his consulting room at Charak Clinic.

He walked with a slight stoop. I could see why his students called him 'Daddy' for he was affectionate, gentle and caring.

He put me at ease as soon as I entered and expressed pleasure at my urge to study the history of medicine. He took me around the steel cupboards around his room housing a variety of precious books on the subject.

I requested him to give me an appointed hour in the evening when, each week, I could come and study a book or two in his balcony, making notes. I proposed to do this over a long period.

To my surprise, he suggested that instead of this inconvenience, I should borrow two or more books at a time and read them at my leisure. He showed me the lender's card in each book and asked me to fill it when I borrowed the book. The card would tell him where the book was, should he need it. On returning the book, I was to complete the entry on that card and replace it and the book in its place.

He did not know me from Adam and for him to place such faith in me with books not easily available in Bombay was humbling.

Through his courtesy, I was able to study many classics, including biographies of John Hunter, Edward Jenner and many others.

Personal Touches

He was fond of golf. He once achieved a hole-in-one at the Golf Club in Chembur, duly recorded on the board on its walls.

His granddaughter, Jeroo Ranji, shares, "My mother [Mehroo] used to tell us how Dad Dad, as we called him, tied his shoelaces on both shoes simultaneously by using one hand for each shoe. This story fascinated me as a child and attested to his prowess as a skilled surgeon. He had an innate curiosity in many diverse subjects, created little home movies of his travels, was an avid photographer and enjoyed classical music. Years later, I spent hours at Marshall Lodge, the Cooper residence on Cumballa Hill, combing through his library of National Geographic magazines from decades past."

Death

On 3 April 1966, whilst addressing the 11th Annual Conference of the Bombay Territorial Branch of the Indian Medical Association, he suffered a heart attack. He was immediately taken to the Northcote Nursing Home but despite all possible care, passed away two days later.

Suggested Reading

- Anonymous: Dr R.N. Cooper, eminent surgeon, is dead. *The Times of India* 6 April 1966.
- Antia Noshir H, Davar Behman N: *Medical profession. The healing touch.*
- Dastur Gulserene: Personal communication 2022.
- Joshi NC, Prabhu SS: Bai Jerbai Wadia Hospital for Children and Institute of Child Health and Research, Mumbai *Indian Pediatrics* 2022;59:348.
- Karnik P P: Fatal attraction. In Kamath MV, Karmarkar Rekha (Editors): *Untold Stories of Doctors and Patients*. Mumbai: UBS Publishers Distributors. 1993.
- Keswani N H: Give me back those days – anytime! *Golden Jubilee Souvenir, Seth Gordhandas Sunderdas Medical College and K. E. M. Hospital.* (Editors: Bhatnagar S. M., Kothari M. L) 1976.
- Marfatia Meher: A surgeon and a gentleman. *Sunday Mid-day* 19 June 2022.

Dr Arthur E. de Sa (1910–1981)

Dr A.E. de Sa
(Seth G S Medical College and KEM Hospital Silver Jubilee Souvenir)

He was born to Clementina Andrade and her husband Lawrence de Sa in Assangaon, Goa on 13 June 1910. He was a brilliant student. His early education was at the Antonio Da Silva High School and the Elphinstone College in Bombay. He studied medicine at the Grant Medical College and passed the M.B.B.S. examination of the University of Bombay in 1931, aged

20 years, standing first in the first class. He secured the Gangabai G. Sunderdas Scholarship, Ratanshaw Dadabhoy Prize for Medicine, the Jaswantsinhji Limbdi Gold Medal in Medicine, Nusserwanji Choksey Gold Medal in Medicine, and the Lord Sandhurst Gold Medal for Pathology and Bacteriology. He served as a House Physician to Dr M.D.D. Gilder and House Surgeon to Dr A.P. Bacha. This was followed by a short stint in the Anatomy Department.

During his further studies in England, he obtained the L.R.C.P. and M.R.C.S. diplomas in 1934 and was admitted as a Fellow of the Royal College of Surgeons of England in April 1936. He also traveled to Vienna to further his learning in surgery.

On his return to Bombay, he soon established himself as an eminent surgeon holding appointments as Honorary Surgeon in King Edward VII Memorial Hospital (1936) and at the Bai Jerbai Wadia Hospital for Children (1942). Dr N.H. Keswani has, fortunately for us, provided a pen-portrait of him during his early days at King Edward VII Memorial Hospital: 'The gallant Sir Arthur (de Sa)who was still a bachelor in those good old days, was another ready wit: and has remained a dear friend from my student days…I recall Arthur with his coat dangling from his left index finger and thrown across the back of his left shoulder…'

As early as 1948, he was performing surgery for craniostenosis and operations on the spine. In 1949, *The Indian Physician* featured under 'Original contributions' his paper entitled *Intracranial tuberculomata*. Unusually, it featured the first names of the seven patients analyzed by him. It is a pity that this paper is now neglected by authors on tuberculosis of the central nervous system.

In 1964, he was appointed Principal Medical Officer at Bai Jerbai Wadia Hospital for Children and held this post until his retirement in 1970. He had retired from Seth Gordhandas Sunderdas Medical College in June 1968.

Dr Arthur de Sa was the first surgeon to specialize in pediatric surgery in India. He was awarded Honorary Fellowship of the Association of Pediatricians in India and elected its president in 1959. In the next year, he was unanimously elected President of the Association of Surgeons of India. He was also elected President of the Indian chapter of the International College of Surgeons in 1970 and President of the Indian Society of Gastroenterology in 1976. Author of many scientific publications, he was the Editor of *the Indian Journal of Surgery* from 1964.

In 1947, at the insistence of the Government of India, he led a team of doctors to Lahore for relief work during the communal massacre that followed the partition of India. He also accompanied Lady Edwina Mountbatten and Governor General Lord Mountbatten to riot-stricken areas of West Pakistan at the height of the communal frenzy in October 1947.

He was a keen sportsman. Dr Celine Pereira captured his heart to become his fair lady.

Soft spoken but always erudite, he was a popular speaker at many conferences and meetings and was asked to deliver a number of orations, including one in memory of his dear friend, Dr Ernest Borges. Another oration in 1978—in memory of Mr Chandu Sanzgiri—was entitled *Medicine and Social Responsibility*. This talk remains relevant and deserves study.

He passed away after suffering a massive heart attack on 4 March 1981.

Suggested Reading

- De Sa A E: Surgery in ancient India. In: Eds.: Bhatnagar S. M., Kothari M. L: *Golden Jubilee Souvenir Seth Gordhandas Sunderdas Medical College and K. E. M. Hospital.* 1976.
- De Sa A E: K.E.M. revisited. In: Eds.: Bhatnagar S.M., Kothari M.L: *Golden Jubilee Souvenir Seth Gordhandas Sunderdas Medical College and K.E.M. Hospital.* 1976.
- Gandhi R.K., Puri Kavita: Dr Arthur E De Sa. An appreciation. In: Eds.: Bhatnagar S. M., Kothari M. L: *Golden Jubilee Souvenir Seth Gordhandas Sunderdas Medical College and K.E.M. Hospital.* 1976.
- Keswani N.H.: Give me back those days – anytime! In: Eds.: Bhatnagar S.M., Kothari M.L: *Golden Jubilee Souvenir Seth Gordhandas Sunderdas Medical College and K.E.M. Hospital.* 1976.

Dr Gopal Vinayak Deshmukh (1884–1963)

Dr G.V. Deshmukh
(*Written by Dr M.G. Talwalkar in 1984 for the Birth centenary of Dr G.V. Deshmukh.*)

Dr Gopal Vinayak Deshmukh was born on 2 January 1884 in a very prominent well to-do agricultural family in Vidharbha. His father was a malgujar and he came from an immensely rich agricultural family who had the control of 23 villages. He often used to tell about opulence of his mother's home, and the elephants and their other trappings he was surrounded with, when he visited his maternal house in Vidharbha. As the four brothers grew up, their father, who had a great belief in education, moved to Wardha and subsequently to Nagpur.

In his early days he was physically a weakling and found himself on the wrong end of the tussle in the school. In those days, street brawls between Hindus and other communities was a common thing, and many local bullies used to beat up these boys. He resolved to make up for his deficiency and took to physical exercise in a famous Akhada under the guidance of a guru. This made him physically fit and the group was able to deal with the local

bullies who soon realized that they had met a match in Gopalrao and his friends. In the school, in the beginning, he was not one of the bright boys as he was involved in more extra-curricular activities. He was once upbraided by his Sanskrit teacher for his poor achievements as this teacher was a friend of his father. Gopalrao decided to do away this deficiency and in the next examination, his teacher proudly announced that the once laggard pupil had not only done well but stood first in the class. This background in Sanskrit, which he cultivated by attending a special class conducted by a Sanskrit teacher, helped him later in life studying Manusmriti, Bhagwad Gita, and many other Sanskrit law books. In his later years, he introduced several bills to relieve the wretchedness of a Hindu Widow and a maltreated Hindu Wife.

After finishing his schooling, the problem of what to do arose before him. He got permission from his mother to visit Bombay where a friend of the family Dr D.D. Sathey was studying in the Grant Medical College. When he saw the grand porch, the main office of the Grant Medical College, he was impressed and he persuaded his mother to allow him to join the medical college.

In those years, education in the well-to-do agricultural families in Vidharbha was a second consideration. His mother often told him that he had plenty at home to live on and that she was not particularly happy to send him to distant Bombay for studies without anybody's guidance. But the presence of Dr D.D. Sathey who was a family friend and senior to him assured her that he will look after young Gopal.

Thus the entire course of his life was changed. Instead of being sent to look after agricultural properties, he came to an Institution which was a premier institute imparting medical knowledge in the whole of India. The Grant Medical College was in existence from the year 1845 and at the time Gopalrao entered, it was manned by the finest staff of teachers in India.

Once he came out of the protected influence of the home, Gopalrao flowered into a mature person. He was a very gregarious individual who had many friends and indulged in multifarious activities. Tennis was his forte and he indulged in it at all times at the expense of his studies. He was fond of dramas and at this time, a play "Gun Sundari" was running at Play House Theater. It was seen by him and his friends at least hundred times. In spite of his apparent dissipation of time, he put in hard work when everyone else was in slumber. He put in days work with the help of the notes taken by one of his best friends, the late Dr Nadgir, who subsequently became the professor of Anatomy. In due course, he appeared for the first examination in the University. In the Anatomy paper, after finishing the first question, he got a severe malarial rigor and had to leave the hall without being in a position to finish the paper. Thinking that this would surely be failure in that paper, he started getting ready to spend the vacation in Nagpur.

However, the professors thought

otherwise. In those days, the professor knew the capacities of every candidate as they were the examiners too. The present method of inviting outsiders did not exist and each candidate was known personally to the teacher who was his examiner. Dr Dimmock, who was the professor of Anatomy then, wanted to know why Deshmukh did not come for the Viva. When he was told about the paper, he remarked that the boy who knew even one question so well must be prepared and therefore there was no reason for him to stay away from the Viva. He was sent for and he stood high in the examination. This would be impossible in the present arrangement of conducting the examinations. In due course, his final was in the first class.

He then went back to Nagpur to consult his parents and expressed his desire to go abroad for further studies. His mother was very reluctant as she was not keeping well and Gopal was still unmarried. There is a little humorous episode in this connection which he used to recount. His father had approved of a young girl to be his future Daughter-in-law. They were very well to do Malgujars from a neighboring district. Gopal was instructed to go and see the girl and give his approval. He was accompanied by his elder brother. However, he had different ideas in that matter. Both the brothers left the house apparently with object of seeing the girl but returned late night without completing the mission without the knowledge of the father. There was a domestic scene but the father had decided not to interfere in the matter and ultimately a girl of his mother's choice was brought in as future Mrs Deshmukh. She also came from Deshmukh family of nearby town called Vani. Her father was a prominent agriculturist. In those days, girls were married before they reached puberty and hence, she had no formal education. However, before his departure to the U.K., he left word with his father to educate the young daughter-in-law.

His mother had an indifferent health at that time and was very unwilling to send her favorite son across the seven seas. However, he persuaded her and she gave her consent upon a promise that he will immediately come back whenever she sent for him. This however was never fulfilled as she passed away while he was pursuing his studies in London and was not informed about the her illness.

He went to the U.K. to take his London M.D. and, in due course, was admitted to the London hospital as an undergraduate. He got through his examination without much difficulty and, as challenge to his friends, who had preceded him for their Fellowship, he also took the Primary fellowship in Anatomy & Physiology. In due course, he did his graduation at the London University and then his M.D. (Lond) in General Medicine.

Subsequently, while on a visit to his friend Dr Pardhi at Birmingham, he attended the clinics of Jordon Lloyd who was famous at that time for his work on Pancreatic Surgery. Mr. Lloyd was impressed by the young Dr Deshmukh and promised to take him up as his House Surgeon when

he finished his fellowship. When he finally applied for the post, the authorities in Birmingham were not very willing to take him up. On learning the attitude of the Advisory Board, Mr Lloyd threatened to resign if Dr Deshmukh was not appointed as his House Surgeon. The Committee had no choice as they could not do without the famous Mr Jordon Lloyd.

During the tenure, he was not very well accepted by the other English colleagues at the hospital. However an incident took place soon. In the common room, the staff relaxed in their free time but a local bully wanted a particular chair that he was sitting on and ordered him to vacate it for him. A struggle followed in which he thrashed the fellow and had his way. He became well accepted after this incident. Soon, someone played a prank on the Matron of the Hospital who evidently was not popular. Once, when she was out late at night, someone climbed to her room, bolted the door from inside, and decorated it with toilet paper. The matter was reported to the Dean the next day and the house staff was hauled up in the Dean's Office. They confessed that one of them had done it but refused to divulge the identity of the person. Dr Deshmukh, who had the knowledge, also joined the gang but others asked him to keep out. He was adamant and this gesture was very much appreciated as he was not on friendly terms with the rest of the local staff earlier.

In 1912, on his return back to India, he worked at the J.J. Hospital as an Honorary Surgeon in place of his teacher who had gone on leave for a short time. In those years, the Grant Medical College and the J.J. Hospital were only under graduate teaching institutions. It was a preserve of the I.M.S. and no Indian, howsoever well qualified, had a chance of holding any responsible post. He soon took an active part in the Bombay Medical Union which was in existence for some years and, with the help of two other nationalist friends, they agitated in the Government of Bombay. Ultimately the Government saw the force in the argument and the first batch of Honoraries were appointed at the J.J. Hospital in 1926.

Soon after his return, World War I broke out in Europe and, as it gradually involved the whole world, the Government of India set up a War Hospital under the command of General Hogel and many well qualified Surgeons and Physicians and even Eye surgeons were invited to work at this Hospital. Those who were included were Dr Bhajekar, the senior most of the practicing Surgeons; Dr Deshmukh; Dr Bacha; Dr Baria; Dr Gilder; Dr Duggan; Dr Erulkar; Dr Contractor; and many others. When the war ended, the Hospital was closed. There was no other public facility for these talented people to serve the public. At this time, the National Movement was started by Mahatma Gandhi and, during the lathi charges that took place in the struggle, the injured were treated at the Peoples Free Hospital—i.e., the present Nair hospital.

He soon set up a lucrative practice in association with Dr Miss Joshi (later Lady Laxmibai Rajwade of Gwalior) and,

being one of the well qualified doctors in the Hindu community, he became very popular in a short time. He soon entered the local Municipal Politics and was elected to the Bombay Municipality. Later, he became the President of the Corporation. It was a custom in those days for the President to invite the Governor of Bombay at a Tea Party on the lawns of Malabar Hill Garden. Dr Deshmukh, being a nationalist and a complete teetotaler, refused to serve drinks and was particular about wearing a top hat and a frock coat. His wife had to wear socks and high heel shoes.

Bombay, at that time, was torn from time to time by communal riots and Dr Deshmukh as the Chairman of the Peace Committee, Mr M.C. Chagla as the Secretary, and the Shaukat brothers together moved to the disturbed areas and soon established communal harmony. A Hindu moving openly in the predominant Muslim area with the purpose of establishing harmony had a very salutary effect, as a very large number of patients were from this area at that time. An astrologer in his young days had predicted that his rise in life will be in the hands of non-Hindus and this was true as a large number of his friends and patients were non-Hindus.

He next extended his attention to the Legislature. It was one of his ambitions to do something for the Hindu Women. He had witnessed the disposed condition under which the widow had to live and pass her life under the social pressures and the limitations imposed through the family taboos. He had the misfortune to see one of his very near relatives in such a condition in his young days and was deeply affected by this. When the chance came with the first popular elections, he stood for it and gave up a very lucrative practice in Bombay to try and achieve his aim of giving relief to the Hindu Women. In the course of time, he introduced three Bills in the Assembly. The opposition, as usual, was great from the orthodox group, but with his persuasive ways and absence of opposition from the Government, he managed to get the three Bills passed in the Parliament.

These three were

1. Right to property
2. Right to separate residence
3. Right to divorce under special circumstances.

Because of the Hindu traditions and prevalent Manusmriti, there was a great opposition and even the "Mahatma", when asked about his views and blessings for these Bills, said that the time was not yet ripe for such a drastic change in the Common Hindu Law. But Dr Deshmukh worked hard, canvassed a great deal, spoke to various members of the Central Assembly, and convinced the Government leaders. Finally, the bill was introduced and got passed. The story of this struggle is great and a whole book may be written about the effort and struggle for achieving the same. Later, all these Bills were included in the Hindu Code Bill introduced by Dr Ambedkar.

When Independence came in 1947, the constitution Assembly was formed and, as an old experienced parliamentarian,

he expected to be nominated, but politics is the most treacherous game. His old friend and the King Maker in Bombay, Vallabhbhai Patel, refused to nominate him. What the reason was is difficult to know but, as far as I know, they were very angry about the way he used to play with the Treasury Benches and once had voted against the party whip as he maintained that every member had a right to vote according to his conscience on matters not vital to the general political issues. However, he stood as an Independent member in the election following the declaration of Independence in 1947, and lost.

Just then, the most tragic event in his life took place. Mrs Deshmukh was seen off by myself and the doctor at the V.T. Station bound for Lonavala by Deccan Queen. At about 10 p.m., we received a call to say that she had reached safely and everyone was well. The family was at Lonavala for the summer. At about 11.30 p.m., an urgent call informed us that Mrs Deshmukh had a sudden massive cardiac attack and within 20 minutes, she died. This was a terrible shock. We had no immediate means of getting to Lonavala as petrol was under strict rationing and, till we could gather a car and enough petrol, it was already 2 a.m.

On the way, there were many problems and it was early morning when we found ourselves only in Panvel. The local Congress worker helped us to get a transport, but again the main problem was petrol. Luckily the car in Lonavala was sent down in the morning to fetch us. It was a great personal loss to his family. Mr B.G. Kher, the then Chief Minister, gave permission to cremate Mrs Deshmukh in vast grounds round the bungalow. All the friends came down from Bombay. This was the 7 May 1946.

His reading and the natural philosophical mind that he had helped him get over the tragedy particularly in view of the two younger daughters being still unmarried. He had to play the role of an indulgent father as well as mother, particularly for the youngest child who suffered from Asthma, which ultimately was the cause of her early death in November 1950. Both these tragic events made him lose interest in his practice. Now he only attended to his medical work as and when he liked. As it is he had handed over most of his work to Dr A.V. Baliga when he went to the Central Assembly in 1937 and was busy piloting the social Bills.

He now spent most of his time on the Golf Course at the Willingdon Sports Club where he was dropped in the morning and picked up at about 1.30 in the afternoon on my way back from the J.J. Hospital. He spent most of his time reading, a habit which he had developed in his young days. He read a variety of books from science of modern days to Upanishads and Hindu Philosophy. Dr Erulkar was one of his lifelong friends and always used to remark how he could switch from one subject to another as if he was turning one switch off and another on.

Between 1950 and 1960, he spent most of his time in Lonavala and Bombay, making frequent trips and taking one or more of his grand children with him to keep

company. He now and then expressed a desire that he did not want to be bed ridden following an attack of paralysis. He had seen the misery of that sort of life and his desire was that, while playing Golf one day, he will drop down on the course. But fate had different ideas and, on 6 May 1960, while getting up from the chair after an evening meal, he suddenly developed a thrombotic attack and his left side was paralyzed.

He survived this for 29 months and died peacefully on the 23 September 1963. During his last days, he had told me two things: (1) to cremate him in the electric crematorium for which he had persuaded the Municipal Corporation to install one and (2) no religious ceremonies were to be observed at the crematorium. Thus came the end of a great surgeon, a keen physician, and a social reformer.

Pedder Road is the former name of a busy arterial road passing through the affluent Cumballa Hill neighborhood. It was named after Mr W.G. Pedder, Municipal Commissioner (1879). It was later renamed after our protagonist and is now Gopalrao V. Deshmukh Marg. The road begins at the well-known intersection of Kemp's Corner and extends down Cumballa.

Plaque outside his home:

Dr GOPALRAO V DESHMUKH
M. D. (London), F. R. C.S. (England)
(1984–1962)
Lived here 1929 – 1962

Greatly respected consultant physician, surgeon and teacher at Seth G. S. Medical College and K.E.M. Hospital.

He was elected member of the Senate of the University of Bombay, Member of the Legislative Assembly of Bombay Presidency and the Central Assembly.

He was the first President of the Indian Medical Association and the first Mayor

Group photograph of Lokmanya Tilak's Home Rule League Workers 1917.

of Bombay after the independence.

Among many other causes, he championed medical education in the city and country and the rights of women.

He also started schools for the downtrodden children in Nagpur in the name of his father Vinayakrao Deshmukh, Mother Dadibai Deshmukh and his wife Annapurnabai Deshmukh also instrumental in starting the Lokamanya Tilak Hospital at Sion Bombay.

King Edward VII (1841–1910)

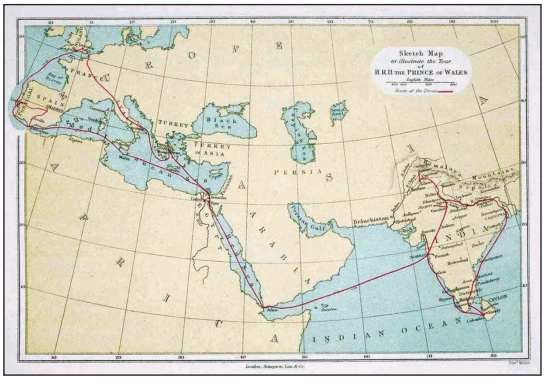
Portrait by Sir Luke Fildes

Edward was born in 1841 in Buckingham Palace. He was educated at the Universities of Edinburgh, Oxford, and Cambridge.

In 1860, there was a report on a scandal with an Irish actress. His father, Prince Albert, died a few weeks later and Queen Victoria blamed her son for her husband's death. In 1863, Edward married Alexandra, eldest daughter of King Kristian IX of Denmark.

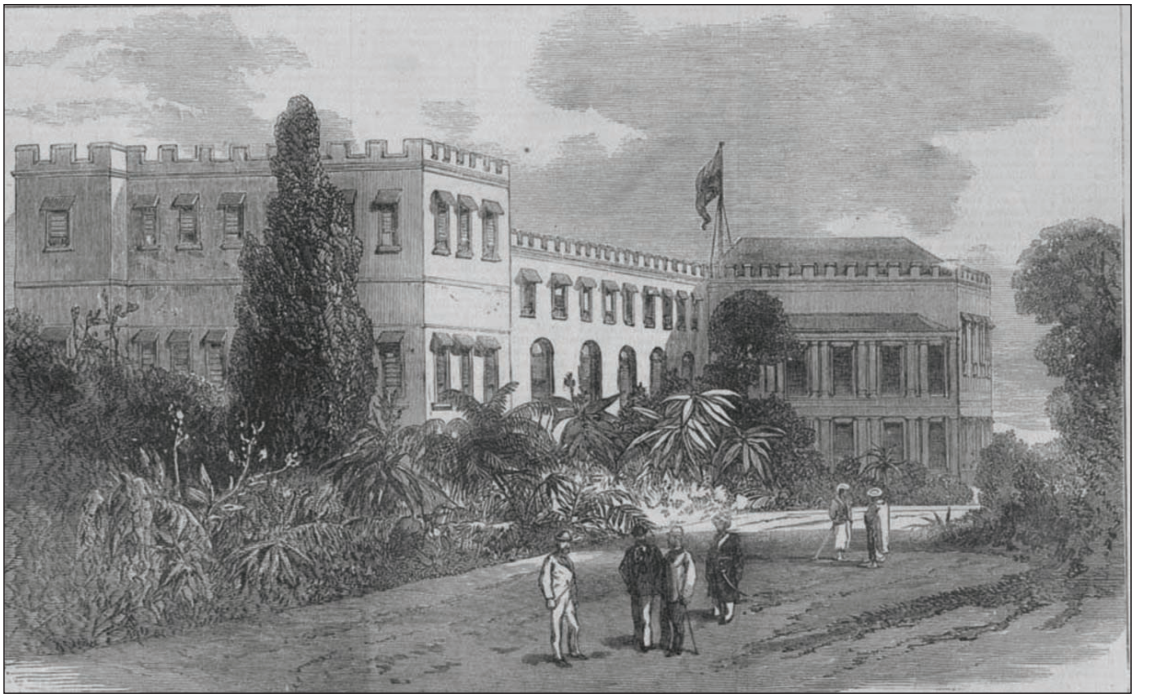
Edward had an enormous appetite and often ate five large meals in a day. The consequent obesity is obvious in his many portraits. He also smoked twelve large cigars and twenty cigarettes a day.

In 1874, as Prince of Wales, he planned an Indian visit, and supervised all arrangements personally. The visit was financed by the Government of India. The prince and his all-male party of eighteen left on 11 October 1875. The Princess of Wales was disappointed at being excluded. They landed at the Bombay Dockyard on 8 November, the day before the prince's thirty-fourth birthday, and traveled south to Goa and Ceylon, and then to Calcutta.



On 8 November, after nearly a month at sea, the Prince of Wales arrived at the port of Colaba, Bombay. To mark the Prince's arrival in India, guns were simultaneously fired in a royal salute in major cities across the Indian subcontinent. He returned to England in May 1876.

Prince's Indian Staff and Suite, Government House, Bombay: Prince of Wales Tour of India 1875–6.



Government House, the residence of the Prince of Wales (later Edward VII) in Bombay (*Illustrated London News 1875*).

It is of interest that he had spent three weeks in Government House, a stone's throw away from the hospital created later in his name. A description of his stay at Government House, Bombay can be found in on pages 117–140 of the diary of his visit.

State reception of native princes by the Prince of Wales at Parel, Bombay 9 November 1875.

On 9 November 1875, the Prince hosted his first reception for the Indian rulers. Here, he adopted Indian court customs such as offering *paan* (shavings of betel-nut, various seeds and spices, and lime-paste wrapped in a betel-leaf) and *attar* (perfume) to welcome them. Especially interesting is the description of the maharajahs and rajahs who greeted him here on his birthday.

One such encounter is of interest. The Prince met the 12-year old Gaekwad of Baroda.

'...all eyes were dazzled when Maharaja Syajee Rao... stood at the threshold of the door a crystallized rainbow... He was weighted, head, neck, chest, arms, fingers, ankles, with such a sight and wonder of vast diamonds, emeralds, rubies, and pearls.'

Russell William Howard in the diary of Prince of Wales' visit.

This photograph of the Gaekwad was probably taken shortly after the reception in Bombay and shows the ruler wearing many of the gifts that the Prince presented to him, such as the commemorative medal, presentational sword, belt, chain, and book.

The marriage of Krishna and Rukmini.
(Late 18th century)

The Prince was invited to attend the wedding of the two sons of Mangaldas Nathubhai. Here he was presented with albums of Indian manuscript paintings depicting the avatars of Vishnu. At the wedding, Russell was astonished with the quantity of flowers decorating Nathubhai's house where the wedding was taking place: '...the scene [was] overpowering; nor did any who entered escape the bewreathment and garlanding, which form part of all ceremonies, the Prince being especially festooned with the choicest'.

This manuscript painting from one of the albums shows the marriage of Krishna (an avatar of Vishnu) and Rukmini, conducted by moon- and starlight in a palace courtyard.

His statue, as Prince of Wales, was donated by Sir David Sassoon in 1876 and placed near the library named after the donor. Popularly called *Kala Ghoda* it is now near the Bhau Daji Museum.

The prince, always hostile to any racial or religious prejudice, was strongly critical of the 'rude and rough' manner by which British political officers dealt with Indians (Lee, 1927). New instructions were issued by Lord Salisbury, the secretary of state, and at least one resident was recalled. The royal party set out for Britain from Bombay on 13 March 1876.

Edward VII became king on the death of Queen Victoria in 1901. Although he was 59 when he became king, he restored some vitality to the monarchy. He made several royal visits and helped prepare the way for international treaties with France and Russia. The king took a particular interest in military matters. He opposed attempts to reduce public spending on the armed forces and was a strong advocate of the Dreadnought building campaign. In 1907, he was treated with radium for a rodent ulcer adjacent to the nose. He was prone to bronchitis.

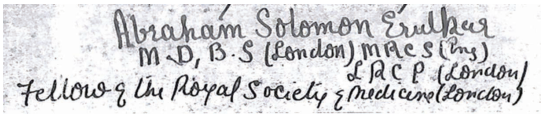
On 27 April 1910, Edward VII returned from Biarritz to Buckingham Palace. He was still active, seeing ministers and, on 29 April, attending Wagner's *Siegfried* at Covent Garden. On 30 April, he went to Sandringham, catching another cold. On 2 May, he wrote the last (and unusual) entry in his long diary: 'The King dines alone.' The queen, alerted to his physical decline, returned from a visit to Corfu on 5 May. Now confined to an armchair, the king was visited by relays of friends. On 6 May, Edward suffered several heart attacks, but refused to go to bed, saying, 'No, I shall not give in; I shall go on; I shall work to the end.' Edward VII died at Buckingham Palace on 6 May, 1910.

Suggested Reading

- http://www.spartacus.schoolnet.co.uk/MOedwardVII.htm
- https://en.wikipedia.org/wiki/Edward_VII
- **https://www.rct.uk/collection/themes/trails/the-prince-of-waless-tour-of-india-in-1875-6**
- Hopkins J Castell: *The life of King Edward VII with a sketch of the career of King George VI.* Toronto: W. E. Scull. 1910.
- Lee Sidney: *King Edward VII: A Biography*. Vol. II. London: Macmillan 1927.
- Mathew H.C.G: Edward VII (1841-1910). *Oxford Dictionary of National Biography*. Oxford: Oxford University Press. 2004.
- Ridley Jane: Bertie: *A Life of Edward VII*. London: Chatto & Windus 2012.
- Russell William Howard: The Prince of Wales' Tour : a diary in India, with some account of the visits of H.R.H. to the courts of Greece, Egypt, Spain & Portugal. Illustrations by Sydney P. Hall. Also see: https://www.rct.uk/collection/themes/trails/the-prince-of-waless-tour-of-india-in-1875-6/first-steps-in-india
- Sanderson Edgar, Melville Lewis: *King Edward VII. His life & reign. The record of a noble career.* London: The Gresham Publishing Company. 1910.

Dr Abraham Solomon Erulkar (1887–1960)

Dr Abraham Solomon Erulkar


Abraham Solomon Erulkar
M.D, B.S (London) MRCS (Eng)
LRCP (London)
Fellow of the Royal Society of Medicine (London)

Signature at the bottom of his application dated 18 February 1919 for the post of Honorary Physician at J.J. Hospital

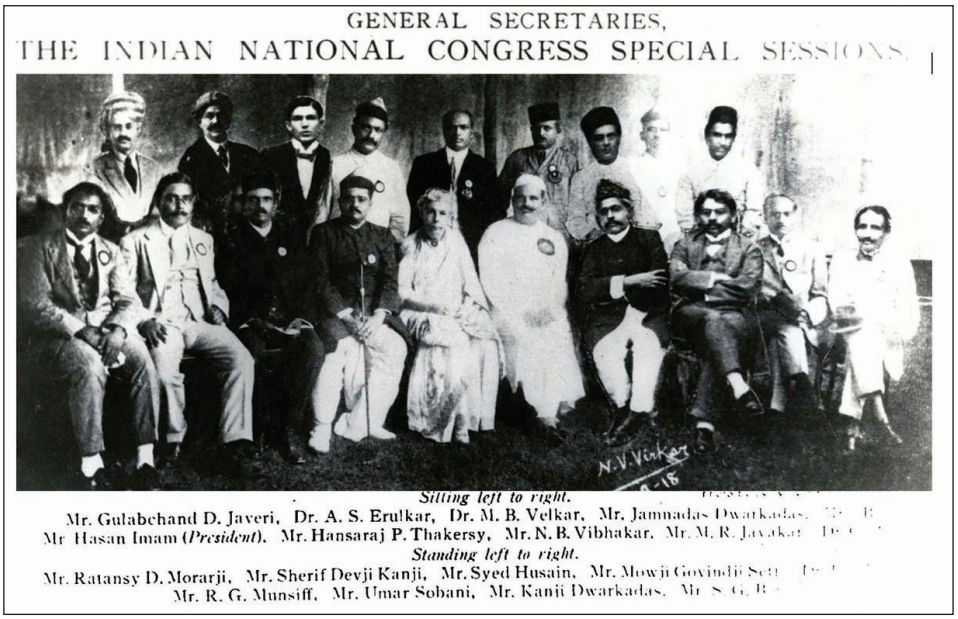
He belonged to the community of Bene Israeli Jews. He was the son of Dr Solomon Abraham Erulkar, a graduate from the Grant Medical College and a reputed physician in Ahmedabad. Dr Solomon Erulkar retired from the Army. Since he was then stationed in Ahmedabad, he decided to settle in this city. He started a small dispensary and hospital in his own large house where patients were treated, often free of charge. Patients and families came in bullock-carts and, at times, stayed in Dr Erulkar's house till the patient got well. Dr Erulkar got members of his faith in Bombay to settle in Ahmedabad and helped them. He started a small Synagogue in his own house at Pankore-Naka, a conspicuous area near three gates in Ahmedabad that grew into the present institution.

On 18 February 1919, from his residence—Imperial House, Lamington Road—Dr Abraham Erulkar applied for the post of Honorary Physician in J.J. Hospital. In it, he noted that he had received his entire medical education in Guy's Hospital, London and had obtained the M.B.B.S. degree at London University in 1913. He served as a Clinical Assistant at Guy's Hospital and obtained the M.D. degree at London University in 1916, standing second on the merit list. He was elected a Fellow of the Royal Society of Medicine of London in the same year. Among the testimonials attached to his application included one by Dr W. Hale White, senior physician to Guy's Hospital. 'He is an admirable worker with a very extensive knowledge of his profession, much experience and… is an extremely pleasant colleague'.

Dr Erulkar was married in 1916 in the West London Synagogue of British Jews to Kate (Kitty) Eccles, daughter of Commodore Captain Joseph David Scott of South-shields. On his return to India, he was in practice as a consulting physician. The

family later moved to Little Gibb's Road on Malabar Hill. Sarojini Naidu and Gopal Krishna Gokhale were among those that visited him there. In 1917, he was a part of the movement for Home Rule and active in the freedom movement.

Lok. Tilak Home Rule League Worker's 1917.
Chair L to R: A.B. Kolhatkar (1), Bipinchandra Pal (3), Dr A. Erulkar (4), Dr G.V. Deshmukh (5), Dr M.B. Velkar (6), Dr D.D. Sathe (7),
Ground : Paghe (2), C.V. Lalit (4), W.M. Joshi (5)



Among the voluntary organizations that served during the influenza epidemic in 1918, two stood out: the Hindu Medical Association and the Social Service League. Their volunteers carried out house visits and attended to patients with no one to nurse them. When needed, they arranged their admission to hospitals. Two wards in the Municipal

Maratha Hospital were placed under the disposal of the Hindu Medical Association. These wards were under the supervision of Dr Abraham Erulkar. The report on work done by the Hindu Medical Association suggests that most patients were from the lower sections of the society and worked in the mills. They were 'ill fed' and lived in 'badly ventilated dark rooms with smoky atmosphere full of coal and dust'.

Dr Erulkar was also active on matters pertaining to medical education and practice. In August 1919, addressing the Bombay Medical Union, he moved a resolution, 'that all educational and professional appointments should be thrown open to the profession at large in India and in the United Kingdom and that candidates should be selected by the Education Minister with the assistance of a selection board.' He felt that the best English medical men with international reputation did not come to India and that qualified Indian applicants were kept out of the selection process.

In 1923, as the Secretary of the Managing Committee of the People's Free Hospital, he addressed a select gathering during the opening of this institution on Lamington Road. This hospital was affiliated to the Topiwala Nair Hospital and provided the means for clinical teaching and practice to its residents and students and had three goals: care of patients, medical education, and research. He emphasized the provision of medical and surgical care to the poor and the afflicted.

He was a close associate and physician to Gandhiji in London and in India. Dr Erulkar was also the medical attendant of Khan Abdul Gaffar Khan. In 1926, he was a member of the first batch of physicians appointed to Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital.

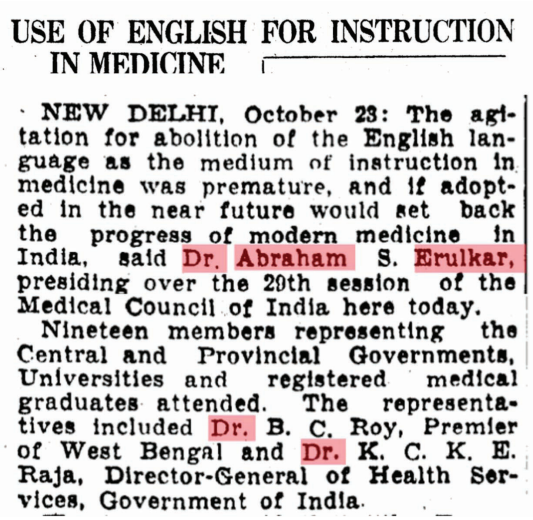
On 5 February 1929, *The Times of India* reported on the death of Dr Laxmanrao M. Bhongale, serving as a surgical registrar at the King Edward VII Memorial Hospital. He was under Dr Erulkar's treatment for pneumonia. 'Inspite of the vigilant nursing and the best possible treatment, he succumbed to it at the early age of 27 years.' Dr Bhongale hailed from Dharwar and had obtained his M.B.B.S. from the Grant Medical College in 1925. He had served as a tutor in anatomy at Seth Gordhandas Sunderdas Medical College. On 15 March 1929, along with Dr Y.G. Nadgir, Dr Erulkar was elected Fellow of the University of Bombay. He was elected Dean, Faculty of Medicine, University of Bombay the next year.

The breadth of his interests can be gauged from the fact that, on 17 March 1932, along with Drs V.R. Khanolkar and Dr A.P. Bacha, he was invited to speak in the Convocation Hall of the university of Bombay on the occasion of the Goethe centenary.

In 1934, he was elected President of the Bombay Medical Union. In February 1937, he was elected as a member of the executive committee, Medical Council of India (along with Drs B.C. Roy, S.L. Bhatia, and others). In 1946, on the retirement of Sir Bennet Hance, Dr Erulkar was elected President of the Council.

Along with Drs G.V. Deshmukh, A.P. Bacha, N.A. Purandare, and three others, he retired from Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital. *The Times Of India*, reporting on this on 17 November 1937, described how, at the felicitation function of the seven, only Drs Deshmukh, Erulkar. and Bacha attended. A conflict between the Dean and the students was said to be responsible.

Dr Erulkar's statement as Vice-President of the Indian Medical Council at a meeting in New Delhi in October 1948 is relevant today as voices are raised in favor of the abolition of English as a medium of instruction in medicine. Dr Erulkar pointed out that such a step would set back the progress of modern medicine in India.



USE OF ENGLISH FOR INSTRUCTION IN MEDICINE

NEW DELHI, October 23: The agitation for abolition of the English language as the medium of instruction in medicine was premature, and if adopted in the near future would set back the progress of modern medicine in India, said Dr. Abraham S. Erulkar, presiding over the 29th session of the Medical Council of India here today.

Nineteen members representing the Central and Provincial Governments, Universities and registered medical graduates attended. The representatives included Dr. B. C. Roy, Premier of West Bengal and Dr. K. C. K. E. Raja, Director-General of Health Services, Government of India.

The Times of India 25 October 1948.

In 1958, along with Professor P. Raghavan, he started the Gastroenterology Society of Bombay. This was later merged with the Indian Society of Gastroenterology.

He died in Bombay Hospital on 28 February 1960. Dr Ernest Borges was his surgeon. For several years after his death, *The Times of India* carried separate memorial notices by Mrs Kitty Erulkar and Dr K.K. Datey on his anniversary. Dr Datey referred to him as a great patriot, an outstanding physician, an able teacher, and a good friend. His widow, Kate, died in her home in South shields in the United Kingdom on 10 October 1969. She was survived by their son, Dr Joseph Abraham Solomon Erulkar, daughter Leela Irene, grandchild, and sisters.

Whilst working for the B.B.C. London under George Orwell, Leela Irene met and later married Glafcos Clerides, 4th President of Cyprus (1993–2003).

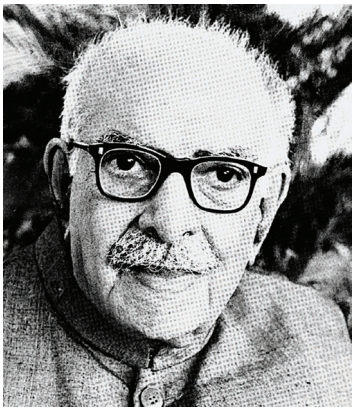
Suggested Reading

- Satam Mrunmayee: *Governing the body: public health and urban society in Colonial Bombay City, 1914-1945* Thesis submitted for the degree of Doctor of Philosophy at the University of Leicester. June 2019.
- Historical documents of Mr. Pratap M.B. Velkar https://historicaldocumentsofpratapvelkar.

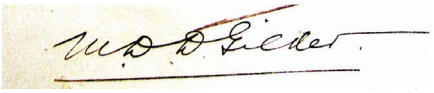
blogspot.com/

- Heritage of Bene-Israel Indian Jews. https://www.facebook.com/profile.php?id=100041371014591
- Lila Irene Clerides https://en.wikipedia.org/wiki/Lila_Irene_Clerides
- History of the Magen Abraham Synagogue. http://www.magenabraham.20m.com/history_synagogue.htm

Dr Manchersha Dhanjibhai Dorabji Gilder (1882–1979)



Akashvani 5 September 1970



Signature: Register of the College of Physicians and Surgeons, Bombay.

He was born in Bombay on 5 November 1882, one of five children of Mr Dhanjibhai Dorabji Gilder and Navazbai Bharucha. His father was a school teacher and an active participant in the cause of temperance and served as the Secretary of the Temperance Association for almost 50 years. Small wonder that his son followed in his footsteps. As a resident house surgeon at St. George's Hospital near the General Post Office in south Bombay in the 1960s, I [Dr Pandya] often saw him alight from his car to make his way to the ward of six beds he had set up to help patients addicted to alcohol. He used disulfiram (*Antabuse*) for this purpose. By blocking the enzyme involved in processing alcohol, disulfiram produces very unpleasant symptoms—tachycardia, angina, nausea, giddiness, flushing, and thirst—when combined with alcohol in the body. The administration of this tablet followed by a swig of alcohol was then considered very effective in weaning the patient off alcohol.

He received his early education at the New High School. He then moved to the St Xavier's College, where he obtained the B.A. degree in 1901. He was then admitted to the Grant Medical College. He obtained several prizes and medals. He obtained the L.M.&S. degree of the University of Bombay in 1905. He proceeded to University College in London as a J.N. Tata Scholar. (Other beneficiaries of the Tata Education Scheme included Dr Jivraj

Mehta, Dr Raghavendra Row and Dr A.P. Bacha.) (*The Times of India* 11 April 1910.)

He had to forgo a career in surgery as he had a juvenile cataract. He had the unique privilege of working with the eminent cardiologist, Sir Thomas Lewis (1881–1945), with whom he carried out research on electrocardiography (Lewis 1912). He returned to India in 1912 with an electrocardiograph which recorded on glass slides. He was amongst the earliest practitioners of cardiology in the country. He was one of the first batch of consultants appointed as teachers at the newly formed Seth Gordhandas Sunderdas Medical College and the King Edward VII Memorial Hospital.

During World War I, he was a consultant in the Army Hospital at the Prince of Wales Museum and the Royal Institute of Science and was given the Honorary Commission of Lt Col along with colleagues such as Drs Raghavendra Row, G.V. Deshmukh, J.N. Duggan, and Ardeshir Koyaji.

In 1972, he was the only surviving member of the Karobhari Committee and member of the first batch of physicians appointed to the B.D. Petit Parsee General Hospital, Bombay. He was a Founder-Member of the Association of Physicians of India (1944) along with Dr Jivraj Mehta, Dr George Coelho, Dr N.D. Patel, and Dr M.J. Shah among others. He was elected President of this body in 1947. He was elected President of the Bombay Medical Union and President of the College of Physicians and Surgeons. He had a large library which he bequeathed to St George's Hospital. He was on the Governing Body of the Lady Hardinge Medical College and Hospital (*The Times of India* 5 June 1952).

Dr Gilder entered politics not by ambition but by accident. Whilst discussing with Sir Chimanlal Setalvad the grievances of the medical profession, he was asked why medical men did not enter politics and assert their rights. This spurred Dr Glider to became a member of the Congress Party in 1926. He first met Mahatma Gandhi in 1932, as a medical attendant to him during the fast at Yerawada jail. Dr Gilder, himself, was arrested in 1939, released after eight months and re-arrested during the Quit India movement in 1942–44. On several occasions in 1932–47, he attended to Gandhiji and his wife, sometimes along with Dr Jivraj Mehta. In 1939, he worked with Gandhiji to close down the liquor shops in Bombay. In 1946, he advised Gandhiji not to visit plague-affected villages. (Other physicians attending to Mahatma Gandhi included Dr B.C. Roy, Dr A.K. Dalal, Dr G.R. Talwalkar, Colonel Maddock—who removed the inflamed appendix at Sassoon Hospital, Poona—and Dr Sushila Nayyar) (Bhargava and Kant 2019). Dr Gilder and Dr Sushila Nayyar were also the medical attendants during Kasturba's last illness. As she neared her end, she developed pneumonia. Penicillin was available only with the American army. Dr Gilder made a fervent appeal to them. When the drug arrived, she was almost comatose and there was a discussion whether it was kinder to leave her alone or to give her the four-hourly injections of penicillin. Gandhiji's will prevailed and the drug was not given

(Guha 2018). Dr Gilder and Dr N.D. Patel were called in when Sardar Vallabhbhai Patel suffered a heart attack at Birla House during his final visit to Bombay on 15 December 1950. Despite their ministrations, he succumbed. (He had suffered a similar heart attack in Delhi a year ago.)

He was elected the 13th Mayor of Bombay in 1943 and became the only Mayor never to occupy office because of imprisonment. He was appointed Minister of Health in Mr. Morarji Desai's cabinet in the bilingual Bombay state 1936–1939 and in 1945–1952.

Pandit Jawaharlal Nehru, Prime Minister, inaugurating the third Conference of Health Ministers in New Delhi, on August 31, 1950. Others seen in the picture include, the Hon'ble Rajkumari Amrit Kaur, India's Health minister; Dr Jivraj N. Mehta and Dr M.D.D. Gilder.

From 1952 to 1960, he was a Member of Rajya Sabha, Delhi. He was elected the President of the Bombay Medical Union and the Indian Temperance Association. For over 30 years, he was a member of the Bombay Municipal Corporation, Senate of the University of Bombay, and Director of the Bombay Mutual Life Association Society. He was also the first non-official President of the Bandra Municipality.

In April 1959, he underwent surgery for calculi in the bladder and an enlarged prostate. He lived at Gilder House, Bhulabhai Desai Road, Bombay. His wife, Dr Hirabai Manchersha Nanavati, obstetrician and gynecologist, died in 1969. Dr Gilder died on 20 May 1979, aged 96 years. He was survived by his only daughter Dr Ketayun Manchersha Gilder, who studied medicine at the Royal Free Hospital, London, before qualifying in Bombay. It is important to note that Gilder Street (from Arthur Road to Grant Road) is named not after him but after Rev Charles Gilder.

Suggested Reading

- Bhargava Balaram, Kant Rajni: Health file of Mahatma Gandhi: his experiments with dietetics and Nature Cure. *Indian Journal of Medical Research* 2019; 149 (Suppl 1):S5-S23.
- Feil, H.S., and Gilder, M.D.D.: Pulse in Aortic Disease as Felt and Graphically Inscribed, *Heart* 1921;8:4.
- Guha Ramchandra: *Gandhi: the years that change the world. 1914-1948*. Gurgaon: Penguin Random House 2018.
- Lewis T, Gilder MDD: The human electrocardiogram: a preliminary investigation of young male adults, to form a basis for pathological study. *Philosophical Transactions of the Royal Society of London. Biological Sciences* 1912;202:351-376.
- Royal College of Surgeons of England: *Plarr's Lives of the Fellows*. https://livesonline.rcseng.ac.uk/client/en_GB/lives/search/detailnonmodal/ent:$002f$002fSD_ASSET$002f0$002fSD_ASSET:378702/one?qu=%22rcs%3A+E006519%22&rt=-false%7C%7C%7CIDENTIFIER%7C%7C%7CResource+Identifier

Dr Ramchandra Gundopant Ginde (1912–1974)

Dr R.G. Ginde

Family Background

The Gindes hailed from Shahapur, Belgaum, then a small pocket under the Rajasaheb of Sangli in Bombay Presidency. His grandfather, Ramchandra, was in the Post & Telegraphs Department of the Government of India and was thus frequently transferred from place to place. His father, Dr Gundopant Ramchandra Ginde, obtained his L.C.P.S. from the B.J. Medical College in Poona and started his practice in Belgaum. Dissatisfied with the practice in this city, he moved to Bailhongal, a small village 27 miles away and settled there. He earned a reputation as a caring physician and a social worker. As Chairman of the Village Municipality for 9 years, he effected long-lasting improvements that attracted the attention

of visiting British government officials. He was appointed Honorary Judicial Magistrate.

Dr Gundopant Ginde had 9 children. He was very fond of music, and especially admired the songs of Bal Gandharva, the famous exponent of Marathi Natyasangeet (stage music). The eldest, Ram, was born on 28 July 1912. The 8th child in the Ginde household, Krishna, was to achieve renown as a stalwart who dedicated his entire life to the cause of music. He was born on 26 December 1925.

Dr Gundopant Ginde's musical yearnings found expression in the form of Bhajan and Natyasangeet. Each Thursday, there would be a regular gathering of the family, friends, and neighbors who might wish to join, where singing devotional songs in Kannada and Marathi would be the main activity. If he was home for the holidays, Gundopant's eldest son, Ramachandra, then a college student, would provide accompaniment on the *dilruba* and a younger son Govind would play the *tabla*. Krishna was allowed to keep time with the *jhanjh* (hand cymbals) almost as soon as he was old enough to hold them and would do it very well already by the age of three. As a child prodigy, he was initiated in music by his elder brother Dr Ram Ginde at the tender age of four years.

Education

Dr Ginde's initial studies were in Kanarese (though his mother tongue was Marathi). He proceeded to Belgaum for higher studies and matriculated in 1928 from the University of Bombay. By then, he was playing the harmonium, the flute, and the *dilruba*. This interest in classical music abided in him. He then moved to Poona where he studied at the Deccan College. In order to prepare for admission into medical college, he moved to Bombay and studied at the Wilson College. Tennis now claimed his attention. He joined the Seth G.S. Medical College in Bombay and studied under masters such as Dr Rustom N. Cooper, Dr Nathubhai D. Patel, Dr P.C. Bharucha, Dr Gopalrao Deshmukh, and Dr N.A. Purandare. Dr Rustom Cooper was especially fond of him and called him 'Sonny'.

In 1935, he won the Bombay University Intercollegiate Tennis Championship. He stood first in the University in the first M.B.B.S. as well as the final M.B.B.S. examination and won numerous awards. He went to England in 1937 but had to return before acquiring the fellowship due to the outbreak of World War II. His proficiency in tennis and music continued to develop. On his return to India in 1940, he stood first among the successful candidates for the Master's degree in surgery.

He developed an interest in blood, then in its infancy in India. His early experiments involved collection of blood from persons who had just died from accidental injuries and using placental blood. Together with Dr S.M. Nadkarni, he set up the first blood bank at the K.E.M. Hospital. His expertise soon prompted surgeons such as Dr Cooper to ask him to supervise transfusions on all their patients.

Family Life

Dr Ginde married Sarala Herekar in 1936. They had three sons. Arun, born in 1942, followed in his father's footsteps, trained in neurosurgery, and settled in Canada.

Neurosurgery

Dr Ginde was interested in surgical pathology and spent a lot of time studying slides and specimens with Dr S.M. Nadkarni. During this period, Dr Khanolkar returned from abroad bringing with him slides of the brain and spinal cord made by Professor Ramon Y. Cajal. These slides stimulated Dr Ginde's interest in neurosurgery.

The Government of India offered a fellowship in neurosurgery and Dr Ginde was selected from amongst 40 applicants. He went to Montreal where he spent two years (1948–1949) with Drs Wilder Penfield and William Cone. Impressed by his sincerity and work, Dr Penfield arranged a study tour of neurosurgical institutions in America and Europe.

On returning to India, he was appointed Honorary Surgeon and Lecturer in Surgery at the Seth G.S. Medical College and the K.E.M. Hospital in November 1953. He tried to keep neurosurgery as his primary interest and had to do everything himself from shaving and transporting the patients to their radiological investigations and their preoperative, operative and postoperative workup. Dr Ginde prepared a detailed plan for a full-fledged department of neurosurgery at the K.E.M. Hospital, which was not accepted due to financial constraints.

Even so, he struggled to do his best and, in 1954, published a survey of the neurosurgical work at the K.E.M. Hospital over the 27 years from 1926–1953 together with an analysis of the patients treated by himself since 1951 (See *Journal of the Indian Medical Profession* 1954:1;81–88). The first spinal cord tumor was removed by Drs R.N. Cooper and Ginde in 1940, the localisation having been made by air myelography. Laminectomy for prolapsed lumbar disc at L2-3 was first carried out by Drs Cooper and Ginde in 1945. The disc contents were excised through the transdural approach.

Drs A.P. Bacha and G.V. Deshmukh had attempted surgery on brain tumors from 1927 but they had to rest content with biopsies and decompressions. Dr A.V. Baliga successfully treated trigeminal neuralgia by surgery in 1940. Dr R.N. Cooper performed the first prefrontal leukotomy by the trans-temporal route of Freeman and Watts in 1945.

Dr S.D. Bhandarkar recalled that he attended Dr Ginde's clinics in O.P.D. 5 and was amazed at the diagrams he used to draw on the blackboard. He recalled that Dr Ginde mastered any activity he took up. Dr Ginde knew next to nothing about tennis, but, when he decided to learn it, he stopped only when he had won the championship he had set his heart on.

Frustrated by the lack of interest shown by the authorities in his proposal for the creation of departments of neurology

and neurosurgery, Dr Ginde resigned from Municipal Service in 1955 and set up a neurosurgery clinic at Breach Candy Hospital. Dr R.N. Cooper, dismayed by his predicament, prevailed upon Mr G.D. Birla to appoint Dr Ginde to the Bombay Hospital. Full-fledged departments of neurosurgery (Dr R.G. Ginde), neurology (Dr E.P. Bharucha), and neuroradiology (Dr D.S. Dadhich) were set up.

From the left: Dr Ram Ginde, Mrs Penfield, Dr Wilder Penfield, Mrs Sarala Ginde during Dr Penfield's visit to Bombay in 1957.

In time, Dr Ginde was the best known and most sought-after neurosurgeon in much of northern and Western India.

From the left: Dr Pilloo Bharucha, Dr Ram Ginde, Dr Eddie Bharucha, Sir Geoffrey Jefferson, Dr Vijay Daftary, Lady Jefferson, unknown, Dr Sheriar Irani, Dr V.P. Mondkar, Dr Noshir H. Wadia, Mrs Ginde, unknown, Dr Anil Desai.

In 1964, Mr Yeshwantrao Chavan and the Government of Maharashtra appointed Dr Ginde as Director of Neurology and Neurosurgery at the Grant Medical college and the J.J. Hospital. This created discord as Drs Noshir Wadia and Gajendra Sinh had already set up and developed departments of neurology and neurosurgery respectively.

After most of his operations at J.J. Hospital, as soon as the histology slides on his patients were ready, Dr Ginde would go over to the neuropathology department and examine them himself. The late Dr Darab Dastur, himself a great neuropathologist, marveled at Dr Ginde's expertise and enjoyed verbal jousts with him on findings and interpretation.

He was often called to other centers to see patients and operate upon them. Dr Arjun Sehgal, neurosurgeon in New Delhi, called him on several occasions and was his host. Amongst his many honors were his appointment as President, Neurological Society of India (1954–1955), editor of *Neurology India* (1956–1964), Founder-Member of the Middle East Neurosurgical Society, and President of the International College of Surgeons (Indian section) (1967–1968).

Library and Patient Records

Dr Ginde's personal library consisted of several hundreds of texts, monographs and bound volumes of journals. It included treasured volumes gifted to him by the widow of Dr William Cone. A significant percentage of these dealt with the history of the medical sciences with special reference to the nervous system. His son, Mr Vijay R. Ginde, donated part of this library to the Department of Neurosurgery at the K.E.M. Hospital.

Dr Ginde's case records remain exemplary models. A former resident recalls an interesting incident:

'I was registrar to Dr Gajendra Sinh in the department of neurosurgery at the Sir J.J. Group of Hospitals. Dr Ginde was head of the other unit and was also the Director of Neurosciences.

'One evening, as I was completing my rounds, I was told by the staff nurse that Dr Ginde wanted to see me immediately. His formidable reputation and insistence on strict discipline induced some anxiety as I wondered what prompted this summons. 'Dr Ginde was seated by the table separating the two halves of Ward 25. Standing next to him was his registrar, Dr Narayan. The sober expression on his face was not encouraging. Dr Ginde smiled and commended me on working in the ward at that late hour. "I was about to show Narayan how an operation note should be written and wondered whether you'd like to see this too."

'He then proceeded to write his account of the operation he had just concluded. He started off with details on the patient—name, age, sex, indoor number… The first few paragraphs were a summary of his history and findings on clinical examination. Then came the clinical diagnosis made by himself. The next few paragraphs summed up the findings on investigation and the diagnosis made before surgery. The interpretation of findings on X-ray films was made in considerable detail.

'By now he had already covered a full sheet in his neat handwriting. Only after this, did the actual operation note commence. He put down the title of the operation—Right frontal craniotomy for excision of intracerebral glioma. Details on anesthesia, the position of the patient,

the incision made, the various steps of the operation, findings at surgery, macroscopic description of the tumor, the final steps of the operation, closure of the wound, blood loss during the operation… followed. He concluded the operation with his post-operative diagnosis, proposed drug therapy in the postoperative period and in the long term and other therapy that the patient might need and his prediction of the postoperative progress of the patient.

'As he collected the sheets he had filled, he was not yet done. He now picked up a fresh sheet and made illustrations showing the key findings, especially with reference to the tumor itself. An hour had passed, and we had not recognized this passage of time. He revised his note and then pinning the sheets together, placed them in the patient's file. He then addressed Dr Narayan, 'You must improve on this in all your future operation notes.'

'Accepting our thanks with a wave of his hand, he hurried away to his next appointment.' (Case notes on his private patients, written in his own hand, have been gifted to the Department of Neurosurgery at the K.E.M. Hospital.)

Death

The Times of India on Sunday, 5 May 1974, carried the headline: 'Dr Ginde, noted surgeon, dead' and informed the readers that he had died on Friday, two days earlier, at the age of 62. Dr Ginde had suffered an episode of myocardial infarction a few months before his death. He had been overworking as always and this illness made him reduce his hours of work. In May 1974, he was admitted in a coma from a major infarct involving the brainstem and cerebellum with possible hemorrhagic transformation. (Information provided by Dr B.S. Singhal.)

His junior colleague at the Bombay Hospital, Dr S.N. Bhagwati, honored him by instituting the annual Ginde Oration. Eminent neurosurgeons from abroad are invited to deliver it. The oration is associated with live demonstrations of complex neurosurgical operations by the orator, and also a workshop. Dr Chandrashekhar Deopujari is the current organizer for this event.

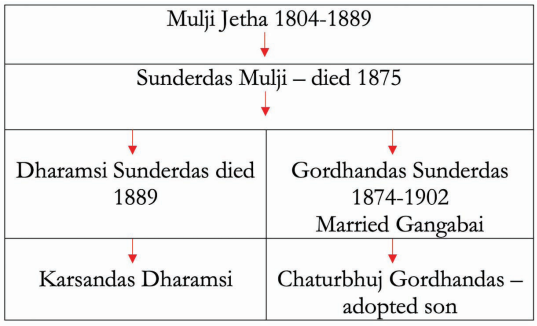
Mrs Sarala Ginde passed away on 30 May 1983.

Suggested Reading

- Deopujari CE. Organized Neurosurgery. *Neurology India* 2016;64:1129-35.
- Pandya Sunil: Two founders of Bombay neurosciences: Dr Ramchandra G. Ginde and Dr Menino De Souza *Neurology India* 2017;65(3):460-467.

Gordhandas Sunderdas (1874–1902)

Mulji Jetha



Deoraj Jethabhai Gosar, popularly known as Shah Mulji Jetha belonged to the Bhatia community. He came to Bombay in the early 1870s and began trading in Bombay in the name of Mulji Jetha and Co. (*Times of India* 20 Jan 1908 report on the court case states that Mulji Jetha established the firm in 1824.) His son, Sunderdas Mulji, joined him on attaining maturity. The firm prospered and owned land at Vithalwadi, Mandvi, Dongri, and Byculla. The property in Byculla was leased to Spinning & Weaving Mills (owned by Mulji Jetha & Co.). They also owned two places at the seaport town of Karachi. Mulji and Sunderdas admitted other parties as very small partners, retaining as much as 15 annas' share in the rupee in their own hands. Such outside partners could be turned out at any time.

Sunderdas Mulji had two wives. In 1872, Sunderdas Mulji had a son Dharamsi Sunderdas. On 14 December 1874, a second son, Gordhandas Sunderdas, was born. Sunderdas died in 1875 and his father, Mulji, in 1889. The two wives of Sunderdas—Sundervahu and Sakarvahu—died on 4 and 22 December 1888 respectively. Gordhandas attained the age of 21 years on 22 November 1895. Sunderdas had willed his properties to Dharamsi Sunderdas and Gordhandas Sunderdas. There were no partnership deeds.

Mulji Jetha died on or about the 3rd day of Shravan Samvat in 1945 (14 August 1889). In October 1888, he had willed that his properties be divided between his grandsons Dharamsi Sunderdas and Gordhandas Sunderdas, the latter being eligible for ownership on attaining the age of 20 years. On 30 October 1888, Gordhandas was aged 15 and Dharamsi aged 20.

Gordhandas Sunderdas

Gordhandas was married to Gangabai. Her brother was Lalji Naranji.

Gordhandas became eligible to his half of the share of inherited properties in 1895.

He and Dharamsi managed the property jointly. Dharamsi died on 28 February 1899.

It was not until 1899 when Dharamsi died that any claim was put forward by Dharamsi or his representatives. The position mentioned was inserted into Dharamsi's will which was executed only a fortnight before he died. According to his will, Gordhandas appointed his wife Gangabai, her brother Lalji Naranji, his solicitor Jamshedji Cowasji Patel, Chaturbhuj Morarji, and Narandas Thakersey Mulji as his executors. On the same day that he executed his will, he executed a deed-poll by which he appointed Gangabai as the person to succeed him in the management of his firm after his death. His will contained references to this deed.

Gordhandas died aged 28 on 10 October 1902 from fever. He had no offspring, leaving behind his wife, Gangabai. Gangabai, Gordhandas' widow, adopted her sister's son, Chaturbhuj Valabhdas, who was now about 20 and was attending to the business of Mulji Jetha firm in Tamarind Lane, Fort. He was now known as Chaturbhuj Gordhandas. (Chaturbhuj's father was Liladhar Vallabhdas Valji.) By the 18th clause of his will, Gordhandas had authorized and empowered his wife Gangabai to adopt Chaturbhuj. He also gave directions as to the education and bringing up of the boy and imposed certain duties on the trustees. He directed that the residue of his estate should be handed over to the adopted son on the latter attaining the age of 25 years if he fulfilled certain conditions set forth in the will. He further directed that if no son was adopted to him, his residuary estate was to be used by the trustees for such charitable institution or institutions such as hospitals, dispensaries or asylums and for the advancement of the Bhatias and natives of India. (*The Times of India* 28 September 1910.)

The litigation began with the death of Dharamsi Sunderdas, who left a will stating that the whole of the estate of his grandfather Mulji Jetha belonged to him. This was contested by Gordhandas, his brother, who succeeded in getting a decree from Justice Russell in April 1901 that both brothers were entitled to the estate. Dharamsi's executors and later Karsandas (Dharamsi's son) filed suits claiming the whole of the Mulji Jetha estates since his descendants had to right to its partition. Gordhandas' executors pointed out that Dharamsi's executors had already come to a partition by accepting Rs. 13,00,000 as Dharamsi's half-share in the property of the firm.

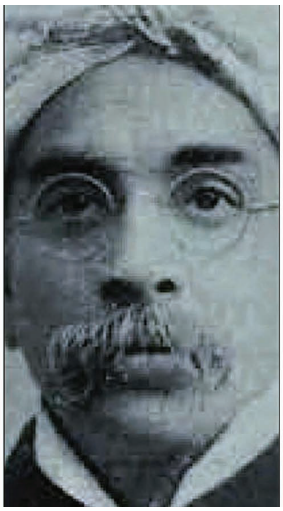
In the last of ten years of litigation, the matters in dispute were referred, by agreement, to the sole arbitration of Mr Chimanlal H. Setalvad.

Sir. Chimanlal H. Setalvad

Justice Daver passed an order stating that a part of Gordhandas' estate was to be used for charities and the other part was to go to Chaturbhuj. The estate was valued at Rs. 38,00,000. Rs. 20,00,000 was to be divided between Gangabai, Lalji Narayan, N Aranji, Chaturbhuj Gordhandas Sunderdas (adopted son), Mathuradas Gokaldas Madhavji, Narotam Morarji Gokaldas, and Khimji Kuvarji (*The Times of India* 21 October 1911).

Sir Chimanlal Setalvad, Sir Pherozeshah Mehta, Sir Narayan Chandavarkar, and Advocate-General Mr D.N. Bahadurji (brother of Dr K.N. Bahadurji) were appointed Trustees. As it happened, all of them were ardent advocates of the creation of a new medical college in northern Bombay for the care of the mill-workers and other poor citizens. They were also imbued with the spirit that drove Dr K.N. Bahadurji that this college should be staffed by well-qualified independent Indian medical practitioners in no way connected to the Indian Medical Service and the Government.

Sir Pherozeshah Mehta



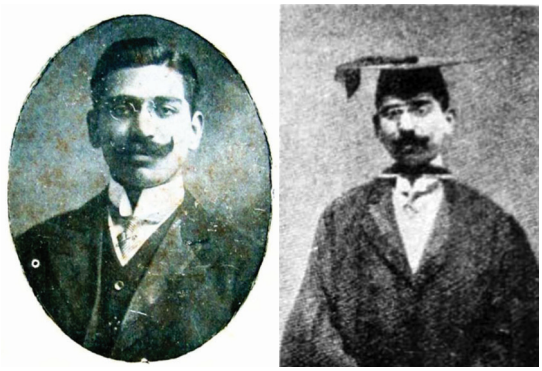
Sir Narayan Chandavarkar

Mr D.N. Bahadurji

[Mr Bahadurji's portrait was kindly provided by Mr Justice (Retired) Gautam Patel.]

The Municipal Corporation received Rs. 12,00,000 from the trustees of the estate of the late Seth Gordhandas Sunderdas for the building and equipment of a new medical college in conjunction with the King Edward Medical Hospital in Parel. Rs. 80,000 were received from the trustees of the charities created by the will of the late Seth Ranchhoddas Vithaldas Shroff from the interest of which to buy clothing for convalescents leaving the same hospital. (*The Times of India* 14 March 1916.)

Dr Habib Ismail Jan Mahomed M.D. (Lond.), F.R.C.S. (Eng.) (? – 1913)



Habib Ismail Jan Mahomed

He was the eldest son of Dr Ismail Jan Mahomed. The senior Dr Jan Mahomed was, for many years, a prominent member of the Bombay Municipal Corporation. He had played an important role in enabling vaccination against the plague amongst the members of his Khoja community during the epidemic that broke out in Bombay in 1896. He died, aged 48, in 1902 after suffering relapsing fever and pneumonia.

Dr Habib entered Guy's Hospital in October 1903 and was the first Indian to secure the much coveted Treasurer's Gold Medal for clinical medicine. He was also awarded the Golding Bird Certificate in Bacteriology. He passed the primary examination for the Fellowship of the Royal College of Surgeons of London in 1906 and obtained the M.B.B.S. degree, M.R.C.S., and L.R.C.P. diplomas—all in London—in 1908. At the examination for M.D. (London), he was also awarded a gold medal in 1909. Dr William Hale-White, distinguished physician at Guy's Hospital described Dr Habib as 'above average and in the very front rank of men of his time.' He obtained the F.R.C.S. in 1911.

On his return to Bombay in 1911, after the death of his father, it appeared that a bright future awaited him. He failed to secure a senior position at Grant Medical College and Sir J.J. Hospital. Indifferent treatment at the hands of I.M.S. staff members led to 'a stiff fight … so that he was duly respected.' Dr Jivraj Mehta told me in an interview that Dr Jan Mahomed was not allowed to use the Professor's Common Room as it was the exclusive use of the I.M.S. officers.

'He was a successful consultant but had an untimely death.' (Cooper 1952) He practiced at the Bower, Pedder Road, Bombay. We learn from *Plarr's Lives* that he was under treatment for diabetes mellitus. Whilst on a visit to England, Dr Habib died at the National Liberal Club.

His daughter, Shirin, married Dr Rajabally Patel, who lived on Pedder Road. Dr Patel had been unofficially adopted into the Jan Mahomed family. He was the physician to Maulana Azad and one of the physicians who looked after Mahatma Gandhi. His name was recently seen in our newspaper columns as he was the grandfather of Ameen Sayani (*Binaca Geet Mala*). The donation of Rs. 50,000 for an operation theater in King Edward VII Memorial Hospital was made by Dr Patel from the estate of Dr Habib.

Suggested Reading

- Cooper RN: A page from history. *Silver Jubilee Souvenir, GSMC-KEMH* 1952.
- Pandurang Atmaram: A plea for a new medical college in Bombay. *Native Opinion* 1885.

- Pandya Sunil K: An interview with the Founder-Dean. In Bhatnagar S M, Kothari M L (Eds): *Golden Jubilee Souvenir Seth G. S. Medical College and K. E. M. Hospital*. 1976.

Dr Rustom Jamshedji Katrak (1899–1987)

Courtesy *Parsiana* (Cover illustration by Mr Mickey Patel in issue dated October 1988.)

Note: His name is spelled Rustom in contrast to Rustam for Dr R.N. Cooper.

He was born to Jerbai and Jamshedji Katrak on 23 November 1899. Jerbai's early death and Jamshedji's remarriage prompted Jerbai's brother, Jamshedji, to offer to bring up Rustom and his elder sister Dossan. Rustom's early inclination was to study law but, as an apocryphal account has it, was dismayed by the fact that this meant his having to state untruths. He obtained the B.Sc. degree and then was guided into medicine by his uncle, Dr Edulji Madon.

He graduated from the Grant Medical College in 1927. He was very fond of children and was dismayed by the thought that there was no treatment for developmental deformities such as club foot, knock-knees and bowed knees that plagued their lives. Up to then, orthopaedics essentially meant the setting of fractures and the application of splints or plaster-of-Paris casts. These treatments were in the domain of bone-setters and general surgeons. This resulted in a significant number of malunited fractures with deformities and consequent physical handicaps. Dr Katrak's work in the wards of Sir Jamsetjee Jejeebhoy Hospital showed him that there was much that needed to be done in these and other areas of orthopaedics—already an established branch of surgery in Britain. He may have been influenced by Dr R.N. Cooper in seeking advanced training in this field.

Dr Katrak obtained a scholarship from the Wadia Trust on the understanding that he would work at the Bai Jerbai Wadia Hospital for Children on his return. In 1934, he qualified as Fellow of the Royal College of Surgeons of England. This was a requirement for training in the Mecca of orthopaedics—Liverpool. Dr Hugh Owen Thomas, Sir Robert Jones, and Sir Reginald Watson-Jones had founded this branch of surgery in Liverpool. Dr Katrak worked with Dr Reginald Watson-Jones in Liverpool and obtained M.Ch. (Orth) there. He was the first Indian to specialize in orthopaedics.

He fulfilled his commitment on his return to Bombay and was appointed orthopedic surgeon at the Wadia Hospital in Parel and at the Parsee General Hospital. He started correcting the deformities and handicaps produced by congenital abnormalities and those that were the sequelae of poliomyelitis. He later also treated tuberculosis of the knee and ankle joints and deformities produced by rickets. He set up a workshop for the manufacture of splints, calipers, and

crutches for his crippled children. He was soon reputed for his correction of club foot by cutting apart tightened ligaments through small, strategically placed cuts in the skin, correcting the deformity to the extent possible and encasing the leg and foot in a plaster cast. The procedure was repeated some weeks later till complete correction was achieved. This had enabled him to treat many such patients without admission to the wards.

He was promised an appointment as an orthopedic surgeon at the Byramji Jejeebhoy Hospital for Children (part of the Sir Jamsetjee Jejeebhoy Group of Hospitals in 1938) but faced humiliation at the hands of the I.M.S. officers. Over the short period of 3 years he worked there, the hitherto empty wards were filled with children seeking his help.

In 1942, he was appointed Professor of Orthopedics at Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital. Dr Jivraj Mehta, Dean, had invited him to start a full-fledged orthopedic department. Fortunately, senior surgeons Dr Rustam N. Cooper and Dr A.V. Baliga were convinced that orthopedic surgeons could provide superior care. As a result, Dr Katrak was soon treating all orthopedic and fracture cases at King Edward VII Memorial Hospital. But even there, he had to struggle for increasing beds and space for his patients. It is noteworthy that Dr Jivraj Mehta continued to help Dr Katrak develop orthopedic departments at other hospitals when he was the Chief Minister of Gujarat.

Dr Katrak's trainees—later eminent orthopedic surgeons in their own right—included Drs A.K. Talwalkar, K.T. Dholakia, K.S. Masalawala, L.N. Vora, and S.J. Kumbhani. When Dr Talwalkar returned from Liverpool and was appointed to the staff of the King Edward VII Memorial Hospital, Dr Katrak split the department and made him the head of the second unit.

Dr S.D. Bapat has written of the time he worked with Dr Katrak in the Orthopedic Department. He found him a slow surgeon but very keen to operate. He was mild-mannered and his favorite exercise was that to strengthen the quadriceps.

As Honorary Orthopedic Surgeon, he was entitled to private practice. He operated at Dr A.P. Bacha's Bellevue Nursing Home on Queen's Road and at Breach Candy Hospital.

In the 1950s. he took steps to set up an occupational therapy department and was fortunate in finding Mrs Kamala Nimbkar to head it. This was the first occupational therapy department in the country. An American by birth, Mrs Nimbkar had made her home in Bombay. Since no accommodation for this department was available, Mr V. Nimbkar built the premises near the present day Tata Memorial Hospital in Parel, under condition that it be named *Shrimati Kamala V. Nimbkar Occupational Therapy Block.* Mrs Nimbkar obtained the equipment, books for its library, and other necessary material. The school opened on 14 November 1950. The excellent work done in this department convinced a visiting W.H.O. team to help set up a complementary physiotherapy department as well in the institution. M.S.G. Joshi, trained in Stockholm, headed it. Working in close

conjunction, the orthopedic department, physiotherapy, and occupational therapy schools provided comprehensive therapy to patients not available anywhere else in the city.

Dr Katrak retired from King Edward VII Memorial Hospital in 1957. He continued serving Wadia Hospital for another 12 years. It was at his instance that the University of Bombay started the postgraduate course in orthopedic surgery leading to the M.S. (Orth) degree in 1952.

In 1963, Dr Katrak was elected Honorary Fellow of the British Orthopedic Association, becoming the first Indian to be honored with it. Dr Katrak was a founder member of the Bombay Orthopedic Society—the first of its kind in India. This Society awards an annual oration in his name.

Personal Life

As you would expect of a doctor who found it very easy to make friends with his young patients, Dr Katrak was a gentle person who easily built rapport. He remained a bachelor. As he told his junior colleague at King Edward VII Memorial Hospital, Dr L.N. Vora, 'I was too involved in my work to get married.' His colleague at the Wadia Hospital, Dr S.J. Kumbhani, noted that Dr Katrak always lit up when faced with children.

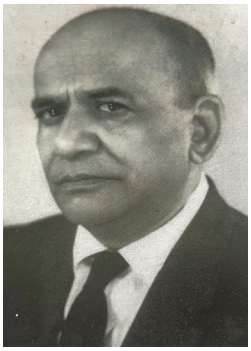
Dr Katrak lived with his unmarried sister, Dossan, to whom he was greatly attached. Her death in 1984 was a great tragedy for him. In later life, he suffered from severe cervical spondylosis, heart disease, and leukoderma. The latter made him withdraw further from society fearing adverse comments on his appearance.

His cultural interests included poetry and music. In later life, he turned to religion and the history of the Parsis.

Suggested Reading

- Bapat Sharad D: *A urologist's journey. The inspiring story of a doctor and a pioneer.* Mumbai: Dimple Publication 2023.
- Fernandes Joy: The father of Indian orthopaedics. *Parsiana* 1988;11:35-40.
- Vora L.N.: BOS (Bombay Orthopaedic Society) History. https://bombayorth.in/bos-history.html

Dr V.R. Khanolkar: the First Professor of Pathology at Seth G.S. Medical College



(Written by Dr Sanjay A. Pai, Consultant Pathologist and Head of Pathology, Manipal Hospital, Bangalore.)

Dr Vasant Ramji Khanolkar was the first professor and Head of the department of pathology at Seth Gordhandas Sunderdas Medical College (G.S.M.C) and the King Edward VII Memorial (K.E.M.) Hospital in Bombay. He had earlier been on the staff of Grant Medical College (G.M.C.) and Sir Jamsetjee Jejeebhoy Hospital from 1924 to 1926. This was after his return in 1924 from London where he had done his B.Sc. and medical education.

Khanolkar worked at G.S.M.C. from 1926 to 1939 and then joined the newly established Tata Memorial Hospital (T.M.H.), which was adjacent to K.E.M. In 1952, the basic research wing of T.M.H., named the Indian Cancer Research Center (I.C.R.C., later renamed Cancer Research Institute) was established and Khanolkar became its Director.

Khanolkar achieved a well-deserved international reputation as a pathologist and researcher in the diverse fields of cancer and leprosy during his stint at T.M.H. and I.C.R.C. For his contributions to the nation, the President of India honored Khanolkar with a Padma Bhushan in 1955.

I have written fairly extensively, over the years, about his professional career. The earlier articles refer to Khanolkar's contributions to bringing India to the world stage in the fields of pathology (in the broadest sense of the word) of cancer and leprosy when he was at T.M.H.; as well as on the autopsies and the research that he performed at G.M.C. and G.S.M.C. Because this volume is essentially about G.S. Medical College, this article deals largely with newly discovered information about his professional years at G.S.M.C. Some information about his medical training in London as well as some data about his T.M.H. and I.C.R.C. years is also documented. Minor parts of this article may overlap with what has been written about him earlier (with the permission of the editors of the two journals, The National Medical Journal of India and Journal of Postgraduate Medicine). However, most of the article consists of newly discovered information.

Initial Years

From the pages of The Lancet, we learn that Dr Khanolkar passed his I MBBS in 1914; the Second examination for medical degrees (part 1, organic and applied chemistry) in 1915; Second examination for Medical degrees (part II) In 1916; and his III MBBS in 1919.

In between, he passed his B.Sc. in 1917 as well as the primary exam for the Fellowship of the R.C.S. in the examinations held on May 2, 3, and 8, 1917. The latter news has been published in the issue of The Lancet dated 19 May 1917, where we learn that "30 candidates presented themselves, of whom 12 were approved and 18 were referred."

Subsequently, The Calendar of the Royal College of Surgeons dated 1 August 1923 has an entry for the year and the name "1919. Khanolkar, Vasant R" in the list of members. He passed his M.D. in pathology in 1922; he was the first candidate to pass in three years.

The Graham Legacy Committee had appointed Mr V.R. Khanolkar to the Graham scholarship in pathology for two years from April 1, 1921. The value of the scholarship was 400 a year. As a Graham scholar, Khanolkar performed research, which was subsequently published in the leading journal, Journal of Pathology and Bacteriology. Some of this data was also presented at a conference; a report in The Lancet on the meeting of the Pathological Society of Great Britain and

Ireland held on July 14 and 15, 1922 states "Prof. Boycott and Dr V.R. Khanolkar (London) described a fairly simple method of enumerating kidney glomeruli by the use of very thick sections." Khanolkar resigned from his two-year reappointment as Graham Research Scholar "to which he was reappointed for two years from 1 April 1923, on his acceptance of the post of Professor of Pathology in the Grant Medical College, Bombay".

We do not have much information on Khanolkar's work at G.M.C. As has been written earlier, he performed 23 autopsies. We know that he played a role in the reorganizing of the department of pathology. Dr S.L. Bhatia, Dean of G.M.C., writes, in the Indian Medical Gazette,

"For some time past we had felt the necessity of reorganizing the Pathology Department. The Departments of Pathology and Bacteriology were isolated and housed in separate buildings at some distance from each other. The Pathology Museum was comparatively small and was located in the main college building away from both the Pathology and Bacteriology Departments. Besides, there were no facilities for research work. To remedy these defects, it was suggested in 1925 by Dr V.R. Khanolkar, MD. (Lond.), the then Professor of Pathology, that the two Departments of Pathology and Bacteriology be amalgamated with one head for the whole department".

Khanolkar joined G.S.M.C. in 1926.

Khanolkar at G.S.M.C.

G.S.M.C. was studded with the giants of Indian medicine—Dr Jivraj Mehta, Dr Gilder, Dr Rustom Cooper, Dr A.V. Baliga, and Dr Khanolkar were among them. At G.S.M.C., he established the department of pathology and microbiology, the museum, and the medical artists department; performed administrative duties; created organizations; and organized conferences. His diagnostic and research work was in the fields of histopathology, hematology. and microbiology.

It appears that Khanolkar's opinion was sought even by physicians/pathologists in other hospitals. A report of "lymphogranuloma" of the colon in The Lancet in 1928 by Yodh and Joglekar of Sir J.J. Hospital state quite explicitly that it was Khanolkar who performed the histologic evaluation and diagnosed the case. In fact, it is interesting that the report is almost entirely an autopsy case report, but has a physician and surgeon as co-authors, but no pathologist!

Among the articles in the very first issue of Indian Journal of Surgery is one on abdominal tuberculosis by R.N. Cooper, in which the author discusses "History, Etiology, Pathology, Symptoms and Signs, Diagnosis and Prognosis" and states, "I am able to obtain the figures at the K.E.M. Hospital through the courtesy of the Professor of Pathology, Dr V.R. Khanolkar and the Associate Professor, Dr R. Dhayagude... Between 1926–1933, 2,000 autopsies were performed. Of these, 216 cases showed Pulmonary Tuberculosis. Of these 216 cases, 80 showed Intestinal lesions. Thus nearly more than a third of the Phthisical patients had intestinal lesions…"

Khanolkar's presentation and subsequent publication of cases of "Atypical lymphoma" and of "Carotid body tumor" at a conference of the Société Anatomique in Paris in 1930 have already been discussed earlier, as also his report in American Journal of Ophthalmology based on a patient that he had seen in G.S.M.C.

Research On Anemia

We find that in the Annual Report Of The Public Health Commissioner With The Government Of India For 1932 by William Scott Berryman, the statements "Physiological anemia during and after pregnancy—this enquiry was conducted by Dr Khanolkar, Professor of Pathology and Bacteriology, Seth G.S. Medical College, Bombay. The total cases studied amounted to 229. From a rough study of these there appeared to be a mild but definite anemia during pregnancy but the course of changes in the blood picture was not always the same." This, to my knowledge, is the first mention of any objective data on the topic of anemia, in the research done by Khanolkar. Even though there is no information on the actual Hemoglobin findings, we are at least informed about the number of cases.

Museum

In an article in Journal of the Indian Medical Association in 1939, Dr Jivraj Mehta, the first Dean of K.E.M. writes,

"It will be realized that the planning of a museum for housing wet specimens presents special difficulties which require a careful study of the particular conditions of temperature and light intensity obtaining in this City. It has been our endeavor to preserve specimens in natural colors for as long a time as possible. Bright light and summer temperature set up marked changes in the preserving fluids and lead to a rapid deterioration of wet specimens. Prof Khanolkar during his tour in Europe in 1929 had an opportunity of consulting curators of several museums in the United Kingdom and the continent of Europe regarding these special problems. It will be noticed that the building has been so designed that though it is well lighted during day time by diffuse sunlight, direct sunlight rarely falls on museum specimens... Credit for the excellent planning of this building for the proper lighting of the Museum as well as for the variety of carefully prepared specimens is entirely due to my worthy colleague, Professor V.R. Khanolkar, Professor of Pathology and Bacteriology. The construction of the building was carried out during the period he officiated as Dean during my absence from duty... As I said, it is absolutely necessary to have an able curator who will be devoting all his time for the development of this museum. The Professor of Pathology and Bacteriology, Prof V.R. Khanolkar, is at present looking after the Pathology Museum and Prof R.P. Koppikar, the Professor of Anatomy, the Anatomy Museum. They have so far ably managed these museums but it will be too much to saddle them with this responsibility in future without the help of a full time curator..."

Microbiology

Microbiology was very much a part of the

field of pathology in the 1920s. Thus, it comes as no surprise that Dr Khanolkar was one of the members of the Indian Committee for the International society of microbiology. Dr U.N. Brahmachari was the President and the committee was formed in preparation for the 2nd International Society of Microbiology that was to be held in Berlin in 1933. Dr Khanolkar was also an examiner for B.Sc. in Microbiology at the University of Bombay in April 1939.

Other Activities

Medical statistics was to form an important component in Dr Khanolkar's research during his stint at the Tata Memorial Hospital and the Indian Cancer Research Center. Early evidence of Khanolkar's prowess in statistics is seen in this statement in the Preface by John Maclean of Wilson College. In his book, Graphs and statistics—a suggestion for a finishing course in mathematics released in 1926, Maclean writes "The help received from Professor V.M. Khanolkar of the Seth Gordhandas Sunderdas Medical College, Lt Col J. Morison, Major Sokhey of the Haffkine Institute, and Dr Muir of the Calcutta School of Tropical Medicine and Hygiene, has been invaluable". The reference to Seth Gordhandas Sunderdas Medical College makes it clear that 'V.M.' Khanolkar is a typographical error for V.R. Khanolkar. However, I note with fascination that an edition of Young India by Mahatma Gandhi also makes a reference to V.N. Khanolkar of Bombay, in the 24 March 1927 issue. Could this be Dr Khanolkar, with yet another typographical error? One could speculate, given his obvious patriotic fervor, that it is Dr Vasant Ramji Khanolkar.

Bombay University

In the Annual report of University of Bombay 1936–1937, on page 24 is the statement, "At its meeting held in September 1936, the Faculty re-elected Dr V.R. Khanolkar as Dean for the year". This is confirmed in Thacker's Indian Directory 1937–1938. Later, a 1940 edition of The Times of India directory of Bombay (City and Province) including Karachi and Hyderabad records, on page 143, notes that Khanolkar was an Ordinary Fellow [elected by the faculty of medicine] of the Senate of the University of Bombay. It would be of interest to readers of this volume that the other Ordinary Fellow [elected by the faculty of medicine] was Dr G.V. Deshmukh, while Dr Jivraj Mehta was an Ordinary Fellow, as a Principal of a college.

When Dr Khanolkar decided to leave K.E.M., we learnt that, in order to commemorate the association of Dr V.R. Khanolkar with the College and Hospital, a "Dr Khanolkar Farewell Fund" has been started with the object of instituting a Scholarship in the subject of his speciality, viz., Pathology and Bacteriology.

Conferences and Associations

An earlier article refers to some of the congresses that Khanolkar attended when he was in K.E.M.. Additionally, we now know that The Thirteenth Meeting of the Indian Science Congress was held in Bombay from 4 to 7 January 1926. Khanolkar, V. K., Prof, of Pathology, G.S.

Medical College, Parel, Bombay is in the list of members. (As has been seen before, it appears that his name was plagued by typographical errors!)

A notice in Journal of the Indian Medical Association noted that the All India Medical Conference that was to be held in Bombay from 27 to 29 December 1933 had Dr Khanolkar as the Chairman of the Scientific subcommittee. A unique scientific society that Khanolkar was instrumental in establishing was the Association of Teaching Pathologists [now renamed Teaching Pathologists Conference]. This association, which is still active, comprises pathologists and microbiologists from academia in Mumbai, who meet on a regular basis and present their research findings.

Acting Dean

Indians—especially students of G.S.M.C. are aware that Dr Jivraj Mehta, the first Dean of G.S.M.C. was a Gandhian, a freedom fighter and finally, after independence, a politician. In his avatar as a freedom fighter, he was imprisoned by the British. The delightful euphemism that was used, however, in the records reads that he was "on leave". Thus, we have Dr Khanolkar in the role of Acting Dean for some time in the 1930s. Examples of his being referred to as Acting Dean are seen in the Acknowledgment of some papers in the Indian Journal of Medical Research in 1932 and 1934.

Memberships

Dr Khanolkar was a member of numerous professional organizations and societies. We see that "At the 39th annual meeting of the American Association of Cancer Research held in Atlantic City, New Jersey, on March 12–13, 1948, Dr Huggins next presented his Committee's recommendation that Dr Vasant Ramji Khanolkar of Bombay, India be elected an Honorary Member. The recommendation was approved, and Dr Khanolkar was declared elected Honorary Member."

He was elected a Foreign member of the USSR academy of Medical Sciences in 1961. He was a life member of the Indian Science Congress Association. In 1960, the Royal College of Physicians of Edinburgh awarded him an honorary Fellowship of the college. He was an honorary life member of the New York Academy of Sciences.

Essays and Opinions

Dr Khanolkar seemed to be omnipresent in Indian academia across the spectrum during these years. Besides the research papers in medical science and related fields, he also published articles on subjects such as Hindu marriage, population control, medical education, old age, etc.

Conclusions

Khanolkar achieved an international reputation for his work in cancer and in leprosy during his stint at Tata Memorial Hospital and the Indian Cancer Research Center. But clearly, while he did not perform much research in his years at K.E.M., he used his time there to teach and practice the science of pathology, set up a museum, network [to use current parlance], and create a base for what would

eventually become the Indian Association of Pathologists and Microbiologists.

Suggested Readings

- Pai SA. VR Khanolkar's research and academic activities in K.E.M. Hospital and Seth G.S. Medical College. J Postgrad Med. 2025 Jan 1;71(1):52-56. doi: 10.4103/jpgm.jpgm_706_24. Epub 2025 Mar 14. PMID: 40085065. DOI: 10.4103/jpgm.jpgm_706_24

Dr Jivraj Narayan Mehta (1887–1978)

He was born in Amreli in Bombay Presidency on 29 August 1887 to Narayan and Jamakben Mehta, one of 5 brothers and sisters. His father suffered losses in his business and the family struggled to make ends meet. His mother was in poor health and needed care. His blind grandmother looked after the home and family. Dr Mehta later said, 'She had created in my mind the spirit for social service.' We learn that he studied under streetlights and tutored children to help his family make ends meet. He recalled getting a scholarship of Rs. 2-8-0 each month for standing first in his class.

He recalled being told that before the age of five years he had suffered from some illness in his lungs. Whilst serving as a tutor to the son of the civil surgeon in Amreli, Dr Eduljee Rustomji Dadachandjee, he was inspired to take up medicine by the care given by Dr Dadachandjee to poor persons. Dr Mehta earned Rs. 2 per month as tutor. This was later raised to Rs. 4. Dr Dadachandjee was well-known to the Tatas.

Dr Mehta secured admission to the Grant Medical College and Sir J.J. Hospital, Mumbai. His medical education was sponsored by the Seth Varjivandas Madhavdas Kapol Boarding Trust. This had been set up in the year 1896 by Sheth Tribhovandas and Sheth Jagmohandas in the memory of their father Sheth Varjivandas Madhavdas, a well-known philanthropist from the renowned Rupji Dhanji family. Dr Mehta was also awarded the Jamkhande scholarship of Rs. 10 per month. He sent the sum received from it to his parents in view of their need.

Dr Mehta stood first in his class in the First Licentiate in Medicine and Surgery examination of the University of Bombay, being awarded the Lord Sydenham Gold Medal in pathology. In his final year, he won seven of the eight prizes open to his batch and shared the eighth prize with his hostel roommate Kashinath Dikshit. On receipt of the sum of Rs. 120 per month from these prizes, he requested the Kapol Boarding Trust to allow him to stay as a paying student instead of being a free-boarder from then onwards. He continued to send money home. We learn that as a medical student, he did gymnastics,

played croquet and acted in the dramatic club, playing feminine roles on account of his diminutive stature.

Mr J.N. Tata, and, after his death, his sons Sir Dorab J. Tata and Mr R.J. Tata had set aside sums required for the expenses of selected Indian students to complete their courses of studies for the Indian Civil Service; the B.A. degree at Oxford, Cambridge, or London; the M.D. degree of the University of London; and other specified sciences. Dr Mehta applied to the Tata Education Foundation for a student loan for postgraduate studies in London. Dr Dadachandjee helped him by getting the Dewan of Baroda to recommend his case. He was one of the only two successful applicants from amongst several bright students who had applied for it. (Among other beneficiaries in medical studies from this Foundation were Dr N.H. Ghandy, Dr Raghavendra Row, Dr A.P. Bacha, and Dr M.D.D. Gilder.)

Dr Jivraj Mehta lived in London from 1909 to 1915. He studied at the London Hospital Medical School from 1909 and qualified in 1912. He won the University Gold Medal for his M.D. thesis in 1914. He was made a member of the Royal College of Physicians of London in 1915. *Barts and the London Chronicle* (2006, vol. 8, no. 1, page 7) later recalled Dr Jivraj Mehta as a 'pioneer of medical education and hospital administration in India'. Whilst in London, Dr Mehta attended to Mr Gopal Krishna Gokhale's medical needs. Sir Ratan Tata invited Dr Mehta to stay in a cottage on his property in Twickenham. Along with Mr Gokhale, he had received Mahatma Gandhi, Kasturba, and Mr Kallenbach during their visit to London in 1914. He attended to Gandhiji's medical needs during his stay in London.

He was the president of the Indian Students Association in London. He recalled the prejudice against Indians in the London Hospital. Despite being declared as the best medical student, he was denied a resident's post in the hospital. He was asked to work in the outpatients' department, where, he said, patients showed no such racial prejudice. He recalled discussing the attitude of the administration of London Hospital with Mr Gokhale, Sir Ratan Tata, and Sir Dorabji Tata.

He started practice on his return to India and was soon a sought-after physician. Sir Ratan Tata requested him to accompany him to London where he sought medical treatment. Their ship, S.S. Arabia, was torpedoed in the Mediterranean. Dr Mehta guided his fellow passengers, including Sir Ratan, to safety. The stormy weather conditions and the time spent in water took a toll. He developed pulmonary tuberculosis and had to undergo a prolonged period of convalescence in a sanatorium in Switzerland from 1917–1919. In 1970, he had to undergo right lower lobe pneumonectomy to get rid of the lingering disease.

Towards the end of his stay in Switzerland, Dr Mehta happened to meet Sayajirao Gaikwad, Maharaja of Baroda. Impressed with the young doctor's potential, the Maharaja invited him to Baroda, initially in the capacity of his personal physician and, in 1923, as the chief medical officer

of the state of Baroda. In January 1924, he married Hansaben, daughter of Mr Manubhai Mehta, Dewan of Baroda.

During this tenure, Dr Mehta initiated several reforms in the state medical services. He also worked towards improving and enlarging the facilities for treatment at the Shri Sayajirao General Hospital. Envisaged by the late His Highness Sir Sayajirao Gaekwad III as a seat of learning, Medical College Baroda and this hospital were founded in the city of Vadodara by the late Maharaja of Baroda, Major General Sir Pratapsingh Gaekwad.

He was the founder-Dean of Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital, Mumbai. He served these institutions in this position over a period of 18 years (1925–42).

An interesting account of Dr Mehta as a mentor is provided by Dr Vatsala Samant. When Mahatma Gandhi issued his call for the Salt Satyagraha, Dr Samant, a student at Seth Gordhandas Sunderdas Medical College decided to join him. Her uncle took her to the Dean, Dr Mehta.

'Sitting in his office, I saw him going through his papers. He was dark in complexion but his eyes were bright and commanding. There were rumors his wife, Mrs Hansa Mehta, was joining the Congress. He did not either approve or disapprove my decision but advised me not to resign from my studentship but to take leave for one year, pay the fees and remain an absent student because it would not be possible to readmit me after my joining the Salt Satyagraha movement… I joined the college after my release from Arthur Road Jail as per Gandhi Irwin pact. During my training, I observed that every student was afraid of our Dean. If he saw a student without his white coat, he would stop him and enquire who he was. If the student said he was going to the ward to see the patient, out came the remark from the Dean "You could not be my student because you are not wearing the coat." Of course he was sent back to put on the coat and then go to the ward. I don't think he ever went to cinema halls or to see a drama but when we put up a drama to collect fund for our college gymkhana, he sat throughout the drama and spoke congratulating us…

'During our house surgeonship, it was compulsory to eat in the hospital mess and every month money was deducted from our stipend whether we ate in the mess or not. The Dean used to have his lunch in the mess. To lunch with him was an ordeal for us. We had to be well-mannered, hold our knives and forks correctly, not shout at the butlers, or joke with fellow doctors. One almost wanted to avoid lunch and remain hungry! His purpose of eating in the mess was to see that the food served was good and to train us in the proper manner of dining so that should we travel abroad for further training, we were not subject to ridicule…'

Dr Samant completed her training in obstetrics and gynecology and obtained the M.D. of the University of Bombay. In addition, she had worked as house surgeon to Dr A.V. Baliga. Dr Arthur De

Sa was his assistant and Dr P.K. Sen was the registrar.

'Before her departure to Switzerland, Mrs Kamala Nehru requested Gandhiji to ensure the setting up of her planned hospital in Swaraj Bhawan in Allahabad to serve the ailing women of Allahabad. She knew she would not come back to Allahabad. After her death, a trust was formed. One of the members of the Trust was Dr Jivraj Mehta. Money poured in for the project. The foundation stone of Kamala Nehru Memorial Hospital (K.N.M.H.)was laid by Gandhiji. The hospital was inaugurated on 28 March 1941. Dr Mehta was elected as Chairman of the Managing Committee... Whilst the work on this hospital was in progress, he had sounded me about going to Allahabad, but nothing further came out of it.

'In the meantime, I was appointed Honorary Gynecologist at Cama and Albless Hospital by my then professor Dr M.D.D. Gilder. Dr Mrs Majumdar... a contemporary of Dr Jerusha Jhirad, was medical superintendent of K.N.M.H. I got a call from the Dean's office at King Edward VII Memorial Hospital to see Dr Mehta. He was to retire as Dean in few months. He asked me to sit down and asked about my going to Allahabad as Medical Superintendent of K.N.M.H. For a minute, I was stunned. I requested to me some time to decide. I decided to accept the challenge and accepted his offer. He made it clear to me that, before going to Allahabad, I would have to work in every department of King Edward VII Memorial Hospital - dispensary, statistics, accounts etc to learn how to govern a hospital. I was made to work from 8 a.m. to 9 p.m. in all the departments. This is how he ensured that his candidate was fully prepared for the task. I learnt later that he had sent for me after he received a telephone call from Prime Minister Jawaharlal Nehru urgently requesting a suitable person to take on the job of running the hospital in Allahabad as Dr Majumdar had resigned…

'During my tenure at K.N.M.H., he visited the hospital every two years or so. His visits meant that I had to see the toilets were clean, records complete, arrange meetings of the local hospital committees, staff and in the night go through the files. When he was in charge of the health ministry at the center, he asked me to go to Calcutta to get American surplus items for the K.N.M.H…

'When he was the chief minister of Gujarat, while travelling, his luggage was a small suitcase and boxes of files. His peon who used to accompany him complained to me that he wastes no time while travelling but just goes on through file after file. When he visited K.N.M.H. during this period, police officers offered him escort and security which he refused. He stuck to his old routine of staying at Anand Bhavan, working for the welfare of the hospital. Every time he met somebody from Allahabad, he would enquire about K.N.M.H. and, of course, the medical superintendent's work.

'I bow to him for making me what I am today and the discipline he instilled in me. I am proud of being his student.'

In 1930, he was elected to the Council of the College of Physicians and Surgeons in Bombay. In January 1948, as secretary,

Ministry of Health and Director General of Health Services, Government of India, Dr Jivraj Mehta delivered the convocation address at this college. This address contains advice that remains relevant today. In a country such as ours, with its wide variations in climate and habits of life of the people, the nature and incidence of diseases also show diversity. The health program cannot therefore be uniform in all its details throughout the country. Even so, there are certain fundamental requirements respect of the provision for the furtherance of public health which are applicable everywhere. National health programs should provide the individual with adequate preventive and curative medical facilities not in relation to his capacity to pay but corresponding to the requirements of his physical and mental condition. It was necessary to provide properly integrated domiciliary and institutional services. He also felt that physicians in villages, towns, and cities must also concern themselves with the promotion of the general sense of well-being of the members of the community. Medical supervision of work and play, of the food that people eat, of public provision for rest and recuperation as well as periodic medical examination, of faulty moves of life will be some of the many new duties that the physician of the future will be called upon to undertake. Turning to medical education, he pointed out that it was essential to secure, as early as possible, self-sufficiency for the country in respect of undergraduate and postgraduate training. It may be desirable to raise the number of medical colleges. Clinical instruction of students carried out in two shifts in all or most of the medical colleges would facilitate quicker outturn of doctors per year at a relatively cheaper cost than by further increasing the number of medical colleges in the country. He referred from time to time to the report of the Bhore Committee and recommendations made by it. He concluded, 'The more you are able to identify personal success with advancement of the institution or organization of which you form a part, the more you will find that your life has been made worthwhile for you and for others and that eventually you have been privileged to make a contribution to the health and welfare of the community of which you may reasonably be proud.'

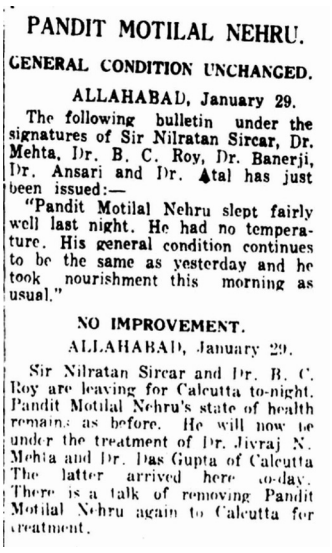
From 1926 onwards, Dr Mehta emphasized the importance of research in medical education. As the Dean, he made many efforts towards securing adequate funds for this purpose. Drs P.C. Bharucha, M.D.D. Gilder, N.A. Purandare, and R.N. Cooper responded generously to his appeal for financial donations to the college research corpus. Similar requests to the Indian Research Fund Association (which later continued as the Indian Council of Medical Research) were ignored by the I.M.S. officers in charge. When Sir Walter Morley Fletcher, Secretary of the Medical Research Council of Britain came to Bombay, Dr Mehta persuaded him to visit K.E.M. Hospital and showed him the research grant applications, which had not been acknowledged. Sir Walter was upset by the revelation and enquired into it. Dr Mehta also showed him the research being carried out at this institution and impressed upon Sir Walter the acute need for financial support for such research programs in medical colleges. Government sanction of funds for projects at K.E.M. Hospital through the Indian

Research Fund Association followed. Shortly thereafter, the applications from King Edward VII Memorial Hospital were approved and research began in earnest at Seth G.S.M. College and K.E.M. Hospital.

Along with Sir Nilratan Sircar, Dr B.C. Roy, Dr C.G. Pandit, and Major-General S.L. Bhatia, Dr Mehta pleaded for the development of the proposed All India Institute of Medical Sciences in Delhi instead of in Dehradun. He also helped in planning and development of several other medical colleges in the country.

He was arrested in 1931 for participating in the non-cooperation movement, for organizing the picketing of shops selling foreign cloth and alcoholic products. He was lodged in Bijapur jail where he was in the company of Mr B.G. Kher, Mr Morarji Desai, and other Congress leaders who later formed the Government of Bombay.

He retired in August 1942 on superannuation, having reached the age of 55 years.



PANDIT MOTILAL NEHRU.

GENERAL CONDITION UNCHANGED.

ALLAHABAD, January 29.

The following bulletin under the signatures of Sir Nilratan Sircar, Dr. Mehta, Dr. B. C. Roy, Dr. Banerji, Dr. Ansari and Dr. Atal has just been issued:—

"Pandit Motilal Nehru slept fairly well last night. He had no temperature. His general condition continues to be the same as yesterday and he took nourishment this morning as usual."

NO IMPROVEMENT.

ALLAHABAD, January 29.

Sir Nilratan Sircar and Dr. B. C. Roy are leaving for Calcutta to-night. Pandit Motilal Nehru's state of health remains as before. He will now be under the treatment of Dr. Jivraj N. Mehta and Dr. Das Gupta of Calcutta. The latter arrived here to-day. There is a talk of removing Pandit Motilal Nehru again to Calcutta for treatment.

The Times of India 30 January 1931. (Pandit Motilal Nehru showed fibrosis of his right lung and mediastinum. The heart was dilated. He also showed edema of the face, neck and arms. He passed away on 6 February 1931.)

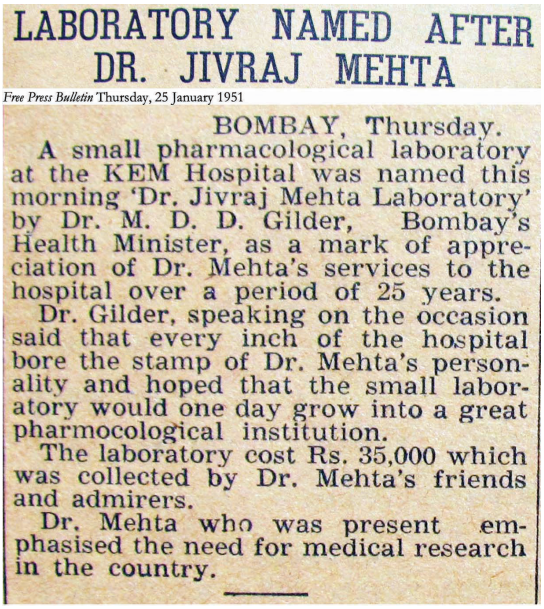
He was appointed Chief Medical Officer of Baroda State, Director-General of Health Services in the Ministry of Health, and later Secretary in this Ministry in Delhi.

17 October 1947: Ninety-three cases of penicillin, a gift from the Canadian Red Cross to India arrived at New Delhi in a special plane from Canada on October 17, 1947. Presenting the penicillin to Rajkumari Amrit Kaur, the then Health Minister in the Government of India at the Palam aerodrome. Dr Jivraj Mehta, Director General of Health Services appears on the left and standing on the right is Sardar Balwant Singh Puri of the Indian Red Cross.

He was then appointed Minister of Public Works, Finance, Industry and Prohibition in Bombay; was elected the first Chief Minister of the newly formed Gujarat state (1960–1963); and succeeded Mr M.C. Chagla as High Commissioner to Britain (1963–1966). He was a founder-member of the Association of Physicians of India and its first President.

Dr Gilder, his colleague at the start of our institutions, honored him in 1951.

Long after he retired from the medical college and hospital he founded, he continued to attempt reformation and



LABORATORY NAMED AFTER DR. JIVRAJ MEHTA

Free Press Bulletin Thursday, 25 January 1951

BOMBAY, Thursday.

A small pharmacological laboratory at the KEM Hospital was named this morning 'Dr. Jivraj Mehta Laboratory' by Dr. M. D. D. Gilder, Bombay's Health Minister, as a mark of appreciation of Dr. Mehta's services to the hospital over a period of 25 years.

Dr. Gilder, speaking on the occasion said that every inch of the hospital bore the stamp of Dr. Mehta's personality and hoped that the small laboratory would one day grow into a great pharmocological institution.

The laboratory cost Rs. 35,000 which was collected by Dr. Mehta's friends and admirers.

Dr. Mehta who was present emphasised the need for medical research in the country.

improvement in medical practices. Inaugurating the 13th Bombay Medical Congress, he advocated the spirit of social service in medical men. Whilst medical practitioners need adequate compensation for their efforts to live comfortably, it was important for them to meet their social obligations. Such awareness was best instilled whilst they were studying in medical college. Towards this end, he also recommended full-time teachers in medical colleges as this would facilitate better patient care, teaching and closer interactions between teachers and students. Without good teachers, we cannot hope to improve the quality of our graduates, care of patients or produce original research. There were opportunities in plenty in our country and for gaining experience in the care of patients with a wide range of diseases. The emphasis placed by authorities on foreign medical qualifications was misplaced (*The Times of India* 28 November 1955).

As Finance Minister of Bombay and Chairman of the Organizing Committee for the meeting of the Indian Medical Association in Bombay in February 1960, he pointed out that despite the numerous measures so far undertaken, India remained backward in providing medical relief. The crowding of doctors in towns and the need for more and better medical research were some of the problems that needed to be solved. At the same meeting, Dr B.C. Roy, chief minister of West Bengal referred to the fact that doctors serving in rural areas should be provided with opportunities to earn as much as they would have were they in cities. Medical practitioners in villages were not able to make ends meet. Dr Roy was not in favor of introducing short term medical courses for rural service. A certain minimum standard should be ensured. In fact, the village practitioner should be better qualified than his counterpart in a town because, in an urban area, the practitioner had experts to fall back upon for assistance which he would not get in village (*The Times of India* 21 February 1960).

Delivering the inaugural address to the 2nd Conference of the Indian Association For the Advancement of Medical Education in 1961, Dr Jivraj Mehta reiterated some historical facts: 'A new chapter in the history of medical education in India began in the year 1960 with the establishment of the Belgachia Medical College, now known as R.G. Kar Medical College Calcutta and with the establishment in 1925 of the King Edward VII Memorial Hospital and Seth Gordhandas Sunderdas Medical College in Bombay, where as per the terms of the donation underlying the establishments

the entire teaching staff was to consist of independent Indian medical men not in government service…' Among other topics, he brought to the notice of delegates to the conference the need for improving the selection of students for admission to the courses of medical studies, the length and type of examinations and the need for close contact between teachers and students. The recommendation by the Medical Council of India for large increases of admissions to medical colleges would further reduce such contact, which was very slender even as he talked. What a student needed was a close contact between student and teacher in the wards. This was not possible with large crowds going around with the teacher. Even in the college, demonstrations left a more lasting impression when the batches were small. He also reminded the delegates to foster a spirit of research from a very early stage in medical education. This meant that the teachers pursued research alongside clinical work with equal devotion. He suggested that full-time teachers without any inducement for private practice might prove more effective. The entire address provides food for thought even in the 21st century.

In 1965, as the High Commissioner for Indian in London, he delivered the Sir George Birdwood Memorial Lecture. After reviewing briefly the history of Ayurveda and the advent of British developments such as the Quarantine Act of 1825, Vaccination Act of 1880, Birth and Death Registration Act of 1896, and the Epidemic Diseases Act of 1897, he passed on to medical organisation in British India. He pointed out that barring such exceptions as Ronald Ross, Leonard Rogers, Leishman, Donovan and McCarrison, there was little by way of research in medical colleges due to the faulty system adopted by the Indian Medical Service of appointing professors to them. The failure to appoint members of the independent Indian medical profession to professorial posts in the medical colleges even when they were more qualified and experienced to those actually appointed was also highlighted. The appointment of the Health Survey and Development Committee (better known as the Bhore Committee after its chairmen, Sir Joseph Bhore) in 1946 resulted in far-reaching recommendations that were implemented from 1947 onwards. He detailed improvement under each of four heads since 1947: medical relief, public health, medical education, and medical research. He concluded by pointing out that, although much had been achieved in the field of medical services in India in the 18 years of independence, there was still considerable ground to cover before its people receive the minimum amenities of health and medical care that are consistent with modern requirements. This wide-ranging paper deserves study.

After his retirement, in Bombay, he lived in *Nishant* on Altamount Road. In 1962, when Prime Minister Nehru asked citizens to donate gold to the government, Dr Mehta handed over his gold medals to Mrs Indira Gandhi.

He was awarded the Padma Vibhushan in 1972. It is of interest to note that amongst others given this award that year were Sam Maneckshaw, P.B. Gajendragadkar, Vikram Sarabhai, and H.M. Seervai.

In a recorded video interview by Dr Lopa Mehta and her team, the late Dr L.N. Vora recorded an important event towards the end of Dr Jivraj Mehta's life. Whilst in Amreli, he fractured his femoral neck. He insisted on being brought to his old hospital. At the orthopedic center of the K.E.M. Hospital, Dr L.N. Vora was on emergency call. Dr Vora came over immediately, examined him, and admitted him to the ward. He discussed the need for surgery.

Dr J.M. Mehta, physician at Harkisondas Hospital, was the brother of Dr Jivraj's wife, Hansaben. He requested Dr K.T. Dholakia to operate on Dr Jivraj Mehta at Bombay Hospital. Dr Dholakia discussed this request with Dr Vora and Dr Vora willingly agreed. Dr Jivraj Mehta agreed to this on the condition that Dr Vora would also be present during the operation and would continue to see him there. After Dr Jivraj Mehta was sent home, at his request, Dr Vora continued to visit him and oversee his progress.

Dr Jivraj Mehta died on 7 November 1978. *The Times of India* (8 November 1978) commented:

'The death of Dr Jivraj N. Mehta marks the passing away of an able administrator, dedicated social worker and an ardent Gandhian, who preferred to resign the chief ministership of Gujarat in 1963 rather than compromise on principles… Till his retirement in 1942 from the post of Dean, Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital, he was known for his thoroughness and efficiency and was one of the most popular Deans the college has ever had. He was a stickler for cleanliness, used to check the wards at night and ensured that the hospital was well run…

'A linguist, Dr Mehta spoke Marathi, Hindi, French and German beside Gujarati and English. As chief minister he was noted for making few speeches and was known for his air of clinical detachment when faced with problems.'

Acknowledgment

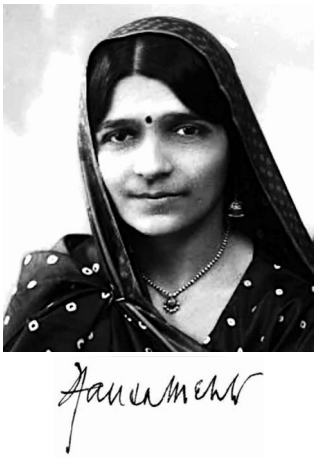
I am grateful to Mr Kyle Patel, medical student at Johns Hopkins Hospital for providing me a transcript of the interview given by Dr Mehta in 1967.

Suggested Reading

- Mehta Jivraj: Inaugural Address delivered on 27 December 1961 to the 2nd conference of the Indian Association for the Advancement of Medical Education. *Indian Journal of Medical Education* 1962;1:167-172.

- Mehta Jivraj: Medical services in India. *Journal of the Royal Society of Arts* 1965;113:995–1019.
- Rungachary K P, Sharma H D: Oral History Interview With Dr Jivraj Mehta New Delhi, India August 10, 1967. The Nehru Memorial Museum and Library.
- Samant Vatsala: Dr Jivraj Mehta – our Dean. In Mehta Lopa (Editor): *One the wings of time… A saga of Seth G. S. Medical College and King Edward VII Memorial Hospital. Platinum Jubilee 1926-2001.*
- Goenka Ajit H, Kulkarni H S: A tribute to the indomitable spirit of Jivraj Mehta. *Journal of Postgraduate Medicine* 2006;52:226–229.

Hansa Jivraj Mehta (1897–1995)



She was born on 3 July 1897 in Surat and educated in Baroda. Her father, Manubhai, was a professor of philosophy at the Baroda College. He later became the Dewan of the states of Baroda and later Bikaner. She stood first among girls appearing for the matriculation examination in 1913. She graduated with honors in philosophy from the University of Bombay. She studied Journalism at the London School of Economics and later traveled to America to learn about women's education with the idea of setting up women's colleges in India. Whilst in London, she developed close relations with Rajkumari Amrit Kaur and Sarojini Naidu. On her return to India, she married Dr Jivraj Mehta in 1928. Their courtship caused an upheaval within the family and community as she was a Nagar Brahmin and Dr Mehta a Vaishya Mehta—a caste lower than hers. It was Sayajirao Gaikwad III, the progressive Maharaja of Baroda, who helped convinced the bride's father to give the couple his blessing.

Mrs Hansa Mehta was an eminent personality in her own right. She was the grand-daughter of Nandshankar Mehta, author of the first Gujarati novel *Karan Ghelo* in 1866. Its translation into English by Ms Tulsi Vatsal and Ms Aban Mukherji was published in 2015. Mrs Hansa Mehta wrote several books for children, on women's rights, and on religion. She also translated works such as *Gulliver's travels* from English to Gujarati. She was elected to the Bombay Municipal Schools Committee in 1926.

She participated in the freedom struggle and was arrested and jailed by the British authorities. Her activities led to her being elected to such posts as President of the All India Women's Conference in 1945–1946; Vice-chancellor of the Shreemati Nathibai Damodar Thackersey University (1946–1948), and Vice-chancellor of the Sayajirao University of Baroda (1949–1958). She was first woman to be appointed Vice-Chancellor.

In 1947, she was appointed the Indian delegate to the United Nations. As a member of the committee for drafting the Universal Declaration of Human Rights, she was instrumental in getting the wording in the opening lines changed from 'All men are born free and equal' (Eleanor Roosevelt's preferred phrase) to 'All human beings are born free and equal', highlighting the need for gender equality. She was elected Vice-chairperson of the Human Rights Commission of the United Nations in 1950. She was also a member of the Executive Board of UNESCO (1959–1960). She was a member of India's first Constituent Assembly and was one of the signatories to the Constitution of India. As Prime Minister Jawaharlal Nehru and President Rajendra Prasad awaited the clock striking the midnight hour, Ms Mehta stood by them. On behalf of the women of India, she presented the national flag to the President with these words, 'We have donned the saffron colour, we have fought, suffered and sacrificed in the cause of our country's freedom. We have today attained our goal. In presenting this symbol of our freedom we once more offer services to the nation.' As a member of the sub-committee on fundamental rights along with Dr B.R. Ambedkar, Mr Minoo Masani, and Rajkumari Amrit Kaur she debated in favor of a Uniform Civil Code. When the motion to pass this code was overturned, she recorded her dissent along with others, stating that one of the factors that has kept India back from advancing to nationhood has been the existence of personal law based on religion which keeps the nation divided into water tight compartments in many aspects of life.

Among her many awards was the Padma Bhushan in 1959. She was honored by Doctorates from the Allahabad University (1958), University of Baroda (1959), and by an Honorary L.L.B (University of Leeds).

Suggested Reading

- Shah Aditi: Hansa Mehta: India's first woman Vice-Chancellor. https://www.livehistoryindia.com/herstory/2020/07/09/hansa-mehta
- Kataria Dilip: Smt. Hansaben Mehta: new identity to Indian women. *Paripex – Indian Journal of Research* 2012;1:80-81.
- Vatsal Radha: Overlooked no more. Hansa Mehta, who fought for women's equality in India and beyond. *The New York Times* 31 May 2024.

Matron Durga Mehta

Durga Mehta, R.N., R.M. (India), S.T.D. (New Delhi), S.R.N. (U.K.), D.N.A. Hospital (London), Program Chairperson T.N.A.I.

She is the niece of Dr Jivraj Mehta. She joined Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital in 1951 and retired as Matron in 1991. During a conversation in 2018, she offered the details reproduced below.

Matron Mehta's father, younger brother of Dr Jivraj Mehta, was a businessman trading with Mauritius. He had already come under the influence of Mahatma Gandhi, who had counseled him to join him at the ashram at Wardha. 'You are not suited for business,' Gandhiji had pointed out to him. Mr Mehta had a different idea. 'Let me make about Rs. 10,000. This will enable me to take care of my wife and family. I can then join Gandhiji.'

Fate had a surprise in store for him. His firm in Bombay ran into problems when an employee used its funds to gamble and lost. When Mr Mehta returned from a trip to Mauritius, this man confessed and announced his desire to commit suicide. Mr Mehta was able to dissuade him from that drastic step. He handed over the firm to a relative with a request that some amount be sent to him regularly for his family. He then moved into Gandhiji's ashram. He was a devoutly religious person and spent the rest of his life helping others.

When Durgaben was a child, she witnessed the ceremonial marriage of Tulsi to God—a ceremony that went on for three days. Durgaben felt that this was a way of developing consciousness on marriage, its rites, and what followed among nubile young girls in the community. Unlike other girls, Durgaben announced from the age of seven or so that she was never going to get married. She planned on helping her parents and others.

Whilst other girls dreamt of becoming teachers or doctors, she decided to something different that would help others but could not come up with a specific solution. She was present with her parents at a meeting addressed by Sardar Vallabhbhai Patel. During his talk, Vallabhbhai addressed the young ladies in the audience and pointed to the great need for nurses as few Gujarati girls opted for this profession. As she pondered this, she knew she had found her career.

Her studies in Amreli were in Gujarati with English as a separate but compulsory subject. Brought up in a household where Gandhiji's teachings were scrupulously followed, she had developed a distaste for the language of the British oppressors. In her Matriculation examination, she answered questions in all subjects carefully, but stopped writing in her answer book for the English paper after completing four out of seven subjects. When her examination supervisor asked her why she was not completing her paper, she shrugged her shoulders and walked out, convinced that she was going to fail the examination as a consequence, but not at all worried about it.

She did not bother to check whether her number had appeared amongst those of successful candidates in the newspaper, knowing that she had failed. A little later in the morning, the doorbell rang. As she opened the door, she found Dr Jivraj Mehta standing there, beaming at her. When Dr Mehta asked how she was going to celebrate, she looked blank for she knew she had failed. Dr Mehta asked her to get the newspaper and look in it for her number. To her surprise, she had passed! He had taken the trouble to obtain her mark-sheet and gave it to her. In English, she had scored 38 marks, three more than

the number required for success.

As Dr Mehta was off to Delhi, he asked her to see him on his return. He took her with him to the K.E.M. Hospital and got her enrolled for training to be a nurse.

Her mother, Triveniben, suffered strokes as she aged. Durgaben, by then a senior nurse, was by her side on each occasion, nursing her, teaching her exercises, and helping the return of speech and strength on each occasion.

Her father had looked after his wife after each illness. On one occasion, he decided that they should visit the temple in Gondal as that had been her desire. Durgaben came from K.E.M. Hospital to help them make this trip. They went to Gondal by car, were housed near the temple, and completed their prayers in it. They were to spend the night there and leave the next morning. Her father approached a soothsayer in the temple and asked about his own death and that of his wife. 'You have a long time left here but your wife will leave you soon,' was the answer.

In the dormitory, they had two beds separated by a gap of two feet. One bed was occupied by her father and the other by her mother. Durgaben slept on a bed between the two. In the middle of the night, she heard her father get up and stand near her. She assumed that he probably wished to relieve himself or adjust his dhoti. She turned to make sure that her mother was not being disturbed. In that moment, he fell to the ground. There was no one around whose help could be summoned. Bewildered, she got some water and sprinkled it on his face. She could feel no pulse, and so she attempted cardiac resuscitation. She soon realized that this was futile and that he was no more. Whilst on the one hand, she marveled at his manner of death—sudden and without suffering—she also felt dismayed at being unable to help in any way during his last moments.

Triveniben's final stroke left her severely crippled. She was admitted to the K.E.M. Hospital, where her daughter looked after her. As her end approached, Matron Mehta sent a message to Dr Jivraj Mehta—then in Delhi—as he and her mother had strong bonds. Dr Mehta came over at once and found his sister-in-law unable to recognize him. Matron Mehta kept repeating in her ear, 'Jivrajkaka has come to see you. Say Ram, say Ram.' 'Why are you asking her to say Ram?' asked Dr Mehta. She replied, 'She cannot speak any complicated word. She is very fond of Ram.' After many attempts, her mother opened her eyes and looking directly at Dr Mehta, said 'Ram, Ram.' She then closed her eyes again. Early next morning, she had passed away.

Dr Jivraj Mehta fell in Amreli and fractured his hip. He was flown to Bombay and, at his request, was admitted to the orthopedic ward at K.E.M. Hospital. As noted elsewhere in this volume, his brother-in-law contacted Dr K.T. Dholakia at Bombay Hospital. Dr Dholakia advised surgery and transferred Dr Mehta to that hospital. Durgaben attended to him there. She was full of praise about the manner in which he tolerated pain and never complained. Dr Mehta made good recovery and, on subsequent visits to his home, Dr Mehta proudly showed her his progress in terms of number of rounds he

was able to make on his verandah at his home on Carmichael Road.

Sometime after his death, his wife, Hansaben, stumbled and fell and could not get up from the floor. She had suffered a Colles' fracture. Durgaben was by her side as she recovered from it.

Talking of these events, she expressed her deep satisfaction at having chosen nursing as her profession. 'I was able to help my parents, my uncle and aunt and so many patients at K.E.M. Hospital.'

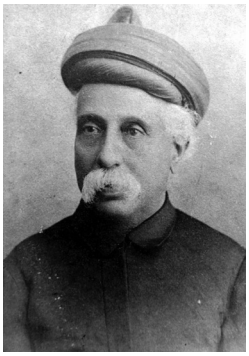
She continues to make helping others her mission even today. She lives in Amreli in the home set up by her father. Till recently, a large part of the home was a hostel to deserving girls. She attended to all their requirements and ensured that they felt at home.

A recent gift of special relevance to us is her gift of Rs. 5,00,000 from her personal funds to Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital as corpus for funding an annual Dr Jivraj Mehta oration.

Suggested Reading

- Mehta Durga: Growth of nursing in India – a glimpse. *Souvenir. Trained Nurses Association of India, Maharashtra State Branch.* 7 June 1962.
- Mehta Durga J: Reminiscences – my teachers. In: Mehta Lopa (Ed.): *On the wings of time… A saga of Seth G. S. Medical College and K. E. M. Hospital 1926-2001.* Mumbai: Souvenir Committee, Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital 2001.

Dr Atmaram Pandurang (1823–1898)



Dr Atmaram Pandurang

He was born in Girgaum, Bombay on 23 December 1823, to Pandurang Yeshwant and his wife Yashoda. His parents hailed from the village of Tarkhad near Bassein in north Bombay. The last name was actually Tarkhadkar—later shortened to Tarkhad. He was one of fifteen children, nine of whom died in infancy or childhood. Atmaram was aged twelve years when his mother, Yashoda, passed away during her last delivery.

His father, Pandurang, worked for Jamsetjee Jejeebhoy, earning a salary of Rs. 100 each month. On Pandurang's death, the burden of meeting the expenses of the family fell on Atmaram's elder brothers, Dadoba and Bhaskar.

He received his education at the Elphinstone Institution, where he was also employed as a teacher. When the Grant Medical College was opened in 1845, he joined that institution and graduated there. He was one of the first batch of graduates and was a contemporary of Dr Bhau Daji Lad.

Starting in 1849, he was able to secure a large and lucrative practice within the native community.

He advocated widow remarriage among the Hindus at the risk of becoming unpopular in his community. He was one of the founders of the Prarthana Samaj of Bombay. He never preached anything which he knew he would not be able to practice in life.

He was appointed Sheriff of Bombay for the year 1879. He was also appointed a Justice of the Peace and a Fellow of the Bombay University. He was President of the Medical Union and the Grant College Society.

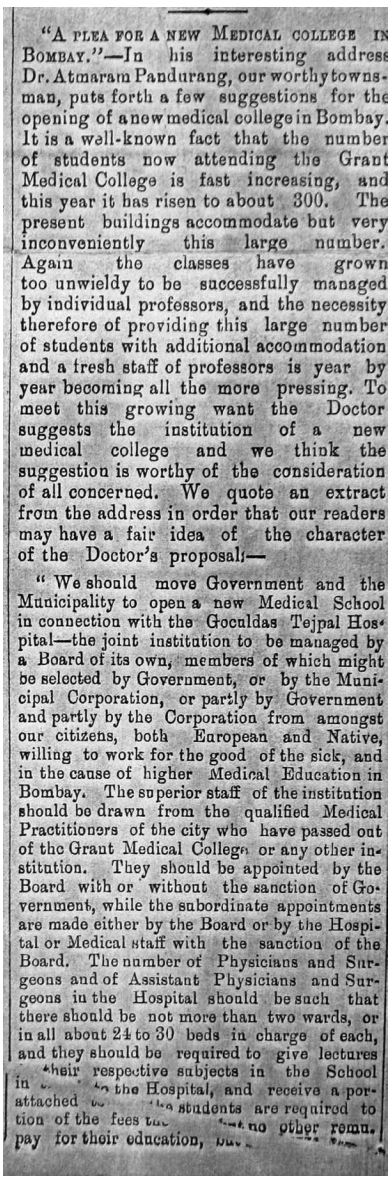
For the last ten or twelve years of his life, he devoted a large portion of his time and energy in bringing about reforms in the Provincial Medical Services. He advocated attaching a new medical college to the Gokuldas Tejpal Hospital. Its professors were to be selected from graduates of the Grant Medical College as Professors practicing in the city. When this was rejected, he participated in debates in the Municipal Corporation to advocate for a medical college in the north of Bombay to serve the mill workers. His emphasis was always on the appointment of suitably qualified Indian doctors to the professorial posts of the institution. His efforts contributed to those by others eventually resulted in the formation of Seth Gordhandas Sunderdas Medical College where his dream of Indian teachers and clinicians at the helm was realized.

Dr Atmaram Pandurang, one of the oldest medical practitioners of this city, died on 26 April 1898 at his residence at Chowpatty following influenza.

Suggested Reading

- Pandya Sunil: Atmaram Pandurang Tarkhad 1823-1898 In: *Medical education in Western India: Grant Medical College and Sir Jamsetjee Jejeebhoy's Hospital.* Newcastle-upon-Tyne: Cambridge Scholars Publishing 2019. Pages 477–483.

From the Newspaper: *Native Opinion*



"A PLEA FOR A NEW MEDICAL COLLEGE IN BOMBAY."—In his interesting address Dr. Atmaram Pandurang, our worthy townsman, puts forth a few suggestions for the opening of a new medical college in Bombay. It is a well-known fact that the number of students now attending the Grant Medical College is fast increasing, and this year it has risen to about 300. The present buildings accommodate but very inconveniently this large number. Again the classes have grown too unwieldy to be successfully managed by individual professors, and the necessity therefore of providing this large number of students with additional accommodation and a fresh staff of professors is year by year becoming all the more pressing. To meet this growing want the Doctor suggests the institution of a new medical college and we think the suggestion is worthy of the consideration of all concerned. We quote an extract from the address in order that our readers may have a fair idea of the character of the Doctor's proposal:—

"We should move Government and the Municipality to open a new Medical School in connection with the Goculdas Tejpal Hospital—the joint institution to be managed by a Board of its own, members of which might be selected by Government, or by the Municipal Corporation, or partly by Government and partly by the Corporation from amongst our citizens, both European and Native, willing to work for the good of the sick, and in the cause of higher Medical Education in Bombay. The superior staff of the institution should be drawn from the qualified Medical Practitioners of the city who have passed out of the Grant Medical College or any other institution. They should be appointed by the Board with or without the sanction of Government, while the subordinate appointments are made either by the Board or by the Hospital or Medical staff with the sanction of the Board. The number of Physicians and Surgeons and of Assistant Physicians and Surgeons in the Hospital should be such that there should be not more than two wards, or in all about 24 to 30 beds in charge of each, and they should be required to give lectures [illegible] their respective subjects in the School in [illegible] the Hospital, and receive a por- attached [illegible] students are required to tion of the fees [illegible] no other remu. pay for their education, [illegible]

Dr Vithaldas Ladhabhai Parmar (1894–1976)

Dr VL Parmar

Dr Parmar's father, Ladhabhai Hirjibhai, was appointed Diwan of Rajkot. Dr Parmar studied at Rajkumar College in Rajkot. He joined the Grant Medical College as a student in 1914. He graduated with the first rank and 17 prizes, medals, and scholarships. He was awarded the Sir Mangaldas Nathubhai Scholarship for further training in surgery and orthopaedics in Britain. He traveled to and from Britain by ship and obtained the Fellowship of the Royal College of Surgeons of England.

On his return in 1924, he worked in Gokuldas Tejpal Hospital in Bombay. When the Seth Gordhandas Sunderdas Medical College was set up, he was appointed on its staff. He later moved to his alma mater, where he succeeded Dr S.R. Moolgavkar as Professor of Surgery and Orthopedic Surgery from 1939 onwards. He was appointed superintendent of Sir Jamsetji Jejeebhoy Hospital for five years.

His wife, Santokbai, was from Gondal. She predeceased him. They lived in Parmar Corner on Pali Hill and were early settlers in this area. They had two sons and four daughters. His children had their education at Seth Anandilal Poddar High School in Santacruz.

He was a member of all the prestigious clubs of Bombay. He was prompt in replying to correspondents and wrote to them by hand. He was a member of the Senate of the University of Bombay, Dean of the Faculty of Medicine and a member of the Board of that Faculty.

His brother was a lawyer in Ahmedabad. He helped Mohan Parmar, his brother's son, to study medicine. Mohan settled in Khar as a general practitioner.

In November 1952, he retired from his *alma mater* on superannuation, having served there for 26 years.

He served on the editorial board of the *British Journal of Surgery*. His services during World War II earned him the rank of Surgeon Commander in the Royal Indian Navy.

Dr Parmar was admitted to Hurkisondas Nurrotamdas Hospital during his final illness with skin cancer. We are not sure whether it was malignant melanoma or radiation-induced squamous cell cancer that had spread. (He had performed several therapeutic maneuvers under X-ray control without the use of lead gloves.)

Dr Nathubhai D. Patel (1900 – 1970)

Dr ND Patel

Nathubhai was born into a Patidar family in a small town near Navsari. Farming was the dominant occupation in this village. Whilst his mother was pregnant with Nathubhai, his father left for South Africa and never returned to his family. His mother and a senior cousin (old enough to be his uncle) brought up Nathubhai. His mother died whilst he was still an infant. His maternal aunt then took over his upbringing.

His cousin ensured that he could study in the local school up to 7th standard in Gujarati and then in Surat at the Mission High School. Nathubhai proved an extraordinary student and stood first in his entire district. He was awarded a scholarship to study in Wilson College, Bombay. He stayed in the hostel across the road from the College.

On completion of his studies, his cousin suggested he go to Africa and perhaps settle there as a shopkeeper or trader. Nathubhai did go but was greatly impressed by the hospital he saw there and made up his mind to become a doctor. He returned, briefly, to India. He was married to a girl who was an orphan. Since her parents had landed property, she was made a ward of the court and her property was kept safe for her as she grew up. She continued with her studies and then taught in the Vanita Vishram school in Surat and later in the Vanita Vishram school in Girgaum, Bombay.

After consultation with his cousin, Nathubhai went to University College in London in 1919, and obtained the M.B.B.S. (London) in 1927. Dr G.M. Phadke, surgeon and Dr K.T. Gajjar, pathologist were his contemporaries at University College, London. After a brief trip to Bombay, he went back to London to receive the M.D. at the University of London. He returned permanently in 1929 to set up practice. Nathubhai was appointed professor of medicine at Seth G.S. Medical College and Honorary Consultant Physician at K.E.M. Hospital in 1929. As his practice gathered momentum, he obtained from his cousin a detailed statement of all the expenses that had been incurred on him and paid back every paisa.

Together with his wife, he rented a spacious apartment on the second floor of Backbay View, near Charni Road suburban railway station. This building was well suited for his practice as it was along Bombay's Harley Street that started from Charni Road (Drs R.N. Cooper, S.N. Cooper, and later B.T. Maskati, A.B.R. Desai, and the Polish Hospital—eventually named Saifee Hospital) and went on to Opera House (Drs J.G. Parikh, G.K. Mulki, and innumerable other senior physicians). Backbay View itself had Drs George Coelho and Karmally on the second floor

and Drs Hiralal Doctor and Arthur De Sa on the first floor.

The front rooms served as Nathubhai's waiting room and clinic and the six rooms in the rear were the family home. Five children were born to Dr and Mrs Nathubhai Patel. The latter three children were born at Backbay View as Nathubhai felt this was more hygienic. An obstetrician from the nearby Roxy Polyclinic was requested to conduct the deliveries at his home.

Suresh, the eldest, went on to work for *The Times of India*. Sarla came next. She and the youngest sibling, Asha, became homemakers. Aneel, the third child, and Manju, fourth in line, graduated from the institution where their father had taught medicine (Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital). Aneel specialized in neurology and Manju in pathology. Aneel married Jean (a nurse) and settled in America. Their son, David Siddhartha, is an expert on foreign affairs with special expertise in West Asia where he has spent several years. Manju married Dr Dilip Tanna, the well-known orthopedic surgeon.

In 1948, the family moved to a larger flat on Altamount Road. This had the added advantage of separating home from clinic. He retired from the twin institutions on superannuation in 1956. Manju missed out on having him as a teacher as she joined as a medical student the next year.

Nathubhai worked hard. Mornings were spent treating patients at K.E.M. Hospital and teaching medical students and residents in the College. He returned home for lunch and a brief period of rest. His clinic started at 3.30 p.m. and went on till 9 p.m. Manju recalls that on the days when he taught at his famed bedside clinics at K.E.M. Hospital, she would wait in her school for him to pick her up, sitting on her schoolbag, long after the other girls had left for home. Invariably, he apologized as his bedside clinic had gone on for longer than expected. Surviving students fondly remember these clinics even today. His method of taking the patient's history, the painstaking examination, and the elucidation of signs were exemplary. Then followed the discussion of symptoms and signs and the formulation of a diagnosis, decision on tests, and treatment. As he talked of medical details, he introduced his students, almost imperceptibly, to the history of medicine, medical ethics, philosophy, and literature in general.

As can be expected, Dr N.H. Keswani had his own interesting insights on Dr Patel's clinics. 'The proverbial unpredictable Patel was another unforgettable individual, who, in one hour's bed-side clinic would talk of medicine for ten minutes and everything else under the sun for the remaining fifty minutes! In the same breath he could talk of cobras, cows, caste system and communism. Yet, in those ten minutes we imbibed more than we would from anyone else's discourse for hours. He had a wit which at times transcended the normal code... He had a great aversion to a person shaking his or her legs while standing relaxed in his clinics and he would create almost an embarrassing situation by his caustic remarks, particularly if it were a lady.' Perhaps Dr S.D. Bapat had incurred his displeasure in some such manner, for in his autobiography, Dr Bapat recounts, 'N.D. Patel was a terror. He was very clever and was known for his accurate diagnosis… He would start his ward round… and enquired who was

the first in the batch and I had to give the history of the patient. He cross questioned every word in the history, followed by very awkward questions. He felt happy belittling me in front of all students…'

During his stint as the Acting Dean of the College and Hospital, he was sent a note on the delivery of a refrigerator from the Municipal Corporation to the hospital. Unaware of the details, he called for the relevant papers and learnt that the hospital had asked for two refrigerators and both had been sanctioned. On further enquiry, he learnt that the second refrigerator had been delivered to the residence of the Municipal Commissioner. In the presence of the accounts officer and head clerk in charge of the stores, he picked up the telephone and spoke to the Municipal Commissioner. Explaining his position as Acting Dean, he put forth his findings to the Commissioner. He requested the Commissioner to rectify the situation and arrange for the second refrigerator to be sent to the hospital. Within 48 hours, the storage department of the hospital reported the receipt of the missing refrigerator.

Manju recalls the single episode when she sought a medical explanation from him. She needed to understand the manner in which the tuberculosis mycobacterium entered the body, took up lodgings there, multiplied, and then spread. Nathubhai made her sit on an adjacent chair and launched a prolonged and detailed explanation covering all the points raised by her. In retrospect, she realizes that his explanation did serve the important purpose of laying the foundation for her understanding of tuberculosis, but at that moment, she was dismayed as she merely wanted a brief explanation and was dying to move on to other activities but had to sit and listen. When asked why she did not stop him and move out, she shuddered. He had a fiery temper and a short fuse and such an act would have brought the roof tumbling around her!

She also recalled his frank criticism of general practitioners and patients who did not follow his instructions. Several family physicians appealed to Mrs Patel to ask him to rein in his temper when dealing with them and with their patients.

He had his own workplace where he sat, read and wrote. His wide range of interests resulted in an extensive library within his home that kept expanding with time. His son, Aneel, displayed the same inclination towards learning and collection of books right up to the end of his life. Nathubhai read extensively in Gujarati and in English so as to also cater to his wife's interest in literature. He never asked his children to read particular books. His attitude was, 'Here they are. Choose whatever interests you and enjoy the contents.'

He did his writing unaided. It was only after his death that Manju chanced upon a beautifully bound volume of poems he had written in Gujarati. He edited the journal entitled *The Indian Physician* from 1942 for ten or more years from his study. The editorial *About ourselves,* in the first issue, described Nathubhai's hopes for this journal.

Each issue started off with a brief biographical essay on a notable physician from the past. In this first issue, he recapitulated the contributions of Jean Fernel (1497–1558), the physician-philosopher. Dr Rustom Jal Vakil's discussion of patients with heart failure in Bombay occupied pages 12–41. Dr Vakil

contributed other papers to subsequent issues. Nathubhai held Drs Rustom Jal Vakil and Minocher Mody in deep regard. He was a founder-member of *The Association of Physicians of India*. Nathubhai also wrote a handbook of medicine to be kept in the coat pockets of medical students and residents of the Seth G.S. Medical College as a ready-reckoner. Later, Dr S.D. Bhandarkar used this as a model to produce an updated version and presented the first copy to Nathubhai.

Nathubhai served for a while as a consultant physician at the Singhania Hospital in Grant Road. Manju recalls visiting the hospital as a child and enjoying its large garden and the rabbits and guinea-pigs with whom she played as she awaited her father.

He was invited to help in the planning and layout of the Bhatia Hospital. The hospital opened its doors in 1932 and Nathubhai was one of the first consultants to be appointed to its staff.

He showed a keen interest in astronomy and, throughout his life, preferred sleeping under the open sky when possible. Manju recalls his bed, mattress and all, being moved to their terrace as summer set in. Nathubhia slept on the terrace till the onset of the monsoon forced him indoors again. He often astonished visitors with his descriptions of the positions of planets and stars in the night sky over Bombay.

He was apolitical, preferring to bury himself in medicine, history, and literature instead. Nevertheless many important freedom fighters made their way to his home. Manju specially recalls Mr Morarji Desai's visits. Whilst Nathubhai was called to see Gandhiji on two occasions as a physician, he was not Gandhiji's constant physician. Drs Jivraj Mehta, M.D.D. Gilder, Dr K.T. Gajjar, and later Dr Sushila Nayyar played that role. Nathubhai was Sardar Vallabhbhai's personal physician and was consulted by the Sardar frequently. He traveled to Delhi for medical consultation when summoned by the Sardar. He was also the physician to the Maharaja of Morvi and the ruler of Bhavnagar.

Manju classified him as a loner in that he eschewed social gatherings and clubs. He preferred his books to people though he was generally sociable. He played golf in Chembur in the company of Dr G.M. Phadke. With uncanny prescience, Nathubhai often quoted from *Psalms 90* to his family and friends:

> The days of our years are threescore years and ten;
> and if by reason of strength they be fourscore years,
> yet is their strength labor and sorrow;
> for it is soon cut off, and we fly away.

As his daughter, Manju, pointed out, he flew away on schedule, at the end of his allotted period. Seth G.S. Medical College instituted an annual memorial lecture named after him. In 1970, Dr J.G. Scadding from Brompton, London, delivering this lecture, talked on 'Patterns of respiratory insufficiency'.

Acknowledgment

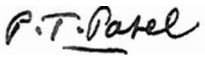
I have obtained the photograph and most of this information from his daughter, Dr Manju Tanna.

Suggested Reading

- Bapat Sharad D: *A urologist's journey.* Mumbai: Dimple Publication 2023.

- Keswani N H: Give me back those days – anytime! *Golden Jubilee Souvenir, Seth Gordhandas Sunderdas Medical College and K. E. M. Hospital.* (Editors: Bhatnagar S. M., Kothari M. L.) 1976.
- Patel N D: About ourselves. Editorial. *The Indian Physician* 1942;1:1–4.

Dr Purushottam Tulsidas Patel



His consulting room was Alice Building, 339 Hornby Road, Bombay and his resided at Water Tower Bungalow, Malabar Hill, Bombay. Having graduated from Grant Medical College in 1908, he passed L.M.&S., standing first in the first class. Proceeding to London, he obtained the degrees of M.B.B.S. and the qualification M.R.C.P.

He held the following posts in England:

Clinical Assistant, Victoria Park Chest Hospital, East London Hospital for Children - 6 months

Senior Resident House Physician, Leeds General Infirmary - 6 months

Assistant Resident Medical Officer, Leeds City Infectious Hospital and Tuberculosis Sanatorium - 11 months

Assistant Medical Officer Bethnal Green Infirmary (London) - 8 months

Assistant Medical Superintendent, St. George's Infirmary (London) - 8 months

He applied for the post of Honorary Physician at J.J. Hospital on 19 February 1919. He was one of those responsible for the foundation of the King Edward VII Memorial Hospital and one of its first Honorary Physicians.

In January 1931, he presented papers on scarlet fever and the use of gold and heavy metals in the treatment of tuberculosis in the Medical Research Section of the Indian Science Congress. He pointed out that gold preparations had been used by Koch and others in Europe (*The Times of India* 10 January 1931).

In March 1934, he discussed meningitis in Bombay in *The Times of India* and reassured the readers that there was no fear of an epidemic. The first patient was admitted to the isolation hospital in Bombay in 1912 and, till 1920, there were only 32 patients. Epidemic meningitis was noted in Bombay between 1921 and 1925 (292 bacteriologically diagnosed patients). He recommended preventive and therapeutic measures, the latter in the form of serum.

In 1939, he was elected President of the Bombay Medical Union with Drs V.L. Parmar and J.L. Desai as Vice-Presidents and Dr George Coelho was one of the Honorary Secretaries. Among the members of the Managing Committee were Drs A. Karmally and B.B. Yodh.

On 30 May 1940, *The Times of India* reported his death at home the previous afternoon. He was 53 years old. He was, at the time, Superintendent of the City Fever Hospital and the Maratha Tuberculosis Hospital. He had worked at the former hospital for 19

years. Present at the funeral were Sardar Vallabhbhai Patel, the Mayor, Mr M.D. Bhat, Municipal Commissioner, and staff and students of the G.S. Medical College and Grant Medical College.

DR. P. T. PATEL DEAD:
City Fever Hospital Superintendent
The Times of India (1861-2010); May 30, 1940;
ProQuest Historical Newspapers: The Times of In
pg. 10

DR. P. T. PATEL DEAD

City Fever Hospital Superintendent

The death occurred at his residence in Bombay, on Wednesday afternoon, of Dr. P. T. Patel, Medical Superintendent of the City Fever (Infectious Diseases) Hospital and the Maratha Tuberculosis Hospital, at the age of 53. He was connected with the Infectious Diseases Hospital for the last 19 years, and was an expert in infectious diseases.

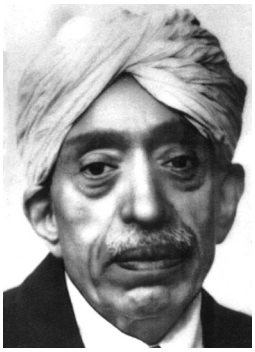
Dr. P. T. Patel.

During epidemics of infectious diseases in the city, Dr. Patel rendered selfless service, and in those days his services were available to the public at the hospital at all times. Though the Bombay Municipal Corporation, which maintains the two hospitals, does not usually allow its medical employees private practice, Dr. Patel was allowed private practice as a special case, in view of his knowledge on the subject of infectious diseases.

Dr. Patel took keen interest in the K. E. M. Hospital and the Sheth G. S. Medical College, and was one of those responsible for the construction of the hospital and the college. He was also an honorary physician of the K. E. M. Hospital and a former president of the Bombay Medical Union.

The funeral, which was largely attended, took place the same evening, among those present being Mr. Vallabhbhai Patel, Mr. Mathooradas Tricamjee, the Mayor, and Mr. M. D. Bhat, Municipal Commissioner, as well as the staff and students of the G.S. Medical and Grant Medical Colleges.

Dr Nilkanth Anant Purandare (1877–1964)



Dr NA Purandare

Dr N. A. Purandare receiving the Founder Fellowship, National Academy of Medical Sciences from President S. Radhakrishnan at the First Convocation in Vigyan Bhavan. New Delhi 1963. Note Dr Jivraj Mehta between the President and Dr Purandare.
(Courtesy: *NAMS Handbook*)

(This biography has been written by Dr Chittaranjan Purandare.)

Dr Purandare was born on 27 April 1877 in a family that was well recognized for its practice of Ayurvedic Medicine over

several generations. Right from his early childhood, the showed an aptitude for medicine. After passing his matriculation, he joined the Grant Medical College in 1896. During his years at Grant Medical College, he won a number of prizes and scholarships. In 1900 he graduated, securing the Charles Morehead Prize in Medicine. He obtained his M.D. in Obstetrics and Gynecology with distinction.

Around 1911, Dr Purandare started private practice in a humble way. Soon, his tact, sympathy, and brilliance enabled him to make roads in the once exclusive stronghold of the then predominant dais. Even though it was an enormously difficult task to fight against all odds, he did so single-handedly. Soon his fame and popularity spread not only in Bombay but also in other parts of India. In 1926, when King Edward VII Memorial Hospital and Seth Gordhandas Sunderdas Medical College were started, Dr Purandare was selected as an Honorary Gynecologist and Lecturer in Obstetrics and Gynecology at the Hospital. Later, he was appointed as Honorary Obstetrician at the Nowrosjee Wadia Maternity Hospital. He played a pioneering role in establishing the Departments of Obstetrics and Gynecology at King Edward VII Memorial Hospital and at Nowrosjee Wadia Hospital. He retired in 1940, but continued as an Emeritus Professor until his death in 1964.

Even today, Dr Purandare is remembered as a great teacher and an extremely good clinician, who possessed a clear mind for analysing data. The humility of the man is evident from the fact that he remained a devout student all his life. Two very important researches in the field of midwifery go to his credit. The first was importance of location of anterior shoulder in the progress of labor and its significance in obstructed labor. The second was a method for detecting cephalopelvic disproportion. These were universally recognized and even incorporated in textbooks written by British obstetricians. Deeply interested in raising the standards of medical education and ethics, he worked as a member of the senate of Bombay University and College of Physicians and Surgeons of Bombay. He was honored with an Honorary Fellowship from the Royal College of Obstetricians and Gynecologists, London, for his distinguished academic career. He also contributed numerous articles to various journals from time to time. He wrote a book in Marathi named *Prasuti Shastra* on obstetrics, for nurses.

The last honor during his long and productive career came to him in December 1963 when he was made an Honorary Founder Fellow of the Indian Academy of Medical Science. He was awarded a scroll at the first convocation. The curvaceous stretch of road that runs outside Purandare Griha, from Wilson College to Chowpatty, has fittingly been rechristened Dr N.A. Purandare Marg.

Padma Shri Dr Vatsala Samant (1910–2010)

Dr Vatsala Samant

Dr Samant was in her 100th year when she passed away. Her life takes us through the period when patriotism was a genuine emotion and service was a duty. As we study Dr Samant's biography, we encounter Gandhiji, Kamala and Jawaharlal Nehru, Jivraj Mehta and others of that vintage.

We are fortunate in that she had started work on her autobiography. She died before she could complete it. We must thank her daughter Sasmeeta for completing it. Explaining her unusual title *Take thou*, Dr Samant wrote: 'Medicines can be bitter or sweet, soothing or irritating, relaxing or invigorating, much the same as are books… Dear readers, if you find this book a bitter pill to swallow (though nowadays no pill is bitter as it is coated with sugar), throw it away, or else sit back, relax and enjoy it.'

She was born in Vasai (Bassein). Her grandmother registered the date as 19 January 1910 but this may be incorrect as her mother recalled that she was born before *Makar Sankranti* which is always on January 14. She tells us that her mother was seriously ill after the delivery, probably from puerperal sepsis. She was delivered by a *dai*, who was also the barber's wife. This is of interest as Dr Samant went on to obtain the M.D. in obstetrics and gynecology and head a prominent hospital for women in Allahabad.

An epidemic of plague in Vasai resulted in her being moved to Bandra in the home belonging to Dr Mahadeo Tendulkar, her *nani's* brother, who was a general practitioner. Dr Samant recalls helping him from the age of ten years. When he saw her unflinching as he evacuated an abscess, he decided to help her to become a surgeon. He was an ardent nationalist and influenced his young ward in this as well. Dr Samant recalls playing the role of Rani Laxmibai or Jhansi at a function presided over by Gandhiji and being awarded a prize of books by him. Thanks to Dr Tendulkar's activities in the freedom movement, Vatsala came into close contact with Vithalbhai Patel (who also lived in Bandra), Mrs Sarojini Naidu, and Deshbandhu Chittaranjan Das.

Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital

After completion of her Matriculation and Intermediate Science examinations, her mother and Dr Tendulkar helped overcome her father's objections and ensured her admission to Seth Gordhandas Sunderdas Medical College in 1929. She was one of a handful of girls in the college then.

On 12 March 1930, Gandhiji decided to walk to Dandi to collect salt from the sea. Dr Samant decided to join and opted to

take a year off from her medical studies. Her uncle did his best to dissuade her, pointing out that, at that stage, her duty lay in completing her medical studies. When she consulted her Dean, Dr Jivraj Mehta (whose wife, Hansaben. had joined the movement), he advised her to pay her fees for the year and remain absent. Vatsala made salt at Chowpatty. She worked under the guidance of Mrs Kamala Devi Chattopadhyay and attended meetings addressed by Mrs Kamala Nehru, Pandit Motilal Nehru, and Mrs Sarojini Naidu. She describes 'Kamlaji, frail in body but strong and dominating in the spirit of nationalistic ardor… This was my first and last glimpse of Kamla Nehru. Little did I know… that I was to sit day in and day out for over thirty years under her portrait at (the hospital named after her) fulfilling her last wish of continuance of service to sick and needy women…'

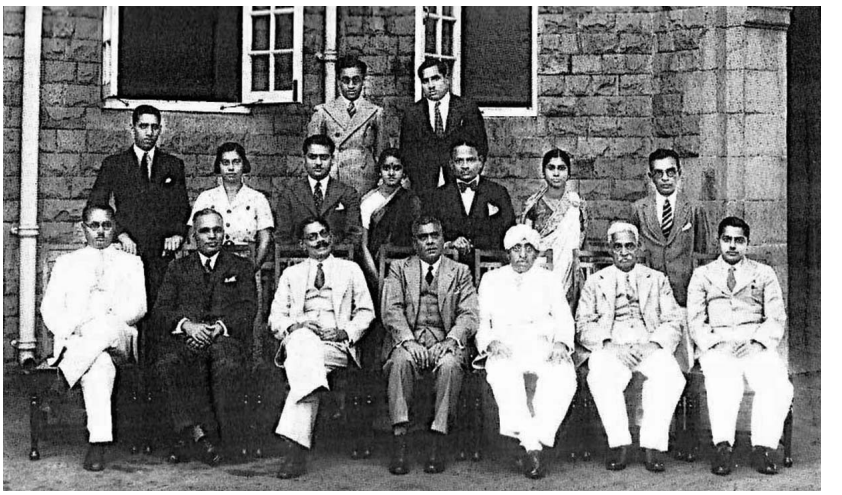
She fell under the spell of Jawaharlal Nehru, then a rising star of the independence movement. 'I gave him my autograph book and he wrote, 'Live dangerously'. As she followed his advice, she was imprisoned at Arthur Road jail for two months. She was freed under the Gandhi-Irwin Pact. 'When I was a girl, India had a high moral position in the world, there were ideals: honesty, selflessness and no corruption,' she said later. 'That has all gone.'

Writing of the days as a medical student, she described her professors, who were honorary teachers who came for the love of teaching. 'They were all nationalists and each one had a stupendous practice…'

Of Dr Jivraj Mehta, she wrote, 'Always clad in spotlessly white khadi, he was a monument of punctuality. He had an amazing memory and was a strict disciplinarian. He was one of the best administrators that I can recall… Clad in mufti, he used to do Harun al Rashid type of rounds at night to see whether everybody was working… We both feared and respected him. He was to become my advisor, philosopher, and guide when I joined the Kamla Nehru Memorial Hospital.'

She showed an aptitude for surgery and was awarded the Dr Shirwalkar Gold Medal in clinical surgery. She chose to work in obstetrics and gynecology. Her description of obstetrics may amuse you. 'It was a science of masterly inactivity; one had to wait for nine months for the goods to be delivered and that too only when Mother Nature and Father Time decided on when and how to do it.' She graduated in 1936 and missed the medal in surgery by just one mark. 'I did not attend the convocation because the Chancellor was British.'

She was appointed House Surgeon at Wadia Maternity Hospital. She then worked as a house surgeon to Dr N.A. Purandare at King Edward VII Memorial Hospital. 'He was always punctual… and wanted me to write the operative surgery report immediately after finishing the gynecological operation. Often I had to remind him that if I was late, I would miss my lunch…' She obtained her M.D. in obstetrics and gynecology.



Nowrosjee Wadia Maternity Hospital, Medical Staff and Post Graduates 1936.
Seated in the first row wearing a turban is Dr N.A. Purandare M.D., F.C.P.S. with Dr Miss V. Samant R.A., M.B.B.S. standing behind.

In 1939, she was awarded the Prince of Wales Gold Medal. She was also awarded a research fellowship by the University of Bombay. She delivered four lectures on her research findings and was given Rs. 1200 by the University—a handsome amount then.

When she applied for the post of house surgeon at King Edward VII Memorial Hospital, which had never appointed a girl to this position, Dr Jivraj Mehta cautioned her, 'The future of other girl students getting surgical posts will depend on your performance. You can either make or mar their future.' The fact that many girls were appointed after her speaks of her achievement as house surgeon to Dr A.V. Baliga.

The start of World War II in 1939 ended her dreams of studying abroad. Dr M.D.D. Gilder arranged her appointment as Assistant Honorary Gynecologist at the Cama and Albless Hospitals for Women.

Kamla Nehru at the spinning wheel.

Kamla Nehru Memorial Hospital

Kamla Nehru Memorial Hospital had its beginnings in 1931 as a dispensary founded by Smt Kamala Nehru in her ancestral house, Swaraj Bhawan. When Kamla Nehru lay critically ill, Gandhiji went to see her. She requested him to use his influence to set up a hospital in Allahabad so that women suffering from critical diseases may not feel neglected. She could go to Switzerland for treatment but not all could afford that. Gandhiji wrote an essay *Her last wish* in *Harijan*.

Under his inspiration Rs. 5,00,000 were collected. In 1939, three years after her demise, Mahatma Gandhi laid the foundation stone of Kamla Nehru Hospital. The Mahatma once again came to the city on 28 February 1941 to inaugurate the hospital. Dr Jivraj Mehta was appointed Chairman of the Kamla Nehru Memorial Hospital Managing Committee. He sent for Dr Samant in 1942 and offered her the post of Superintendent of this hospital. After some hesitation. Dr Samant accepted his offer. 'In Bombay, Dr Mehta made me slog from morning to late evening in all the departments of King Edward VII Memorial Hospital ranging from Dispensary to accounts, statistics, medicolegal cases etc….as it was imperative to get exposed to all aspects of running an institution. She left Bombay on 26 April 1942 along with Dr Mehta and her mother.

Nehru entrusted her with the running of a hospital his family had started in Allahabad. Her close association with Nehru and his family meant that Vatsala knew every member of the Gandhi clan who was prime minister: Nehru, his daughter, Indira Gandhi, and her son, Rajiv. 'I was treated like a member of the family.' Dr Jivraj Mehta was a constant source of encouragement and support.

Some of its doctors, including the legendary Dr Vatsala Samant, Dr Stheklekar, Dr Baveja, and of course renowned cancer specialist, Dr Paul, have rendered yeoman service. At least three of them have won Padma awards for their exemplary services.

At the start, it was a fledgling unit with just 40 beds of Obstetrics and Gynecology, out of which 28 were free. The first Medical Superintendent of the Hospital was Dr(Mrs) Satyapriya Mazumdar. The number of beds increased to 350, 175 of which are free or subsidized.

A Letter of Appreciation from Jawaharlal Nehru

An incident shows her sense of propriety and Jawaharlal Nehru's understanding. On 2 July 1949, he wrote to her:

> My dear Vatsala,
>
> I received your letter of the 29th June this afternoon. I am immediately replying to it, partly because you are naturally worried and I do not want you to be worried, and secondly because I am going away early tomorrow morning for Ladakh for a week.
>
> You have written quite frankly about this matter and I appreciate that. So far as I am concerned, I do not see how anybody can blame you, though of course mistakes are unfortunate. If you are asked for an explanation either privately or in court, say exactly what you have written to me. There is no need to say less or more. I am quite sure every intelligent person will

understand. So please do not worry about this matter...

You talk about resigning from the Hospital. I do not at all like the idea of your thinking of resigning because of this particular incident. In fact if you were resigning previously, you should not do so now. We do not want you to resign.

But independently of this incident, we can consider the matter. I think that what you badly require is a change. You have been unwell and you have worked hard for many years. Many months ago it had been suggested that you should go to Europe or America for some months. I do not know why this has not come off.

I understand that there was some difficulty perhaps in making other arrangements and hence the delay. If possible, this matter should be speeded up and anyhow you should have rest. We can think about the future later. We should never decide anything at a moment when a particular incident has somewhat upset us.

I repeat, do not worry. You have done excellent work during these years and not only I but large number of people in Allahabad appreciated this very much…

I am sorry that you hesitated to write to me. You should not do so. We have now known each other for many years and you should treat me as a friend who can give you advice. It is just absurd for you to talk about my being angry with you.

I am sending a copy of this letter to Dr Jivraj Mehta…

Yours sincerely,

Jawaharlal Nehru

(In her letter, Vatsala had stated that, due to her 'negligence', a patient had died after blood transfusion and added that 'it was an accident that I chose the wrong donor—how it happened—it just happened, I just don't know' and that she was the 'culprit and must take the punishment'. She added that as she had reached the top of the ladder in her work at Allahabad, she wanted a change, to resign and stay with her family, as she felt that she might not be able to work efficiently now, 'either I am getting old or I am tired.')

When she started work at the hospital, it was looked down upon by the well-to-do citizens of Allahabad, who saw it as a hospital for the poor. It is a tribute to the high standards set up by Dr Samant that, in a few years, the reputation of medical care there had soared and soon leading families made a beeline for it when their mothers, wives, and daughters needed medical care.

Dr Samant retired from Kamla Nehru Memorial Hospital in 1972. Her autobiography provides fascinating details of those eventful years, including her marriage to Kunwar Chowdhry, a handsome young officer in the Royal Indian Air Force in December 1943.

She was awarded the Padma Shri in 1972.

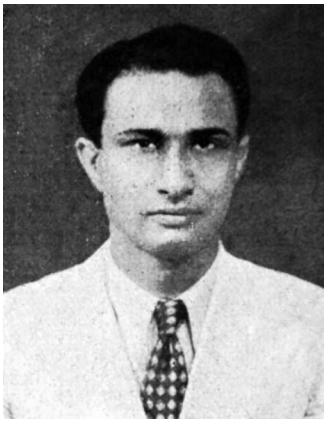
Her husband predeceased her. She was laid to rest on 31 October 2009 in Poona.

Suggested Reading

- Aravamudan Gita: *Unbound. Indian women @ work*. New Delhi: Penguin Books 2010.

- https://archive.org/stream/HindSwaraj-Nehru-SW2-12/nehru.sw2.vol.s12_djvu.txt
- Chattopadhyay Anjana: *Women scientists of India. Lives, struggles & achievements.* New Delhi: National Book Trust India. 2018. (Dr Samant is listed as 'Chowdhry Vatsala Samant'.)
- Gopal S (Editor): *Selected Works of Jawaharlal Nehru, Second Series*. Volume 12. New Delhi: Jawaharlal Nehru Memorial Fund. 1984.
- Samant Vatsala (Editor): *Health awareness for women*. New Delhi: Gyan Publishing House. 2000.
- Samant Vatsala: Dr Jivraj Mehta – our Dean. In Mehta Lopa (Editor): *One the wings of time… A saga of Seth G. S. Medical College and King Edward VII Memorial Hospital. Platinum Jubilee 1926-2001.*
- Samant Vatsala: *Rx Take thou. The autobiography of Padmashree Dr Vatsala Samant M.D*. Pune: Published by her daughter Sasmeeta Srivastava. 2013.

Dr Prafulla Kumar Sen (1915–1982) (I)



Dr PK Sen

1977: Dr Sen at 1st National Conference on Pacemakers.

(This version of the biography has been written by Drs Sunil K. Pandya and Dipankar Dasgupta.)

Early Life

He was born to a civil surgeon on 7 December 1915 in Calcutta. Among his ancestors was the social reformer Keshab Chandra Sen (1838–1884). He went to school in Jamtada, Bihar and studied science at the Victoria College in Nagpur.

Medical Education

He graduated in medicine from Seth Gordhandas Sunderdas Medical College in 1938. In 1940, he obtained the master's degree in surgery from the University of Bombay, scoring a distinction. He gained inspiration from the lives of Çaraka, John Hunter, and Alexis Carrell.

He was appointed Honorary Assistant Surgeon at King Edward VII Memorial Hospital. The eminent urologist, Dr S.D. Bapat, describing his experiences as a student at Seth Gordhandas Sunderdas Medical College noted, 'Two young

surgeons, Dr P.K. Sen and Dr Vasant Sheth impressed me. Dr Sen had a style. He was handsome and was aware of it…'

The Rockefeller Foundation provided him a Fellowship to study with Isidor Schwaner Ravdin (1894–1972), chair of surgery at the University of Pennsylvania.

Dr Ravdin had served in India in 1945 as the Commanding Officer of the 20th General Hospital.

In one of his reports dated 1943–1945 Ravdin said 'The chota monsoon had begun the day before our arrival and where all before had been dust, now was mud. It was not possible to drive vehicles through the area. There were no roads, nor fires, no provision for messes, no satisfactory quarters for women. Real work lay ahead.' Ravdin's work, and that of his unit, called for the clearing of a jungle and building a hospital. Their efforts earned the 20th General Hospital the reputation as one of the best hospitals in the China-India-Burma theater.

The hospital ultimately occupied 289 buildings and 162 tents, and in the twenty-eight months of operation during Ravdin's command, the hospital admitted close to 50,000 patients. The ratio of American to Chinese patients was two to one. Two thirds of all admissions went to the medical service and the remainder went to the surgical service. Among some of the medical problems faced by Ravdin and his staff were a malaria epidemic, cutaneous diphtheria, hypohidrosis, and the maintenance of a "closed" psychiatric ward without any effective locks.

Dr Sen also worked with thoracic surgeon James Hardy (1918–2003). Dr Hardy performed the world's first lung transplant in 1963. Dr Hardy also attempted the world's first modern heart transplant when he transplanted the heart of a chimpanzee into comatose and dying Boyd Rush's chest during the early morning of 24 January 1964. This heart continued to beat for approximately one hour, and then Rush died without regaining consciousness. The consent form did not disclose that a chimpanzee heart might be used, although Hardy stated that he had discussed this with Rush's stepsister. Before the transplant attempt, Hardy asked the four doctors who would be assisting him, to vote whether to proceed. One said yes, one abstained, and the last two nodded yes. This operation was also performed at the University of Mississippi Medical Center in Jackson. It was the world's first modern heart xenotransplant since Hardy used a chimp's heart. More than three and a half years later, the first heart transplant using a human heart was performed by Christiaan Barnard of South Africa on 3 December 1967, with patient Louis Washkansky surviving for eighteen days.

Whilst with Dr Ravdin, Dr Sen was a co-author on a paper on the impact of surgery on adrenocortical activity. During late 1920s, Dr Ravdin had laid the foundation of Dr Sen's subsequent researches into physiological and biochemical problems applied to surgery.

Dr Sen also traveled to other American and European surgical research centers. Over the next 15 years, the Rockefeller

Foundation awarded him two more fellowships for study in the United States.

Cardiac Surgery

It is of interest that the first reported successful cardiac operation in South Asia was the repair in 1946 of a stab wound in the left ventricle by Dr K.M. Shah, surgical registrar at the King Edward VII Memorial Hospital. A few months later, in 1947, his senior colleague in the same department, Dr A.V. Baliga, performed a pericardial drainage to relieve the cardiac tamponade of a patient (Hosain 2017).

On his return to India in 1952, Dr Sen was appointed Honorary Assistant Surgeon on the staff of King Edward VII Memorial Hospital and eventually held the post of Professor-Director of Surgery.

He was also inspired by the work of Vladimir Demikhov, the surgeon at Moscow State University who worked on transplantation in animals and gained fame for transplanting the head of one dog onto another to create a two-headed dog. Dr Sen had visited Dr Demikhov's laboratory in Russia on two occasions. During this period, he developed cardiac surgery, the use of hypothermia, and the heart-lung machine and set up experimental surgery in a specially designed laboratory. Based on these experiments, he performed digital closed mitral valvotomy (1952), the first open heart operation, surgery to repair coarctation of the aorta (1953), closure of atrial septal defect (1956), and replacement of the aortic arch (1973).

In 1965, he attempted the development of transmyocardial acupuncture in an attempt at improving blood support to the heart. This was based on his study of the reptilian heart where it has been postulated that the bulk of the myocardium is supplied directly by luminal blood from the ventricular cavity. (In addition to Dr S.G. Kinare and G.B. Parulkar, Dr Tehemton Udwadia was a co-author on one of the papers on the subject. It is reported that Dr Sen once told Dr Udwadia, 'They build too low who build below the stars.')

In 2004, Dr M.S. Valiathan reviewed the operation of transmyocardial acupuncture and praised Dr Sen's concept and far-sightedness. A single report published in America condemning Dr Sen's work led to a stoppage on it in America and India. Twenty years later, attempts at such revascularization using laser gained prominence. Dr Valiathan commented, 'Sen's pioneering work was ignored in India and no attempts were made to follow the lead he had given…' Together with Dr Kinare, he published the monograph on aorto-arteritis, then the definitive work on the subject.

In 1968, he performed India's first heart transplant. In retrospect, one wonders if, apart from Dr Barnard's operation, this was, in part, inspired by Dr Hardy's transplant four years earlier. He had been working towards this since 1954. Speaking at a reception in honor of Dr Sen at the Town Hall in Cape Town, Dr Christian Barnard commented, '…A man like Dr Sen should be praised for entering a new field like heart transplantation so rapidly and so adequately.' At this meeting, Dr Sen was introduced to Dorothy Haupt, widow of Dr Clive Haupt, whose heart

was even then beating inside Dr Blaiberg's chest (*The Times of India* 15 July 1968). The heart transplant won him the Padma Bhushan.

The following table from Hosain (2017) shows the frequency with which Dr Sen's name appears as a pioneering surgeon:

Table 1. Milestones of Cardiac Surgery in South Asia at a Glance

Time	Person(s)	Place	Event
1946	Dr K.M. Shah	KEM Hospital, Bombay	First cardiac surgery, repair of left ventricle injury
1948–49	Dr Reeve H. Betts	CMC, Vellore	Established cardiothoracic department
1949	Dr Billimoria	Masina Hospital	PDA closure
Feb 27, 1951	Dr Reeve H. Betts	CMC, Vellore	Aortopulmonary shunt in a TOF patient
1951	Dr A.T.S. Paul	General Hospital	Established cardiothoracic department
1952	Dr P.K. Sen	KEM, Bombay	First closed mitral valvotomy
1952	Dr Husfeld	Colombo, Ceylon	A closed heart procedure
Late 1950s		Karachi, Lahore, Rawalpindi	Closed heart procedures
1956	Dr P.K. Sen	KEM, Bombay	ASD closure using surface hypothermia
1959	Dr A.K. Basu	IPGME&R, Calcutta	Aortic valvotomy using inflow occlusion
Feb 16, 1961	Dr K.N. Dastur	Nair Hospital	First ASD closure under CPB
1966	Dr A.T.S. Paul		First open heart surgery in Sri Lanka
1966–67	Dr C.C. Kar and Dr A.K. Basu	IPGME&R, Calcutta	First pacing
1967–68	Dr Donald E. Bowes	UCH, Lahore	First open heart surgery in Pakistan
Feb 16, 1968	Dr P.K. Sen	KEM, Bombay	First heart transplantation in Asia
Mar 4, 1970	Lt Col Akram and Major Abdul Malik		First open heart by a Pakistani team
Sep 18, 1981	Dr M. Nabi Alam Khan and Dr S.R. Khan		First open heart surgery in Bangladesh
1985–95	Australian team	Bir Hospital	Closed heart operations in Nepal
Feb 27, 1997	Dr Bhagwan Korala and team		First open heart by Nepalese surgeons
2006	Dr Alain Doloche and team		First open heart in Afghanistan

ASD = atrial septal defect; CMC = Christian Medical College; CPB = cardiopulmonary bypass; IPGME&R = Institute of Post Graduate Medical Education and Research; KEM = King Edward Memorial; PDA = patent ductus arteriosus; TOF = tetralogy of Fallot; UCH = United Christian Hospital.

His trainees included Drs G.B. Parulkar, T.P. Kulkarni R.A. Bhalerao, Sharad Panday, Nitu Madke, Sudhanshu Bhattacharya, and Arun Chaukar. He facilitated the development of the department of anaesthesiology under Drs G.S. Ambardekar, Y.G. Bhojraj, and A.J. Dhruva; cardiovascular pathology under Dr Suman Kinare; and the department of radiology under Dr Malini Nerurkar.

On retirement in 1973, he moved to Calcutta. He practiced as a consultant cardiovascular and thoracic surgeon at Calcutta Hospital and Research Center, the flagship hospital of C.K. Birla group. He remained there until his death in 1982.

Cultural Attributes

He was well-read not only in his native Bengali but also in English literature and was prone to using poetry, philosophy, and medical history in his discussions in the wards, talks, and presentations.

He had to his credit several poems and paintings. The latter were exhibited in India and America. On 26 April 1967, the art critic of *The Times if India* reviewed an exhibition

of his paintings at the Pundole Gallery. The description of '…a surgeon who paints for himself alone…' was followed by '…he seems to be unaware that it is not enough to put paint in canvas in a certain style…While the Impressionists got their inspiration directly from Nature, Dr Sen gets his impressions from the Impressionists…' The reviewer ended his diatribe on a conciliatory note: '…He has a good sense of colour…no. 9, a painting of a peasant is an interesting composition…'

Personal Life

He met Marie Barnes, an American physiologist, whilst training in Philadelphia in 1950. Four years later, they married. They had no children.

Some Personal Experiences

Dr Nanasaheb Chaudhury

Soon after passing his final F.R.C.S. examination, Dr Chaudhury went to meet Mrs Vijaylakshmi Pandit, our High Commissioner in London. In the visitor's list, he saw the name and address of Dr P.K. Sen—his teacher and tennis partner at Seth Gordhandas Sunderdas Medical College—in London. He went to meet the surprised Dr Sen and his wife, Marie. Dr Sen invited him to dinner. Dr Sen told him of his teacher in America, Professor Ravdin, the American cardiac surgeon who was in London then. He offered to recommend Dr Chaudhury to him, suggesting that after training with Dr Ravdin, Dr Chaudhury could join Dr Sen's cardiac surgery team in Bombay. The advice was followed and Dr Chaudhury had breakfast at Strand Hotel with Dr Ravdin. 'When P.K. says you are his student and you are good, get your visa and come to U.S.', said Dr Ravdin. Unfortunately, this did not materialize. Dr Chaudhury settled in Akola as a district surgeon when Dr Baliga did not select him as an Assistant Honorary and, instead, advised him to go to a relatively remote place and offer his services there. His father, also a physician trained in Bombay, had set up a small hospital there with all departments. As he put it, Dr Chaudhury served as general practitioner in surgery, also doing specialist operations in Akola. He started the first private burns unit in India, inaugurated by Mr Vijay Merchant, president of the Burns Association in Mumbai. He collected 300 patients with hydatid disease and this experience enabled him to discuss their surgery in prestigious institutions such as Mayo Clinic, Cleveland Clinic, and Johns Hopkins Hospital.

Dr Dipankar Dasgupta

Dr Dipankar Dasgupta, now a senior consultant anesthetist, recalls an incident when he was working in the cardiovascular surgery operation theater as a junior. In between two operations, he sat outside the theater, reading a cultural magazine in Bengali. Dr Sen was passing by and glimpsed its cover. 'What are you reading?' With the brashness of youth, Dr Dasgupta said, 'Sir, this is not your cup of tea. It is a magazine of essays and fiction in Bengali.' Dr Sen was touched to the quick. He stood for a few seconds and asked, 'What are you doing this evening?' When he learnt that Dr Dasgupta was free, he invited him home for dinner. When he reached Dr Sen's home, somewhat nervous, Dr Sen greeted him heartily, introduced him to his wife, and then asked her to take him

to his library whilst he attended to some tasks. Dr Dagupta was stunned when he saw cupboards filled with books, some of them packed with classics in the Bengali language and rows of bound volumes of magazines featuring essays and fiction by the great Bengali authors. Dr Sen entered just then and said, 'So you thought I am ignorant of my own language and culture, did you?'

Sunil Pandya

As we were preparing for our examination for the M.S., we learnt that Dr Sen was conducting clinics at K.E.M. Hospital for his postgraduate students. Egged on by my colleagues at J.J. (at times considered enemy territory by students at K.E.M.), I ventured into his office after seeking an appointment. Hesitantly, I requested permission for myself and some colleagues from J.J. to attend his clinics. He glanced sharply at me and then said, 'You may attend but do not in any way ask questions or participate in discussions during the clinic. This is only for my students.'

He frowned upon the flippant use of terms where the speaker was ignorant of their significance or meaning. I recall attending a clinic where a student described the appearance of gastric ulcer on a barium study as 'niche-notch appearance'. Before the student could blink, Dr Sen asked him the meaning of 'niche' and what caused the 'notch'. Expectedly, the student turned a blank face towards him. Dr Sen then explained that the ulcer crater filled with barium resembled what the French termed 'niche'—a hollow or an alcove. The 'notch' was produced by the spasm of circular muscle on the greater curvature. The chastised student learnt not to use words without understanding their meanings. On another occasion, a student was similarly hauled up when he could not explain the meaning of *au lait'* when he characterized the pigmented dermal patch seen in patients with neurofibromatosis as 'café-au-lait'.

He was one of my examiners for the M.S. (Surgery) at the University of Bombay. I was then a registrar in neurosurgery to Dr Gajendra Sinh at J.J. Hospital. He did not know this. He was asked to examine me in anatomy. To my pleasant surprise, he led me to the tray with specimens of the brain and spinal cord. 'Aha!', I told myself, 'This should be good.' After answering several questions, as the *finale*, he took me to a section showing the vertically split brainstem, cerebellum, and the fourth ventricle. He picked up a thin membrane delicately with his forceps. 'Can you identify this?', he asked. 'Yes, sir, that is the roof of the fourth ventricle,' I said, pleased as punch. 'I need to know from you the anatomical name of this structure,' he persisted, deflating me completely. As he saw me blundering, he murmured to me, 'Superior medullary vellum is the term you should have provided me', as he walked back to the table where the other examiners sat. I was astonished that this eminent cardiovascular surgeon was so familiar with a minute part of the brain, whilst I, working in neurosurgery, had forgotten this name.

Death

He succumbed to myocardial infarction in Calcutta on 22 July 1982.

Suggested Reading

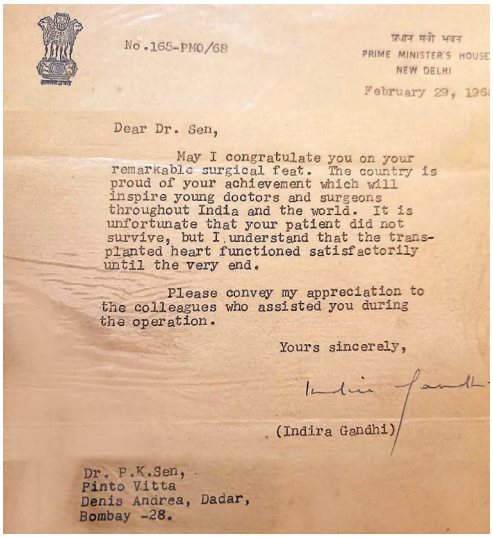
- Bapat Sharad D: *A urologist's journey*.

Mumbai: Namrata Mule, Dimple Publication 2023.

- Hosain Nazmul: The early days of cardiac surgery in South Asia" the history and heritage. *Annals of Thoracic Surgery* 2017;104:361–6.
- Jones David S, Sivaramakrishnan Kavita: Transplant buccaneers: P. K. Sen and India's first heart transplant, February 1968. *Journal of the History of Medicine and Allied Sciences* 2018;73:303–332.
- Mittal Chandar Mohan: Profulla Kumar Sen *Texas Heart Institute Journal* 2002;29:17–25, (This paper contains details of Dr Sen's experiments on heart transplantation from 1954 and details of his operations in February and September 1968.)
- Valiathan M S: *Acharyas*: ancient and modern. *University News* 2004;42:13–17.
- Walia Ishmeet, Arora Harvinder,. Barker Esmond, Delgado Reynolds, III, Frazier O. H.: Snake Heart. A case of atavism in a human being. *Texas Heart Institute Journal* 2010;37:687–690.

Dr P.K. Sen with Denton Cooley.

Johannesburg – first heart-transplant symposium.



No.165-PMO/68

प्रधान मंत्री भवन
PRIME MINISTER'S HOUSE
NEW DELHI

February 29, 196

Dear Dr. Sen,

May I congratulate you on your remarkable surgical feat. The country is proud of your achievement which will inspire young doctors and surgeons throughout India and the world. It is unfortunate that your patient did not survive, but I understand that the transplanted heart functioned satisfactorily until the very end.

Please convey my appreciation to the colleagues who assisted you during the operation.

Yours sincerely,

Indira Gandhi

(Indira Gandhi)

Dr. P.K.Sen,
Pinto Vitta
Denis Andrea, Dadar,
Bombay -28.

Letter from Prime Minister.

Dr P.K. Sen's residence at Denisandra, Gokhale road North, Dadar, Mumbai 400028. His residence was on second floor and hospital/ nursing home on first floor of this building.

Dr Prafulla Kumar Sen (1915–1982) (II)

(This version of the biography has been written by Dr Malini Nadkarni, Retired Professor and Head, Department of Radiology.)

The twin institutions of Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital will be celebrating their centenary soon. Many have contributed to the glory of these magnificent workplaces. Dr Prafulla Kumar Sen is one of the prominent names in that list. He was a great visionary and a very dynamic person. He is regarded as the founder of cardiothoracic surgery in India.

Before I start with my personal experiences and impressions, let me narrate some background of these institutions, which I have gathered from our golden jubilee publication.

When our institution began functioning in 1925–26, there were excellent teachers who carried out the clinical work in honorary capacity and initiated and brought improvement in various fields of medicine. With the passage of time, new developments and the concept of sub-specialization evolved. The posts of assistant honorary physicians and surgeons were created.

It was envisaged that with full time units on the clinical side, there would be better organisation and upgrading of undergraduate training and well-trained doctors will be available for community as well as for postgraduation courses.

Rockefeller Foundation

Dr R.G. Dhayagude (1945–54) who was the dean then, took the initiative and mooted the idea of development to Drs R.K. Anderson and M.C. Balfour, who were the nominees of the Rockefeller Foundation in India. After consulting municipal and other authorities, in the year 1956, during Dr S.G. Vengsarkar's tenure as the dean, this project was finalized. According to the agreement, Rockefeller Foundation was to provide adequate funds for training of personnel and cost of laboratory equipment and teaching aids. The Bombay Municipal Corporation provided a grant for construction and salaries of the personnel.

The first full time units at the Seth G.S. Medical College were created in 1956 and Drs P. Raghavan and P.K. Sen were chosen for Medicine and Surgery respectively and were deputed for study abroad. The dean, Dr S.G. Vengsarkar and Professor of Pathology, Dr N.M. Purandare were also deputed to visit medical centers in U.S.A. to study changing trends in medical education. The Foundation provided a grant of Rs.13,00,000 in 1956–57. Because of good results produced by these two departments, a further grant of $1,47,000, was made in 1963–64. Part of this grant was also for the purchase of equipment. Professor of Pharmacology, Dr R.S. Satoskar, tells us that $10,000 from the grant were set aside to establish radio-isotope laboratories under his direction, again the first of its kind in this part of India.

My Experiences

I heard the name of Dr P.K. Sen when I was seven or eight years old. My father was a student of Seth Gordhandas Sunderdas Medical College in the 1935 batch and Dr Sen was two years senior to him. In 1940, Dr Sen cleared his M.S. in general surgery with distinction. It was during my mother's illness that I got acquainted with the names of Dr P.K. Sen and his wife Dr Leela Sen, who was a gynecologist. In the late 1940s, she had clinically diagnosed my mother's hypothyroid state when no laboratory tests were available. My mother was treated with thyroid extract as per the treatment norms in early 1950s. Subsequently, my younger siblings were born in their nursing home which was situated near Portuguese Church in Dadar. This nursing home/hospital was on the first floor of the building and their residence was on second floor.

My mother would tell us about studious nature of Dr Sen. She had seen him reading till late hours at night, in his office room on first floor. The office room had many books. (There were no computers then!) Unfortunately, his marriage did not last long. Later, Dr Sen remarried Marie Barnes who was working in a Physiology laboratory in Philadelphia, where Dr Sen was getting trained.

Sometime in 1952, my father had told us that Dr P.K. Sen had performed some 'heart operation'. It was a sensation. Now I know that it was closed mitral valvotomy, one of the first in India. Before this surgery, heart-related surgeries such as pericardiectomy and ligation of patent ductus arteriosus were done, but this was the first surgery of the heart itself. He soon started closing atrial septal defects with the aid of hypothermia and inflow occlusion techniques in 1957.

I entered Seth G.S. Medical College in 1960. After clearing first M.B.B.S. examination, we started attending the hospital O.P.D.s and wards. Our seniors had told us not to use elevator in the hospital with a warning that, 'If Dr Sen finds you coming up in a lift, he would make you go down and climb the stairs and he would wait to see that you follow those instructions.' The picture was clear, that 'Dr Sen is a terror!'

When we started attending clinical terms in 1961, for our first surgical term, my batch got Dr Sen's general surgery unit in ward no. 5. In those three months, Dr Sen never talked about patient's symptoms, signs, treatment options, or management. He always told us stories about ancient civilizations, use of English language (most of us were from vernacular medium instructions), geography, mannerism etc. We hardly learnt any surgery from him, but he opened our minds to look at the world at large. Now, Dr Sen appears to me like a knowledge encyclopedia.

In late 1965, I started my residency in radiology in the full-time departments of Medicine and Surgery, widely known as no. 53 on second floor, near thoracic surgery theater of 1960s and 70s. Dr Sheila Engineer-Deshmukh was the assistant professor of radiology, and this section was created for radiological investigations of cardiovascular diseases, with required radiological equipment

such as rapid film changer synchronized with X-ray exposures. Initially there was dark room fluoroscopy for intravascular catheter positioning. Later on, image intensifier fluoroscopy with television monitor was installed. In those days of primitive technology, blood samples were collected from different locations in cardiac chambers and were analyzed for oxygen saturation to determine the level of shunting of oxygenated and deoxygenated blood in congenital heart ailments with disorganized flow pathways.

King Edward VII Memorial Hospital had entered a new era of invasive radiological techniques. It was a very interesting and challenging field. Cardiologists used to carry out their procedures where radiological assistance was given by us. Vascular and other invasive procedures were carried out by Dr M.D. Kelkar, who was the senior registrar in thoracic surgery. Suprasternal puncture of aorta or trans-lumbar approach for visualization of aortic bifurcation and peripheral circulation were then commonly performed. They are now obsolete techniques. I did not see the procedure of suprasternal aortic puncture though I have seen an X-ray film with needle sticking in arch of aorta and opacification of aortic arch with contrast medium. I have done plenty of trans-lumbar aortographies for visualization of aortic bifurcation and peripheral arterial circulation. Dr R.A. Bhalerao, being interested in hepatobiliary surgeries, would carry out splenoportography for study of portal hypertension and do necessary invasive hepatic studies. Lymphangiography was done by the surgical registrar, Dr Kanetkar. It was a newly acquired technique adopted for study of lymphatic diseases like chyluria and lymphedema. I learnt all these procedures and started carrying them out. I used to attend cardiothoracic Out-patients' Department on Wednesday and grand round on Thursday, along with Dr Sheila Deshmukh, chief of cardiovascular radiology. Any new procedure or special achievement was celebrated by getting cashews. When cashews became costly, they were replaced by groundnuts.

On Wednesday afternoon, after all the O.P.D. patients were seen, there used to be a meeting in an adjoining room. There was a large table. Dr Sen used to sit at the head of the table. On his right side, Drs G.B. Parulkar, Sharad Panday, M.D. Kelkar, and senior and junior surgical residents used to be seated. On Dr Sen's left side was a place for Dr Deshmukh with a small viewing box between them. On left side of Dr Deshmukh, Dr Dhruv or Dr Meena Bhat (anesthetist), cardiologist Dr Madhukar Deshmukh would sit, followed by cardiology residents. As I was the junior most, I would find some corner place to sit. Generally, interesting new cases were discussed about their management. As the field of cardiovascular surgery was developing, every case would be discussed in detail. Everybody was free to opine and their opinions were sought after. I enjoyed those discussions. When all the cases were over, there would be talks about political situation like 1965 India-Pakistan war or any such topics. Dr Sen was a multifaceted personality! So many topics could be there for discussions. Residents would call this

as Dr Sen's 'Durbar.' Here, everybody was free to express his/her views unlike the royal court (Durbar) where formalities were observed.

In those six months, I had no personal interaction with Dr Sen. My house-post was getting over and I had decided to apply for registrar's post in general radiology department, as I had to have experience of other radiological investigations.

On one morning, when I was about to enter the department (no. 53), I saw Dr Sen approaching. I greeted him, 'Good morning, Sir". He nodded and caught hold of my shoulder and literally dragged me. We walked up to ward 5 (his general surgery ward) on the first floor. Still holding me by my shoulder, he said, 'Will you stay here?' I didn't quite understand. He again asked me if I would like to continue to work at no. 53. I told him, 'Sir, but I have to learn general radiology also.' I had registered for D.M.R.E. which was offered by Bombay University. I had to learn other investigations too. Dr Sen said, 'You don't worry about that. I will talk to Dr Athale (Hon. Radiologist and Head of Department).' I shared this with Dr Deshmukh. Within a short while, my post was upgraded to registrar's post and I was permitted to work in general radiology department on three days (on cardiac catheterization days) and participate in other duties of X-ray department, like routine O.P.D. fluoroscopy duty and attending emergencies. (There was no technician in the radiology dept. after 5:00 p.m.) For the present generation of students and residents, these schedules of last century might appear amusing!

Initially, I used to wonder why I was chosen to continue at no. 53 by upgrading the post, but later I realize that Dr Sen had a vision of making his team. When a young surgeon, Dr C.V. Patel came back from U.K. after completing F.R.C.S. degree with a desire to work at K.E.M. Hospital, Dr Sen immediately offered him a lecturer's post (senior registrar) which was within Dean's power to offer. Subsequently, he became assistant professor, the post which was filled through public service commission—a lengthy procedure. Dr Sen also helped in development of other full-time units in surgery like Pediatric Surgery and Urology.

As days passed by, I started getting some glimpses of Dr Sen's personality and observations. There was a small office of the Department of Medicine and Surgery where we were supposed to sign our presence. It was never rigid and people's honesty was trusted. But Dr Sen would drop into our department around 9.30 in the morning and 4.45 in the evening, randomly. Our subordinate staff had remarked that it was his way of checking that we had not disappeared. In 60s and 70s, ladies used to wear saris routinely, but when one of his lady house officer appeared in salwar kameez, he appreciated her for having a modern dress suitable for working in the wards.

Newer modalities were getting introduced in the field of diagnostic radiology. Lymphangiography was one of them. A surgical registrar used to carry out this procedure of dissecting lymphatics and cannulating them with very small needle (30 SWG). I used to observe him

doing the procedure and help him with further radiography till contrast medium reached thoracic duct. The gentleman left the department abruptly. Dr Sen had seen me practicing the procedure. So he asked me whether I could do it. I said, 'I will try.' I am happy to say that my experience of more than 300 lymphangiographies and 1000 portovenographies was possible thanks to the firm backing of surgeons like Dr Sen and Dr Bhalerao.

I used to carry out inferior vena cava studies in suspected obstructive lesions in liver diseases. I had observed the narrowing of this vessel in hepatic diseases. I had tried to correlate its severity by comparing the narrowest diameter with the diameter at renal vein insertion into inferior vena cava. I presented that work at the monthly meeting of the surgical staff. Dr Sen was impressed and he congratulated me wholeheartedly for my analysis. I can never forget that.

Dr Sen had keen interest in research and in the subsequent clinical application of the knowledge gained through such exercises. Initially, apart from structural cardiac defects and their repairs, he also paid attention to the perfusion of myocardium. In order to improve blood supply for an ischemic heart, he got interested in ligation of internal mammary artery. The rationale behind this was to divert the blood flow through pericardiophrenic artery to increase blood flow to myocardium through collateral vessels. This procedure was not without complications and its objective evaluation was also difficult in late 50s. By 1960, Dr Sen and his team studied reptilian hearts where the myocardium is supplied by channels that arise directly from the cavities of the heart. Dr Sen's inquisitive mind thought of trans-myocardial acupuncture. His method consisted of multiple and full thickness acupuncture of the ventricular myocardium in such a way that blood flows directly from the ventricles to myocardium. As this attempt was to provide blood to myocardium as in the reptiles, he called this as 'snake-heart operation.' He did conduct clinical trials with this technique. But, doing the procedure within initial 24 hours of myocardial insult had limitations. This concept was revisited in 1981 with the use of laser apparatus. But with improvement in coronary bypass surgery, the use of this technique was not continued.

Another area of Dr Sen's surgical expertise was noted in surgical treatment of aneurysm of aortic arch. Dr Sen's team introduced a simple modification. A few days before the main surgery, a small bypass operation was performed where right subclavian artery was anastomosed with left carotid artery, under local anesthesia. At the time of major surgery, the perfusion of brain was maintained by right subclavian artery. The lower part of arch and below were perfused through femoral cannula. This technique reduced the time taken for aortic arch replacement.

The possibility of cardiac transplant was being discussed and investigated worldwide since 1954. Animal experiments were being carried out. The astonishing news of the first cardiac transplant in December 1967 gave a sense of urgency to Dr Sen who did not want to remain behind. With meticulous study and planning, the heart transplant surgery was carried out in

our hospital. It was the first in Asia.

Dr Sen and his team had meticulously practiced many surgical procedures in the dog laboratory. This laboratory was situated on the terrace above thoracic surgery theater. When the team thought it had mastered the technique of cardiac transplant adequately, it was ready to carry out the same on a patient. Actually this procedure was done twice, but the first one was during night time and it was not successful.

I was very fortunate to witness the second heart transplant surgery from the viewing gallery of the operation theater. This viewing gallery was next to the dog laboratory, i.e., it was on the terrace. There was a transparent dome shaped ceiling of operation theater, through which we could see the procedure very clearly. There was sitting arrangement around this dome, where Dr Deshmukh, myself, two more staff members, and three or four students were present. It was a once-in-a-lifetime experience for us to see.

On the main table, Dr Sen disconnected the beating heart of the patient. Dr Sharad Panday removed the beating heart of a brain-dead patient on the side table and brought it in a sterilized bowl to the main operation table and held it for Dr Sen to pick up. But this beating heart just then contracted and literally jumped into the space created for its reception. Seeing that, we (myself and Dr Deshmukh) also missed a heartbeat and looked at each other. But, seeing that the heart had occupied the right place, we were comfortable. Both these surgeons did their work meticulously. This patient survived only for few days, but encouraged the younger generations to be ready to undertake difficult tasks.

As workload was increasing, the new building of Cardiovascular and Thoracic Center (CVTC) was taking shape and Dr Deshmukh entrusted me the responsibility of setting up a radiology department there. It was a new challenge for me, so I got busy with organizing the same. But, just then, Dr Deshmukh got an opportunity to go to U.K. on one year's fellowship program. Before going to U.K., she did tell me that if any problem arose regarding the work or administration of our cardiovascular radiology area, I should go to Dr Sen and he would certainly help.

I soon realized the importance of her words.

Dr Sen disliked entertaining false charges. He would call the concerned person and ask for explanations which brought out the truth. One of his resident doctors told me an incident in the ward. While on ward round, somebody tried to make false accusations against me. Dr Sen got angry and asked the person to call me and make those charges so the matter could be clarified. Obviously the matter ended there. Similarly, there were complaints that I was carrying out splenoportographies. Dr Sen called a meeting of concerned people to ascertain the facts. I admitted that I was doing this procedure on the general radiography equipment when I was free from cardiac work and I was getting the required sterilized trays with towels, syringes etc. from the patients' ward. I was utilizing my free time without hampering any cardiovascular work. In fact, I used to carry out left heart catheterizations in case

cardiologists were absent. Dr Sen realized the truth. In fact, he said I could use the serial changer X-ray equipment for non-cardiac work, if I thought it was useful for documentation of findings. It was a good recognition of my work.

All these episodes guided me when I was heading my department and, if anybody came with complaints, I would call the concerned individual/s and clarify the matter in their presence. The values I learnt from my teachers helped me manage my department when I headed my department at a very young age.

Development of cine radiography was a next step in imaging technology, before video recording came into picture. We had acquired a cine radiography camera. Our conventional X-ray films could be handled in our X-ray dark room with 15 watt bulb with red filter called as safe light. The cine film is very sensitive to light. So all the manoeuvres of loading of film in cine camera and then processing the exposed film in complete darkness were very challenging. I was trying to master the technique. In fact I had successfully obtained a cine radiography film of replaced mitral valve. But it was just a plain cine film. I was not ready to subject a patient to contrast injection unless I had acquired the proper technique and was confident about it myself. Contrast injection could have its own problems! The cardiologists were very anxious to have the technology but nobody was ready to learn. I was already hard pressed for time as, being the only full timer, all the administrative and other problems of general radiology department were directed to me though I was not heading the department then. I tried to seek opinion from Dr Sen and asked whether I could refuse responsibility of general radiology department so as to devote required time and attention to this new technology. He counseled me against doing that. Fortunately for me, videography technology appeared, and life became easy.

The inquisitive mind of Dr Sen observed irregular and obstructed blood vessels in young individuals. He postulated possible tuberculous etiology. He grouped those observations under the name of nonspecific aortoarteritis and published a monograph which is a valuable standard reference work.

Recognition, Honors

Dr Sen's work and vision have been widely respected and rewarded. Government of India conferred the Padma Bhushan on him in 1969. He was president of Association of Surgeons of India in 1971–72. The same Association of Surgeons of India has instituted a memorial oration in his name in 1993.

Poetry and Painting

Besides his meritorious medical career, he had interest in poetry and paintings. I had attended one of his painting exhibitions at Jehangir Art Gallery. In his youth, there was lot of resemblance between Dr Sen and the actor Dev Anand. In fact, once Dr Sen narrated a story how he was mistaken for the actor, when he (Dr Sen) was called to see some actress who had a heart ailment.

Unlike most of us, he was not a 'family

man'. Though he knew my father so well, he never enquired about him. I had never seen him whiling away his time talking about people. All the people in the department were his family and friends. I still remember how all the people who had worked with him were very happy to see him when he had come to the operation theater at CVTC two-three years after his retirement. He too was very happy to be in his hospital—his own place! I still remember feeling like an orphan on the day of his retirement.

Later Life

After getting married in 1975, I was visiting Kolkata where my husband was working at an institute. Since I knew that Dr Sen was working at Calcutta Hospital, I had gone to see him there. I found that he was not the same enthusiastic man. I thought he had lost all the vigour.

The last I saw him was in Dadar, near his original home. His sister was living there with her children. He had got down from a car and was talking to somebody. I was in a taxi and in a bit of hurry to get back home. For a moment, I thought I should stop and say 'Hello' to him. But the pressure of getting back home was great and I thought I would see him sometime later. But, that did not happen. Within a short interval, we got the news that Dr Sen was no more. He had died of a heart attack in Calcutta. I was stunned. There was a condolence meeting in our Main Lecture Theater. I don't remember who made speeches, but Dr Meena Bhat (Professor of Anesthesia) was inconsolable. All of us felt the loss very deeply.

In 2015, we, Dr Sen's people, gathered together on the day of his birth centenary on 7 December. Dr Arun Chaukar had specially brought cashews which was our special food in no. 53 and the cardiac surgery theater, whenever we had to celebrate anything. My teacher Dr Sheila Deshmukh had sent a special message for this occasion which I reproduce here.

November 29, 2015.

To my erstwhile friends and colleagues... Greetings!

It fills me with nostalgia at this time, to sit down and write to you. This was indeed an inspiring and exciting time of my career—when we were together breaking new ground.

Dr P.K. Sen returned from his studies in America fired with determination to set up a surgical department of excellence and service. I was associated with him from the beginning, when he asked me to join this venture as a radiologist. I helped in drafting an application to the National Institutes of Health, U.S.A. for a substantial grant, to set up a center of cardiothoracic diagnosis and therapy. We were fortunate to obtain (through the efforts of Dr Sen) the sponsorship of Dr Michael E. DeBakey, who lent his name and prestige as 'principal investigator and supervisor.' He provided remote advice and encouragement, and a few on-site visits.

From the outset, Dr Sen had the vision of a department consisting of a team of individuals from different specialities—clinical cardiology, radiology, pathology, anesthesia, and surgery—all working together with one goal. No rivalry, no turf battles. He provided the leadership to support and encourage each one of us, to excel in our fields independently.

For me personally, this meant learning to use new equipment, new technology, learning cardiovascular anatomy and pathology in much greater depth. Not only did I have to guide our technologists, but first I had to teach myself, as there was no one to turn to. The weekly joint conferences were helpful in coordinating and supplementing each one's knowledge—as we shared radiologic findings with final pathology—clinical cardiac findings with surgical results etc. and participated in planning further management.

I am thankful to Dr Malini Nadkarni for inviting me to contribute my thoughts to this meeting. She was my very able successor after I left, and has made her own contributions since then.

I wish you all a very successful gathering to honor a great leader and visionary. I have very warm and fond memories of Dr P.K. Sen—both professionally and personally—as my late husband Dr Madhukar M. Deshmukh would have endorsed enthusiastically.

Sheila M. Deshmukh.
November 29, 2015

George Wittet (1878–1926)

Mr George Wittet, the architect of the King Edward VII Memorial Hospital.
(Photograph: *The Times of India* Tuesday, 26 January 1926 Page 7.)

Born in Blair Atholl, Scotland, he studied architecture in Scotland and England before travelling to India. Mr Wittet came to India in 1903 as Assistant Consulting Architect to the Government of Bombay, serving under Mr John Begg. Mr Begg, charged with the design of public buildings, returned to England to choose an assistant. He chose Mr Wittet based on his study of art and brilliant success under experienced architects such as John More, Dick Peddle, and George Washington Browne in Edinburgh and Walter Henry Brierly in York. 'From the first day, when he took up his duties in Bombay, the influence of Mr Wittet's strong personality, artistic ability, and technical skill became apparent in the work which issued from Mr Begg's office.' (Anonymous 1919)

Messrs Begg and Wittet incorporated the Indo-Saracenic style in many of their public buildings in Bombay. Mr Wittet had studied the historic buildings in Bijapur for this purpose. (https://www.civilsdaily.com/news/george-wittet-who-left-beautiful-fingerprints-across-mumbai/)

Mr Wittet helped Mr Begg design the General Post Office. Six years later, when Mr Begg was promoted as Consulting Architect to the Government of India, Mr Wittet stepped into his shoes. As Consulting Architect, he designed the Prince of Wales Museum, the neighboring Royal Institute of Science, the Gateway of India, the Cowasji Jehangir Hall, the New Customs House and other buildings.

We remember him as the architect for the Seth Gordhandas Sunderdas Medical College, King Edward VII Memorial Hospital. These buildings were in

Mr Wittet's preferred style of classic and renaissance architecture. (https://victorianweb.org/art/architecture/wittet/index.html)

At the request of Mr Cecil Burns, Principal of the Bombay School of Art, Mr Wittet taught architecture for many years. He also served on the Senate of the Bombay University and took active part in establishing the course for the degree in architecture.

He was famed for his ability to combine Eastern and Western architectural design and produce buildings that were eminently utilitarian. His services were also requested by other states in the country.

He continued in this post up to 1920 when Tata Sons & Company invited him to join as Director of Tata Engineering Company Ltd. He was asked to design the headquarters for the Tata group of companies. The result was Bombay House, completed in July 1924. The Gateway of India, also a Wittet creation, was inaugurated on 4 December 1924 by the Viceroy, Rufus Isaacs, Earl of Reading.

Wittet was also the designer of the other two hospitals in the immediate neighborhood of the King Edward VII Memorial Hospital which were constructed around the same time. This presumption is based on the fact that the compound railing, campus planning, architectural style, details and finish are quite similar to that of K.E.M Hospital. These hospitals are Nowrosjee Wadia Maternity Hospital and Bai Jerbai Wadia Hospital for children. Fortunately, these two hospitals retain their original domes.

In January 1926, he rejoined the Government of Bombay in his original position. He was a Fellow of the Royal Institution of British Architects and President of the Indian Institute of Architects from 1917–1920. (https://web.archive.org/web/20120730095406/http://www.iia-india.org/MainPage.aspx?Sel=141) Writing on behalf of architects, Wittet wrote in 1922,

"On any building in the course of erection you will see large notices 'Builders so and so', 'Concrete work by someone else', and so on; but you may look all over and you won't find the author's name. Until quite recently professional etiquette debarred him from putting it up. Now the Royal Institute has sanctioned it being put up 'in an inconspicuous manner', such is our natural modesty. As a matter of fact, the position should be reversed, the architect's name should be prominently displayed and the contractor's in an inconspicuous manner, and later when the work is complete it should bear the author's signature in such a manner as all may see and readily identify the architect with his work" (Bhatia 2023).

Mr Wittet described the three-fold capacity in which an architect functioned—as artist, director of construction, and administrator. It was necessary to study personally each component of the construction. He provided the example of the plumber and electrician, who, unsupervised, can ravage the building. Discussing the construction of the memorial hospital to King Edward, he noted, '…No key was forthcoming from the situation or surroundings, but the hospital was to be for Indian patients and run by Indian officers and staff so in

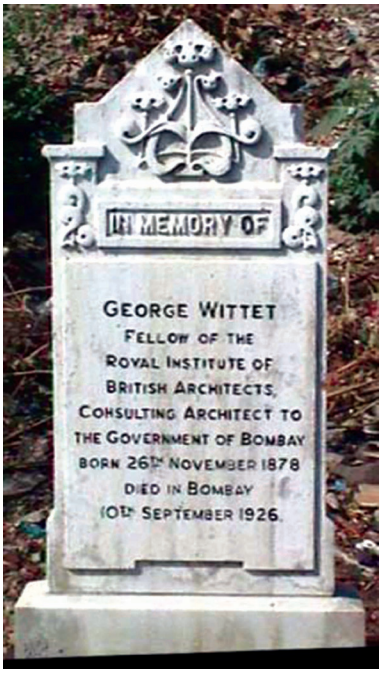
the treatment of the structure, which is of the simplest, the essential features such as the shades and protections to openings are of the traditional 'chajja' type and where detail has been necessary the character are based on motifs of the country so that the general feeling is Indian evolved naturally and without effort.' (Anonymous 1923.)

Illness enforced his retirement as Consulting Architect to the Bombay City Improvement Trust.

On Saturday, 11 September 1926, *The Times of India* announced the death of Mr Wittet at the Byculla Club on the previous day. He was 46 years old and 'had been ill for some considerable time'. The death, either from acute dysentery (Anonymous 1926a) or from cholera (Salvi 2019), appears to have been sudden as he was scheduled to leave for England the next day. He was buried in the Sewri Christian cemetery.

In 2005, Dr Vinita Salvi from our institutions, visited this grave and found that the headstone had been destroyed and the ground leveled. She was especially shocked as, five years earlier, whilst celebrating the 75th anniversary of our institutions, she and her colleagues had looked for and cleaned the grave. Dr Ravi Ramakantan, our ex-Professor of Radiology, confirmed this on 12 December 2023. 'Unfortunately there is nothing there now. It was all apparently washed out in the July floods.'

Mr John Begg, consulting architect to the Government of India, paid a posthumous tribute to Mr Wittet by describing his work as 'big, broad and masculine… without a touch of the niggling or trace of hesitancy… His building sounded an emphatic note of personality and he had left a notable monument of his career in them… He had an immense appetite



Photographs courtesy Dr Ravi Ramakantan.

for work and, not the least, an arresting personality that could sweep away difficulties, reconcile divergent interests and inspire the most lethargic with a spirit of enthusiastic co-operation. The tragedy of his death while still under 50 is one of the most nearly commemorable of the events of his remarkable career in India.' (Anonymous 1929, Bhatia 2023.)

The ultimate tribute was paid by Sir Leslie Wilson, Governor of Bombay. Speaking at a meeting in memory of Mr Wittet, he stated, '…No one who is familiar with the great public buildings of Bombay can fail to be impressed with the importance of George Wittet's work… Here in Bombay if you wish to find a fitting monument to his memory you only have to look around.' (Anonymous 1928.)

Suggested Reading

- Anonymous: A maker of Bombay. Mr. George Wittet F.R.I.B.A. *The Times of India* 3 September 1919, page 10.
- Anonymous: Architecture: some Bombay buildings. Mr. Wittet and his work. *The Times of India* 5 January 1923, Page 8. (This is a report of Mr. Wittet's own talk.)
- Anonymous: Bombay architect Mr. George Wittet dead. Designer of Gateway of India *The Times of India* 11 September 1926, Page 11.
- Anonymous: Late Mr. George Wittet. Funeral in Bombay. *The Times of India* 13 September 1926a, Page 10.
- Anonymous: Enduring monument to a great architect. *The Times of India* 16 November 1928, Page 10.
- Anonymous: Architecture in India. George Wittet's work. *The Times of India* 9 May 1929, Page 6.
- Dwivedi Radhika: After the glory, not even a grave. *The Times of India* 13 July 2005, Page 7.
- Salvi Vinita: Seth G.S. Medical College and KEM Hospital In 2001: The Living Giant. In Gogtay Nithya (Editor-in-Chief): *Annual Report 2019. Seth G.S. Medical College & King Edward Memorial Hospital Municipal Corporation of Greater Mumbai*. 2020, Page 8.
- Bhatia Harshad: George Wittet: Architect of many of the city's landmarks *Mumbai Mirror* 29 Jan 29, 2023.

BOMBAY ARCHITECT.

MR. GEORGE WITTET DEAD.

DESIGNER OF GATEWAY OF INDIA.

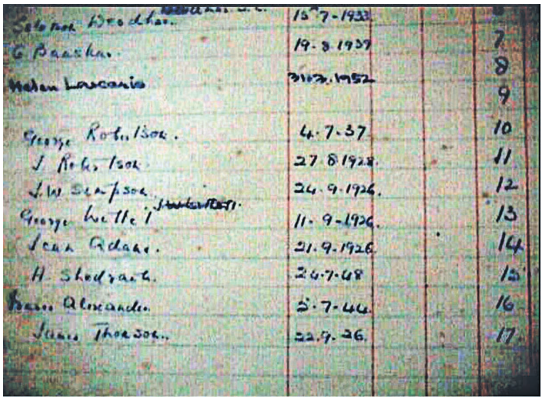
We regret to announce the death of Mr. George Wittet, F.R.I.B.A., Consulting Architect to the Government of Bombay, which took place at the Byculla Club on Friday. Mr. Wittet, who was 47 years of age, had been ill for some considerable time. He had resigned his appointment as Consulting Architect to the Bombay Improvement Trust on the grounds of ill-health. His death, however, was unexpected, as it had been arranged that he should go home to recuperate, and was to leave by Saturday's English mail. Mr. Wittet was one of the best known architects of Western India, and many public buildings designed by him are to be found in all parts of Bombay city and Presidency. The funeral will take place at 5 p.m. on Saturday from the Byculla Club.

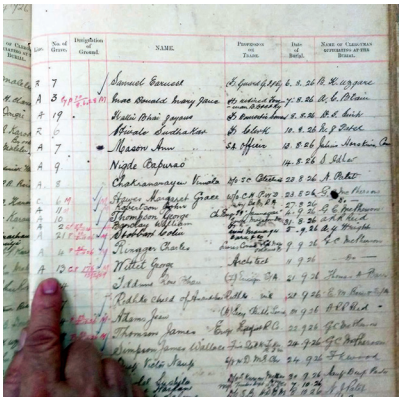
BUILDINGS DESIGNED.

Mr. Wittet came out to India about the year 1903 as Assistant Consulting Architect to the Government of Bombay. At that time Mr. John Begg was Consulting Architect, and he assisted Mr. Begg in the design of the General Post Office building in Bombay. Mr. Wittet succeeded Mr. Begg on the latter's elevation to the post of Consulting Architect to the Government of India about the year 1909. He held that position till the year 1920, when he left Government service and joined the Tata Engineering Company as Director. The principal buildings designed by Mr. Wittet for Government during his tenure of office were, first of all, the Prince of Wales Museum of Western India, which shows the influence of the General Post Office building; the Royal Institute of Science, the Gateway of India, the New Customs House, the Small Causes Court, the Poona Agricultural College, Poona; the King Edward Memorial Hospital and the Gordhandas Sunderdas Medical College; the Nowrojee Wadia Maternity Hospital, and the Central Bank Building. As an architect of outstanding merit Mr. Wittet's fame had spread outside Bombay city and his services were requisitioned by many Indian States.

CONNECTION WITH THE TATAS.

In January last Mr. Wittet severed his connection with the Tata Engineering Company and rejoined the Government of Bombay as Consulting Architect, which office he held till his death. Mr. Wittet was a Fellow of the Royal Institution of British Architects and was President of the Bombay Engineering Congress held in 1924. Besides being a highly trained architect, Mr. Wittet's chief claim to distinction lay in his great artistic skill. He possessed in a remarkable degree the faculty of combining Western utility with Eastern ornament in his architectural designs. At the same time he depended for the effect of his composition more on mass of grouping than on meritricious detail, and this is perhaps best borne out in his design of the new Customs House in Bombay. It is needless to say that the large number of public and private buildings which adorn the city of Bombay to-day will be a standing monument to the work and worth of the distinguished architect. Mr. Wittet was well-known and highly popular, and his death will be regretted by a large circle of friends.





Photographs courtesy Dr Ravi Ramakantan.

Bhaskar Balwantrao Yodh (1898–1971)

Dr B.B. Yodh

He was born in Ahmedabad to Mr Balwantrao Dahyabhai Yodh, a clerk. His early education was at Baroda High School. He joined the Grant Medical College as a student in 1916 and passed the final M.B.B.S. examination in 1921. He was awarded the Lord Sandhurst Gold Medal by the University of Bombay. He had joined the 1st Bombay University Training Corps (predecessor of the National Cadet Corps) and in 1921 was the Lieutenant. In England for further training, he worked in the London Hospital and the London School of Hygiene and Tropical Medicine.

On his return, he was appointed to the pathology staff of the newly created Seth Gordhandas Sunderdas Medical College

and served under Dr V.R. Khanolkar for two years. From 1927–1953, he was Honorary Physician and Professor of Medicine at the Grant Medical College and Sir Jamsetjee Jejeebhoy Hospital. On his retirement, he was appointed emeritus professor and served in this capacity till his death.

He addressed problems facing residents of Bombay. In 1935, he spoke of the need for special wards for some diseases. He referred to the first step taken by Sir Jamsetjee Jejeebhoy when he provided the hospital named after him for the poor of the city. Other hospitals followed in its wake and he spoke that, at the time, there were a little over 2,000 beds for a population of about 12,00,000. The recent stimulus for the development of hospital accommodation had been provided by Sir Leslie Wilson, Governor. These beds for housing the sick also served the crucial functions of medical education and research. He suggested an infirmary that would house many chronically ill and incurable patients. The provision of such an institution, housing at least 500 patients would relieve the chronic congestion in the present teaching hospitals. (When he said this, Dr Jivraj Mehta, Dean, Seth Gordhandas Sunderdas Medical College, was making similar requests year after year in his annual reports to the Municipal Corporation. Both pointed out that caring for such patients in the infirmary would cost less than in hospitals.) Dr Yodh also suggested providing separate hospitals for special causes of diseases. This would facilitate detailed studies on these diseases and the best means for treating patients. He suggested that a beginning be made by establishing specialized wards in teaching hospitals in which similar types of diseases could be investigated and treated. This far-sighted suggestion bore fruit later with wards for patients with heart diseases, diseases of the nervous system, and so on. Given his interest, he proposed a special hospital for patients with tuberculosis, such a hospital to be sited at a distance from the city in a sanatorium-like environment. He was not in favor of the burgeoning nursing homes, most of them catering to special communities (*The Times of India* 22 May 1935).

An interesting situation arose which necessitated the formation of a committee headed by Dr Yodh in 1949. The Government wished to regulate the quantities of opium, *bhang, and* ganja supplied to practitioners of indigenous systems of medicine and to ayurvedic pharmacies. The committee met vaidyas, hakims, and representatives of their pharmacies. Its report was summarized in *The Times of India* 16 June 1949. In the opinion of the committee, whilst opium and bhang were required, ganja was not. A procedure was suggested whereby the needs of individual practitioners and pharmacies could be evaluated and drugs supplied to them. The maintenance of registers and system of accounts was detailed.

In 1962, he was elected Fellow of the Royal College of Physicians. He was a member of the Senate of the University of Bombay for 15 years. He was also a senate member and syndicate member of the University of Baroda. He was Dean of the Medical Faculty. He was a Founder Fellow of the Indian Academy of Medical Sciences. He worked on tetanus, typhoid, dysenteries, and other tropical medical diseases.

In 1954, Dr B.B. Yodh and Dr Chamanlal Mehta welcomed the proposal of the Government of India to form a separate body in charge of postgraduate medical education. Separately, Drs J. Jhirad and A.V. Baliga also welcomed this step. The Medical Council of India would now restrict its activities to undergraduate education. This was resisted by Dr S.C. Sen, the President of the Medical Council of India. Drs Jhirad and Baliga made the additional point that the large (50 members) and unwieldy Medical Council with medical practitioners, university representatives, and administrators needed replacement by a compact body of medical educationists closely connected with postgraduate medical education. Both groups pointed out that when the Medical Council was formed there were two qualifications—licentiate and graduate. Subsequent degrees were lumped under 'higher medical qualifications'. The consequent confusion needed resolution (*The Times of India* 12 August 1954).

He was especially active in the control of tuberculosis in the community and as Chairman of the Technical Committee of the Tuberculosis Association of India. He started outdoor clinics and domiciliary treatment.

His interest in ancient India medicine was reflected in his work with the Government of India Committee of Ayurveda and Indigenous Systems of Medicine. In an attempt at winning over those disinterested in the history of medicine, in a talk to the Rotary Club of Bombay, he pointed out that the ancient concept of disease being caused by evil spirits and demons had arisen when medicine was the pursuit of magicians and priests. It was from temples of worship, however, that the seeds of modern medicine were sowed. Even in the 1950s, he was pleading for scientific research into the ancient Indian medical systems using established medical principles. It would help if the public too demanded that medicine should no more be left in unskilled hands and that modern medical standards were enforced. This plea was relevant as in contrast to the 90,000 qualified medical practitioners, India had between 4,00,000 and 6,00,000 unskilled vaidyas and hakims.

He was elected joint honorary secretary of the Bombay Branch of the BMA from 1926–1940. He was also president of the Bombay Branch, and later the Bombay Territory, of the Indian Medical Association. He was secretary and president of the Association of Physicians of India, and president of the Society for the Relief of Crippled Children until the end of his life.

Dr Yodh had his consulting rooms next to those of Dr Shantilal J. Mehta, the surgeon. Both were senior consultants at Hurkisondas Narottamdas Hospital in Girgaum after retirement from their medical college appointments. The hospital had been founded in 1925 by Gordhandas Bhagwandas Narottamdas. Governor Leslie Wilson had inaugurated it.

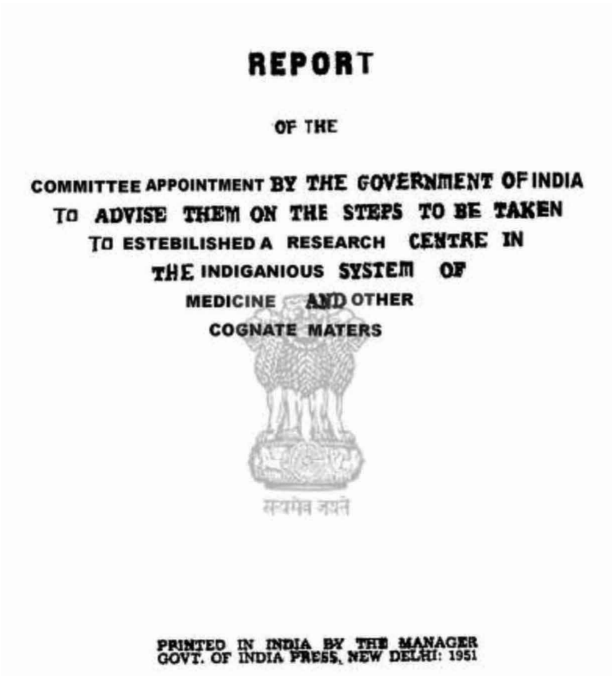
Dr Yodh was a keen Rotarian and was elected president of the Rotary Club of Bombay for 1966–67. His other interests included swimming and music. He married Saroj, daughter of Keshav Harshad Dhruva, a writer and Sanskrit scholar. They had two sons and two daughters. One of his sons, Shyam, trained in neurosurgery in Bombay but later

gave up this science for playing classical music on the sitar in U.S.A. One of their daughters, Medha, married a Swedish medical student and they settled down in America. She was a celebrated Bharata Natyam dancer.

In later life, Dr Yodh lived in Samudra Villa, 18 Darabsha Road, off Nepean Sea Road, Bombay. He died on 31 October 1971.

Suggested Reading

- Yodh B B, Joglekar S R: An unusual case of lymphogranuloma with generalized metastases. *The Lancet Clinical and Laboratory Notes* 1928;212:121. (This was published after he joined the Grant Medical College. His co-author was Professor of Surgery.)
- Yodh B B: Observations on the treatment of tetanus. With special reference to tetanus antitoxin. *British Medical Journal* 27 September 1932, P. 589.
- Yodh B B: Clinical research and the Indian Council of Medical Research. *Indian Journal of the Medical Sciences* 1960;14:291–294.
- M.J.S.: B. B. Yodh FRCP, DTM&H. (Obituary) *British Medical Journal* 19 February 1972, Page 514.
- Wolstenholme Sir Gordon, Luniewska V: Bhaskar Balwantrao Yodh. Munk's Roll. Volume VI, page 483. https://history.rcp.ac.uk/inspiring-physicians/bhaskar-balwantrao-yodh


REPORT

OF THE

COMMITTEE APPOINTMENT BY THE GOVERNMENT OF INDIA
TO ADVISE THEM ON THE STEPS TO BE TAKEN
TO ESTEBILISHED A RESEARCH CENTRE IN
THE INDIGANIOUS SYSTEM OF
MEDICINE AND OTHER
COGNATE MATERS

सत्यमेव जयते

PRINTED IN INDIA BY THE MANAGER
GOVT. OF INDIA PRESS, NEW DELHI: 1951

(vi)

APPENDIX III

No. F. 28-2/49-MI.

GOVERNMENT OF INDIA

MINISTRY OF HEALTH.

New Delhi, the 2nd December, 1949.

FROM

M. R. KOTHANDARAMAN, ESQUIRE,

Deputy Secretary to the Government of India.

To

Dr. C. G. PANDIT, M.B.,B.S. (Bom.), D.P.H. (Lond.), D.T.M. (Eng.), Ph.D. (Lond.),

Secretary, Indian Research Fund Association, New Delhi.

SUBJECT:—*Committee on Indigenous Systems of Medicine—Recommendations—Establishment of a research centre.*

SIR,

I am directed to say that the Government of India have decided to appoint a Committee consisting of the undermentioned persons—

1. Dr. C. G. Pandit, Secretary, Indian Research Fund Association, New Delhi. *Chairman.*

Members

2. Dr. V. Subrahmanyam, Member, Constituent Assembly of India.
3. Kaviraj Ganesh Datt Saraswata, Principal, Rishikul Ayurvedic College, Hardwar.
4. Dr. R. R. Pathak, Principal, A. S. K. Ayurvedic College, Begusarai, Distt. Monghyr, Bihar.
5. Dr. D. N. Banerji, R. G. Kar Medical College, Calcutta.
6. Dr. B. B. Yodh, Professor of Medicine, Grant Medical College, Bombay.
7. Dr. A. N. Goyle, Principal, Glancy Medical College, Amritsar.
8. Dr. J. N. Ray, Deputy Director-General of Industries and Supplies, Ministry of Industry and Supply.
9. A Unani doctor to be appointed,

with the following terms of reference;

(1) To work out and submit to Government a detailed scheme for the development of a centre of research in Ayurvedic and Unani systems of medicine on as broad a basis as possible on the lines indicated in paragraph 251 of Volume I of the Report of the Committee on Indigenous Systems of Medicine. In carrying out research at this centre

(vii)

modern scientific methods are the ones to be utilised in order that the fruits of such research may be of proved value and acceptable all over the world.

(2) To investigate and define in what manner special training in Ayurvedic and Unani systems can be incorporated during the last year or so of the under-graduate medical course in modern medical colleges, for the benefit of those desiring to qualify themselves in these systems; or alternatively, to suggest how Ayurveda or Unani can be fitted in as subjects for post-graduate medical study. In examining this matter the Committee will give due consideration to the fact that India cannot afford to permit her medical practitioners, whatever system they may individually adopt, to receive training which will fall short of the standards of medical education considered necessary in all progressive countries.

(3) To make recommendations regarding the policy to be adopted as regards the continuance, with such modifications as may be necessary, of certain existing Ayurvedic and Unani medical schools and colleges in which some teaching in subjects such as anatomy, physiology, etc., is carried out, keeping in view the need for establishing a uniform system of medical education throughout the country and for ensuring the utilisation, to the best advantage, of the available resources in the country in men and material for the development of medical education.

The report of the Committee should kindly be submitted to the Government of India by the end of March, 1950.

Yours faithfully,

(Sd.) M. R. KOTHANDARAMAN,

Deputy Secretary.

Image courtesy: Girish Parmar

PART II

CHRONICLE 1946–2025

Image courtesy: Girish Parmar

21
Vital Statistics: Year-on-Year Growth

Infrastructure Expansion

Sr. No.	Year	Infrastructure
1	1925	Hospital: 1 floor
		College: 2 floors
		Male Students' Hostel: 2 floors
2	1927	Wadia Maternity Hospital
3	1929	Wadia Pediatric Hospital
4	1937	Ladies' Hostel
		Hospital: 2 floors
5	1939	Dean's Bungalow
6	1940	Nurses' Home
7	1941	Ministerial Staff Quarters
		Male Students Hostel: 3rd floor
		New Registration Hall
		Tata Hospital
		X-ray Building
8	1944	New Ophthalmology Operation Theater
9	1951	Blood Bank
10	1956	Orthopedic Center
		Staff Quarters
		Convalescent Home
11	1957	Naigaon Hostel
		Ladies' Hostel: Additional floor
		2nd floor over OPD for full time departments
12	1958	2nd floor over AD's Bungalow
		Nurses Home: Additional floor
		Department of Psychiatry: Additional floor
		Additional floor over Convalescent Home
13	1959	Additional floor over Ward 17–18
14	1960	Additional floor over the College
		2 Additional floors over Convalescent Home
		Additional floor over Ladies' Hostel
15	1964	Additional floor over CO Quarters 2
16	1966	CVTC Building
17	1967	2nd floor constructed over Radiology Department
18	1971	New RMO quarters
19	1975	Ophthalmology Seminar Hall
20	1983	New Library Building
21	1990	Multi-Storeyed Building inaugurated
		Ladies' Hostel at GTB Hospital
22	1998	Nurses' Family Quarters started
23	1999	Center for Animal Studies
24	2012	UGPG Multi-Storeyed Building inaugurated in the Campus

Departments

Sr. No.	Year	Departments
1	1925	Administration Anatomy Physiology
2	1926	Anesthesia ENT Forensic Medicine & Toxicology Hygiene (Preventive & Social Medicine) Medicine Skin & Venereal diseases Obstetrics & Gynecology Ophthalmology Pathology Pharmacology Radiology Surgery
3	1941	Dentistry (Formally)

4	1942	Orthopedics
5	1947	Anesthesia (Formally) Psychiatry
6	1949	Hematology (Formally)
7	1950	Occupational Therapy
8	1952	Cardiovascular Thoracic Surgery Neurosurgery
9	1953	Neurology PT School
10	1954	Diabetology (Formally) Medico Social Service Department
11	1957	Preventive and Social Medicine
12	1958	Obstetrics Restarted Pediatric Medicine Tetanus Ward
13	1959	Biochemistry & Nutrition Diabetes Clinic Surgical Pathology
14	1960	Diagnostic Radiology (Formally) Gastroenterology Clinic
15	1961	Plastic Surgery
16	1962	Endocrinology (Formally) Epilepsy Clinic Nephrology
17	1963	Pediatric Surgery
18	1964	Cardiology (Formally)
19	1966	Intensive Cardiac Care Unit
20	1967	Epilepsy Clinic
21	1968	Andrology Unit
22	1969	Pediatric Rheumatology Clinic
23	1970	Neonatal Care Unit
24	1971	Nuclear Medicine Pediatric Nephrology Rheumatology Clinic
25	1972	Sports Clinic
26	1973	Surgical Intensive Care Unit
27	1974	Tumor Clinic
28	1976	Molecular Biology
29	1977	Cardiology
30	1978	Microbiology Urology
31	1979	Pediatric Chest Clinic Puberty and Growth Clinic
32	1982	Gastroenterology Sexual Medicine
33	1983	Endocrinology
34	1985	Neonatology (Formally)
35	1993	Medical Neurological Intensive Care Unit Social Service (separated from Preventive and Social Medicine)
36	1994	Neonatology (Formally)
37	1998	Pediatric Psychological Clinic
38	2000	Emergency Medical Services wing
39	2003	Surgical Gastroenterology
40	2009	Transfusion Medicine
41	2013	Cardiovascular and Thoracic Anesthesia
42	2014	Pediatric Anesthesia

22

Some Milestones

Year	Milestones
1907	• Bombay Police Charges Act passed, making it mandatory for the municipal corporation to provide medical relief
1909	• Municipal corporation asked by the committee to put up proposal for hospital
1910	• Governor of Bombay appealed for donation in memory of King Edward VII
1911	• Memorial Committee decides location of hospital in the Northern part of the erstwhile island
1915	• Dr Jivraj N. Mehta invited by Bombay Medical Union for committee meeting of the proposed hospital
1916	• CR 8246 passed proposal for college • Endowment by Seth Gordhandas Sunderdas
1924	• CR 6575 passed • Only Indians to be employed in KEM hospital
1925	• Seth Gordhandas Sunderdas Medical College started
1926	• Seth G.S. Medical College and King Edward VII Memorial Hospital inaugurated and KEM VII Hospital actually started as the 12th medical college in India • College affiliated to University of Bombay • Training Center for nurses • Staff Honorary • 46 students • 28 RMOS • 100 beds in hospital • Gymkhana has 8 departments • Poor Box Charity Fund started
1927	• Nurses training recognized • Postgraduation commenced in Ophthalmology and Pathology with diploma and degree, respectively • 260 beds in hospital • Maternity cases shifted to Wadia
1928	• Hospital Pharmacopoeia published • MD and MS recognized • First Blood Transfusion at KEMH
1929	• Annual Sports Day started • Clinical term for pediatrics in Wadia Children's Hospital • BSc affiliated to University of Bombay

Year	Milestones
1931	• Staff Society started as Bahadurji society
1932	• Circle Duty System for nurses started
1934	• 80 students admitted • Pathology Museum christened Seth Jamnadas Lallubhai
1935	• Social Welfare Center started • First College Magazine released • Biochemistry and Biophysics incorporated
1936	• Co-operative Credit Society started • Formal instructions for MD course started
1937	• RMOs Mess started
1938	• 370 beds in hospital • Accommodation for 28 students in Ladies' Hostel
1939	• 66 PG students • 426 beds in hospital
1940	• Tata Hospital started • Skin Ward started
1941	• Blood Bank started
1943	• Ward 17 and 18 started
1944	• 456 beds in hospital
1945	• Radiology Department at No. 10
1946	• Sion Hospital started with 50 beds under KEMH
1947	• Formal Inauguration of Sion hospital with 100 beds • Past Gosumec's Society started • Psychiatry OPD started
1948	• DA Bombay University started at KEM • Gymkhana Seth GSMC had Cultural Department as the 10th Unit
1949	• Old RMO Quarters started in place of the then Nurses' Home • D.M.R.E. started • Seth GSMC Gymkhana Canteen started
1950	• Gift Shop Started • Dr N.A. Purandare Stadium constructed on college playground • Psychiatry in-patient
1952	• Research Society started from the Silver Jubilee Fund

Year	Milestones
1953	• RBI Ward started • EEG Machine obtained in Psychiatry Department • First Intracardiac Operation in India performed at KEM Hospital • Neurology Ward started
1955	• Journal of Postgraduate Medicine started
1956	• Full time departments started • First Radioisotope Unit in the city at KEM Hospital • Obstetric Ward created • 76 RMOs
1957	• Blood Group Research Center started • First Municipal Employees (Labor) Strike
1958	• WD 15A Gynecology Extension Ward started • Convalescent Home occupied • Non-residential System for nurses • Padma Bhushan to Dr R.J. Vakil • Ceremonial Opening of Convalescent Home
1959	• Family Care Clinic started by Preventive and Social Medicine Department • Occupational Therapy entrance post inter-science from post degree
1960	• Mycology Lab started • Midwifery Training started • Pyrogen Testing Unit started in Pharmacy Department above Blood Bank • Psychiatry Ward extended • MD (Pediatrics) started • First Endoscopy Unit established
1961	• Biochemistry Department started functioning independently • Plastic Surgery Department used part of Neurosurgery Operation Theater
1962	• Home Nursing Classes started for general public • Ward 19 started • Auxiliary Nurse Midwife Training started • Convalescent Home converted into Orthopedic Center • First Dialysis Unit in Mumbai • First Open-Heart VSD correction using extracorporeal circulation
1963	• Child Guidance Clinic started • Medical Records Department established
1964	• Under-five clinics started • Mobile Health Care started by the Department of Preventive and Social Medicine following an epidemic of gastroenteritis • Bombay Municipal Blood Center made a separate unit • Cardiovascular Thoracic center fifth floor given to nurses • 3 Units in Orthopedic Department • Orthopedic Radiology in Orthopedic Center
1965	• First Renal Transplantation in India at KEM Hospital

Year	Milestones
1966	• MD Psychiatry & DPM started • Cardiovascular Thoracic Center started • School Health Clinic started • First ICCU in India • D.M.R.D, D.M.R.T, and MD Radiology started • Image Intensifier with TV monitor installed in Radiology
1967	• PFT started • 3rd Pediatric Unit started • Chest Ward started • BSc OT & PT started • Kiil Dialyzer arrived
1968	• Pediatric Surgery Ward started in Obstretics-Gynecology building • Neonates totally under the care of the Pediatric Department • First Liver Transplantation in India at KEM Hospital • MD Anesthesia started
1969	• World's 5th and 6th heart transplants • Staff Society took over the journal • Padma Bhushan to Dr P.K. Sen
1970	• Post Partum Program started • Well Baby Clinic started • CVTS Radiology shifted to CVTC • Neonatal Care Unit started
1971	• Endocrine Unit started
1972	• NSS started • Arthritis Clinic started • Modern Blood Gas Equipment operational • MCh Pediatric Surgery started
1973	• Hiking Department added to Gymkhana • CR Elections started
1974	• Cancer investigation and immunology laboratory started
1975	• Micro Ear Surgery Workshops started • OT/PT 3 and ½ year course • High Risk New Born OPD started
1978	• Malvani (Field practice area for PSM) started • MCh Urology commenced
1979	• Pediatric Research Laboratory started • USG in Radiology started • Plastic Surgery obtained operating microscope
1980	• World Congress of Pediatric Surgery held at KEM Hospital • Electric Cautery installed in Skin department
1982	• Burn Unit started • Pediatric Surgery Theater and Intensive Care Unit started
1983	• DM Endocrinology started

Year	Milestones
1984	• KEM Hospital became the first teaching institute to start emergency clinical microbiology laboratory services • Dr M.D. Motashaw Renal Transplant and Research Unit started • Tissue Processor and Cryo started in Skin department
1985	• Library started xeroxing facility
1986	• PSM Department shifted to library building • AIDS Surveillance Center initiated • First Test Tube Baby in India
1987	• DM Nephrology started • Library started audiovisual facility • First Gastroenterology Oration in the city started at KEM Hospital • First national workshop on Endoscopic Sclerotherapy held • Geropsychiatric consultation started • Special Binocular Microscope came in Skin Department
1988	• National Plasma Fractionation Center started • HIV/AIDS Surveillance center started
1989	• Library added computer facility • Hormone Assay laboratory started
1990	• Gastroenterology Department given 25 beds in multi-storeyed building • Level II Neonatal Care Unit started • RMO quarter in multi-storeyed building • Residency System started
1991	• Central Clinical Biochemical Laboratory established • Shidori started • Urology Department shifted to multi-storeyed building
1992	• International workshop on Laparoscopic Cholecystectomy held • Esophageal Laboratory with manometry facilities started in Gastroenterology Department • Level III Pediatric Intensive Care Unit started • Level III Neonatal Intensive Care Unit started
1993	• Janus started • CT Scan obtained • Medical Intensive Care Unit upgraded to Medical-Neurology-Neurosurgery ICU • DCH started • Library added Medline facility • MET Cell started • PSM started general OPD
1994	• DM Neonatology started • Yoga classes started
1995	• Spine OT complex started • pH studies in Esophagus started
1996	• Immunoperoxidase techniques used in Skin

Year	Milestones
1997	• Cadaver Kidney Transplant performed • Email and internet facility started in the library • Dr B.C. Roy Award to Dr G.B. Parulkar (most eminent medical man of the year) • Female Deaddiction Ward started
1998	• Both BPTh 4 and ½ year course under MUHS • Padma Bhushan to Dr G.B. Parulkar • MD Forensic Medicine started
1999	• DM Hematology Course approved • Laminar airflow started in Mycology Laboratory
2000	• 276 staff members • Humane approach to Neonatal Care started • Dhanvantari award to Dr I.N. Hinduja • A specialized Emergency Medical Service was started • Surgical Gastroenterology established
2001	• Intranet and internet facility inaugurated • Platinum Jubilee year
2002	• GOSUMEC Foundation (Alumni Association) started in USA • Old Pediatric Intensive Care Unit was renovated into a state-of-the-art Pediatric Intensive Care Unit with the capacity to cater up to 10 beds with most advanced intensive care • Multislice Spiral CT Scanner installed
2003	• Biplane Angiography system installed
2004	• Flat Panel Cardiac Cath Lab inaugurated • MRI installed
2005	• New Ultrasonography section started
2006	• President Mr Abdul Kalam and Prime Minister Mr. Manmohan Singh visit bomb blast victims • DNB degree in Surgical Gastroenterology introduced • Gosumeet 2006: 80 years anniversary celebrated
2007	• Department of Endocrinology started OPDs for Type 1 Diabetes Mellitus and Gestational Diabetes Mellitus • Department of Clinical Pharmacology started DNA Extraction Services • Specialized Cell-Based Therapy was established with grant from Department of Biotechnology • Department of Anatomy started audiovisual demonstration in Dissection Hall • Department of Nursing implemented 3 and ½ years syllabus
2008	• Record 37 projects sanctioned by the Indian School of Medical Research under their Short Term studentship scheme

Year	Milestones
2009	• 24-hours Toll Free Helpline for Swine Flu in N1 Isolation and Treatment Ward • International Accreditation for the Institute's Ethics Committees • Department of Clinical Pharmacology started a Fellowship in Clinical Sciences for a one-year duration, funded by the Department of Biotechnology
2010	• MD (Immunohematology and Transfusion Medicine) started with two students • First Live Donor Liver Transplant • First Cadaveric Liver Transplant performed by Department of Surgical Gastroenterology • Medical Humanities, Ethics and Justice Workshop launched • Department of Clinical Pharmacology launched International Journal of Ayurvedic Research • Department of Anatomy conducted the first intercollegiate quiz and started the Sponsored Book Scholarship award • Department of Anaesthesiology started a one year Fellowship course approved by MUHS in Cardiac, Neuro, and Pediatric Anesthesia • Journal of Postgraduate Medicine got a new look • Orthopedic OPD got a new look • Diet Department obtained an Automatic Chapati maker
2011	• Department of Skin and Venereal Diseases established Dermatoscopy • Department of ENT established 'Hear For All' • Department of Anatomy introduced a Foundation course • Library completed barcoding of books • Sahasra Darshan Trophy presented to all octogenarians from our institution by Dr Sanjay Oak • The Supreme Court appointed the Dean as the guardian of Aruna Shanbaug • 22nd Edition of Textbook of Pharmacology by Drs R.S. Satoskar and S.D. Bhandarkar published
2012	• Department of Neurology started Corticography • Cortical Dysphasia Surgery started • Department of Obstetrics and Gynecology initiated Extraperitoneal Myomectomy • Department of Physiotherapy commenced Doctorate of Philosophy • Department of General Surgery started Comprehensive Breast Care services
2013	• Deep Brain Stimulation started for Parkinson's Disease

Year	Milestones
2014	• Record 2500 procedures were conducted by the Department of Cardiology in the Cath Lab • Department of Microbiology received ISO accreditation for their virology and immunology divisions
2015	• Community Medicine Department launched a prevention and control of malnutrition program • Department of Microbiology became the first department to in the municipal corporation to get NABL accreditation for all tests
2016	• A new day care facility for thalassemia patients • Oculoplasty • Indo-UK CME on Pediatrics
2017	• Beginning of Cochlear Transplants
2019	• Center of excellence for management of aortic aneurysms • Mobile app for auditing biomedical waste • Department of Microbiology recognized by the Government of India as a virus reference laboratory
2020	• First pediatric swap transplant • First Transcatheter Aortic Valve Implantation [TAVI] • Recognized as a Regional Collaborative Center for facility based newborn care
2021	• Immunobridging Study with a new vaccine [Covovax/Novavax] • First Hand Transplant • Pacemaker Lead Extraction Program • New ventilators and high flow nasal cannula systems • Point of care testing for interleukin-6 and D dimer • Psychosocial helpline for providing support to COVID -19 patients • Installation of BACTEC FX 200 system • Certification for liquid culture and drug sensitivity testing for first- and second-line anti-TB drugs from the National TB Institute • Awarded the best Regional Organ and Tissue Transplant Organization [ROTTO] and State Organ and Tissue Transplant Organization [SOTTO] by the Ministry of Health and Family Welfare
2022	• Endo-oncology Services • Spiral Enteroscopy Services
2023	• Recognition by the Indian Council of Medical Research (ICMR) as a center for conduct of Phase I clinical trials in the country as part of a national network of centers • Glomerulonephritis registry • Digitization of epilepsy health records

23

Some Proud Moments

- The first Indian Medical College of modern medicine to be fully staffed by qualified Indian doctors
- The first Occupational Therapy School in Asia
- The first Physiotherapy School in Southeast Asia
- The first Plasma Fractionation Unit in Asia
- The first Indian hospital to have an Ayurveda Research Center in conjunction with an allopathic set-up
- The first Indian Medical College and Hospital having an indexed medical journal (Journal of Postgraduate Medicine)
- The only Department of Sexology for a billion people
- The first clinical pharmacology Ward in the country
- The first dedicated Orthopedic Department in the country
- The first department of Cardiothoracic Pathology in India
- The first Nutrition Research Unit attached with a Physiology Department in India
- The first department of cardiovascular and thoracic anesthesia in India
- The first specialized Epilepsy Surgery Department in Western India
- The first department of Interventional Electrophysiology in Western India
- The first dedicated Esophageal Laboratory in the country
- The first Intensive Cardiac Care Unit in India
- The first Indian hospital to perform a live donor kidney transplant in India
- The first Indian hospital to perform heart transplant surgery
- The first liver transplant in India (1968)
- The first documented test-tube baby in India
- The first Indian hospital to acquire an ECG machine
- The first mitral commissurotomy in India (1952)
- The first Indian hospital to perform craniofacial surgery
- Pioneering work on the use of diethylcarbamazine in tropical eosinophilia
- Pioneering work on the use of Rauwolfia serpentina in hypertension
- The first balloon atrial septostomy procedure in the country
- The first balloon dilatation of cor-triatriatum in the world
- The first fetal echocardiography-

guided interventional therapy in the country

- The first transcatheter closure of ASD in Western India
- The first cadaveric temporal bone and micro ear surgery workshops (1976)
- The first Department of Preventive and Social Medicine to start a Mobile Health Unit in India (1964)
- Highest annual processing of blood samples in India (about 36,000/year in 1998, 1999)
- Highest annual collection of blood Unit in India (about 30,000/year in 1998, 1999)
- Highest number of blood donation camps held by a single blood bank in India
- Single largest collection in India with a single Blood Bank in a day: 5679 Units of blood
- Pioneering work on in-vitro testing of Indian hepatoprotective agents
- The first intravenous anesthesia with Thiopentone sodium (1940s)
- The first hypothermia technique for ASD (1953)
- The first All India Conference of Indian Society of Anesthetists (1949)
- The first total spinal technique for controlled hypotension (1954)
- Largest numbers of presidents of Indian Society of Anesthetists from a single Institution (five)
- Pioneering work on recreation of reptilian heart vascular pattern in mammalian heart (1965)
- Pioneering work on the association of tuberculosis with non-specific aortoarteritis (1963)
- Discovery of Bombay Blood Group
- Pioneering work on release and grafting of trismus in submucous fibrosis
- President Mr Abdul Kalam and Prime Minister Mr. Manmohan Singh visit bomb blast victims (2006)
- Record 37 projects sanctioned by the Indian School of Medical Research under the Short-Term studentship scheme (2008)
- International Accreditation for the Institute's Ethics Committees (2009)
- The first Live Donor Liver Transplant (2010)
- The first Cadaveric Liver Transplant performed by Department of Surgical Gastroenterology (2010)
- Department of Clinical Pharmacology launched International Journal of Ayurvedic Research (2010)
- Sahasra Darshan Trophy presented to all octogenarians from our institution by Dr Sanjay Oak (2011)
- Supreme Court appointed the Dean as the guardian of Aruna Shanbaug (2011)
- 22nd Edition of Textbook of Pharmacology by Drs R.S. Satoskar and S.D. Bhandarkar published (2011)
- Record 2500 procedures were conducted by the Department of Cardiology in the Cath Lab (2014)
- The Department of Microbiology received ISO accreditation for their

virology and immunology divisions (2014)

- Department of Microbiology became the first department to in the municipal corporation to get NABL accreditation for all tests. (2015)
- Beginning of Cochlear Transplants (2017)
- Department of Microbiology recognized by the Government of India as a virus reference laboratory
- First pediatric swap transplant (2020)
- First Transcatheter Aortic Valve Implantation [TAVI] (2020)
- Immunobridging Study with a new vaccine [Covovax/Novavax] (2021)
- First hand transplant (2021)
- Certification for liquid culture and drug sensitivity testing for first- and second-line anti- TB drugs from the National TB Institute (2021)
- Awarded the best Regional Organ and Tissue Transplant Organization [ROTTO] and State Organ and Tissue Transplant Organization [SOTTO] by the Ministry of Health and Family Welfare (2021)
- Recognition by the Indian Council of Medical Research (ICMR) as a center for conduct of Phase I clinical trials in the country as part of a national network of centers
- Glomerulonephritis registry (2023)

FUNDUS CHARTING IN A RANGOLI

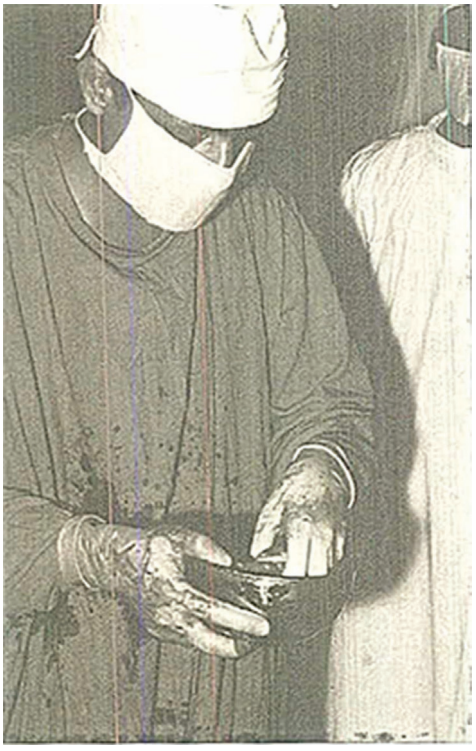
Mayur R. Moreker, Jyoti Dodhi, Trupti Khaladkar, Sonali Sontakke, Sahil Mhatre, Pushpita Das, Karobi Lahiri, Ajay Dudani

Teaching, often involves throwing innovative challenges. This Rangoli made by our Optometrists & Ophthalmology Res depicts an image of the modified Amsler Dubois Fundus Drawing Chart[1,2]. This challenge was also an enriching experience while learning the std. colour coding of the commonly encountered vitro-retinal pathologies. We consider this to be an innovative technique for medical education which enabled the learner to learn standard documentation techniques while exhibiting their unique artistic skills.

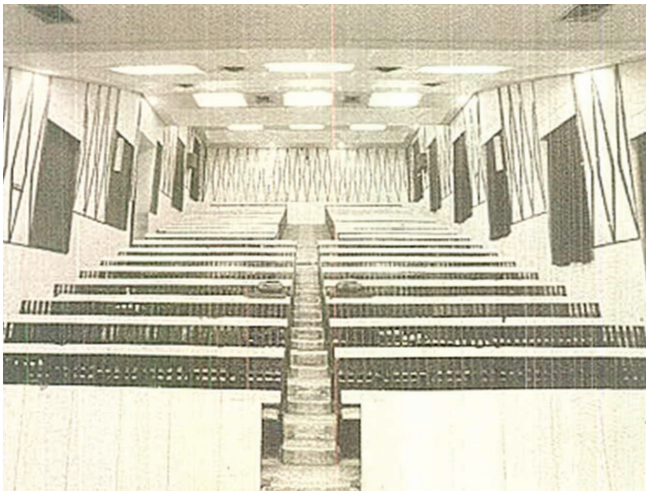
References: 1. Patel D. Fundus Drawing - Original Image.
2. Majumder PD. Documentation and Drawing in Ophthalmology.

Dr Indira Hinduja with first test tube baby Harsha Shah born in India.

https://timesofindia.indiatimes.com/city/mumbai/affordable-ivf-comes-to-test-tube-baby-birthplace/articleshow/71342914.cms



Dr Sharad Panday holding in his hands the donor heart to be transplanted first in India.



JMLT in eighties.

24

Pioneers of the Departments

Department	First Head of Department	Year of Beginning
Anatomy	Dr R.P. Koppikar	1925
ENT	Dr T.O. Shah	1925
Physiology	Dr S.P. Niyogi	1925
Anaesthesiology	Dr A.J. Dhruva	1926
Dentistry	Dr Menezes	1926
Dermatology	Dr A.C. Rebello	1926
General Surgery	Dr G.V. Deshmukh, Dr A.P. Bacha, Dr R.N. Cooper, Dr T.O. Shah, Dr R.D. Shirwalkar and Dr V.L. Parmar	1926
Medicine	Dr MDD. Gilder	1926
Nursing	Smt Marion McCarthy	1926
Obstetrics and Gynecology	Dr N.A. Purandare	1926
Ophthalmology	Dr G.T. Mody	1926
Pathology	Dr Vasant R. Khanolkar	1926
Pharmacology and Therapeutics	Dr Anand Paranjpe	1926
Radiology	Dr J.L. Desai	1926
Orthopedics	Dr R.J. Katrak	1942
Psychiatry	Dr N.S. Vahia	1947
Occupational Therapy	Mrs Kamala V. Nimbkar	1950
Neurosurgery	Dr Ram Ginde	1951
Forensic Medicine and Toxicology	Dr J.P. Modi	1952
Gastroenterology	Dr P. Raghavan	1952
Nuclear Medicine	Dr R.S. Satoskar	1954
Neurology	Dr E.P. Bharucha	1956
Cardiovascular and Thoracic Surgery	Dr P.K. Sen	1958
Pediatrics	Dr Piloo Bharucha	1958
Community Medicine	Dr D.N. Pai	1959
Clinical Hematology	Dr J.C. Patel	1961
Plastic Surgery	Dr C.J.T. Pinto	1961
Endocrinology	Dr S.D. Bhandarkar	1962
Nephrology	Dr Vidya N. Acharya	1962
Cardiology	Dr K.K. Datey	1964
Physiotherapy	Dr Manik Sahani	1965

Pediatric Surgery	Dr R.K. Gandhi	1967
Pulmonary Medicine	Dr S.D. Store	1967
Microbiology	Dr V.V. Kale	1977
Biochemistry	Dr K.G. Tanksale	1978
Urology	Dr Dev Pardanani	1980
Neonatology	Dr Simin Irani	1992
Clinical Pharmacology	Dr Nilima Kshirsagar	1995
Surgical Gastroenterology	Dr R.D. Bapat	2003
Transfusion Medicine	Dr Jayashree Sharma	2009
Cardiovascular and Thoracic Anesthesia	Dr Manjula Sarkar	2013
Pediatric Anesthesia	Dr Madhu Garasia	2014

SPORTS ACHIEVEMENTS

ADRENALS

GS TABLE TENNIS LEAGUE
Winners : (L to R)
Viraj gorhe, Amit dashputra, Piyush mukund, Alok nachane, Pranoy bhatia, Ansh raithatha, Yash chandak

GS TENNIS LEAGUE
BOYS :
Winner - Saransh Bansal (L)
Runner up - Viraj Gorhe (R)

GIRLS :
Winner - Tanvi Hirekerur (R)
Runner up - Simran Gawli (L)

GS FOOTBALL LEAGUE WINNERS :
TEAM BLUE
Standing (L to R) - Vaishakh Pisharody, Kshitij Kulkarni, Zain Chunawala, Aditya Nimbkar
Sitting (L to R) - Nikhil Rao, Ankit Kumar, Manan Boob

COLLEGE FOOTBALL TEAM :
WINNER AT JJ INTERCOLLEGIATE FOOTBALL TOURNAMENT
Standing (L to R) - Parth Maulgaokar , Nishant Manhas , Zain Chunawala, Viraj Gorhe
Sitting (L to R) - Sarit Kundu , Ankit Kumar, Ashutosh Dadhich

25

Decadal Report (1946–1955)

Between 1945 and 1955, India, including Bombay, was in a period of significant transition and upheaval, thus leading to notable changes in the twin institutions of KEM Hospital and Seth G.S. Medical College. The year 1947 marked the end of British rule, which was followed by the painful period of Partition, leading to an influx of traumatized refugees in Bombay, which was a major port city and financial hub. In 1950, the Indian Constitution was formed, and the first five-year plan (1951–56) was put into place, which emphasized the role of agriculture and heavy industry, leading to continued growth in the industrial center that was Bombay at the time. All these events left their footprints on the history of the twin institutions. Two batches of nurses had volunteered their services to go to Kurukshetra Refugee Camps for medical relief in November 1947. With an increased patient load, KEM Hospital was at the frontline of this crisis and was dealing with the medical needs of a displaced population by becoming a treatment center for the wounded. During this testing time, the hospital continued to grow and responded to the crises by increasing staff capacity and expanding the infrastructure and the number of departments and centers. 1950 also marked the Silver Jubilee of the twin institutions and the Silver Jubilee funds were further used to establish a Blood Bank at the Hospital and a Research Society to pioneer medical research in the newly-formed nation. During this tumultuous decade, Dr R.G. Dhayagude was the Dean of the Hospital and the Medical College.

Vital Statistics

	1946	1947	1948	1949	1950
Schedule Strength of Beds	510	510	510	510	510
Daily Average No. of Indoor Patients	556.3	570.93	583.72	616.56	586.4
Total No. of In-Patients treated during the year	16,221	17,096	18,152	20,843	20,208
Total No. of Outdoor Patients treated during the year	5,07,773	4,67,045	4,31,293	5,90,767	7,13,658
Daily Average No. of Out-Patients Attendance	1,634.53	1,557.19	1,446.6	1,965.01	2,372.42
Total No. of New OPD Patients treated during the year	1,50,460	1,14,494	1,22,262	1,64,615	1,70,649
Daily Average No. of New OPD Attendance	474.42	421.22	446.5	599.14	625.84

Expenditure Annually		12,20,052	13,87,500	16,05,300	17,91,503	19,23,959
Average Cost per In-Patient per day (Rupee:Aana:Paisa)		4:12:8	5:3:10	6	6:1:8	6:12
Average Cost per O.P Attendance (Rupee:Aana:Paisa)		0:7:7	0:10:11	0:11:9	0:10:2	0:10:7
Total No. of Attending in School Clinic		1,219	807	974	963	974
Total No. of Indoor Operations		6,683	6,576	6,854	7,735	8,175
Total No. of OPD Operations		11,921	11,188	11,669	11,711	12,562
Skiagram of No. of Patients		5,903	5,452	5,483	6,231	5,986
Fluoroscopic Examination of No. of patients		5,475	5,622	5,779	4,246	953
No. of Patients treated in El. Therapy Department		2,188	2,239	1,981	2,701	2,276
Electro Cardio Grams		236	434	357	463	583
Clinical Lab Investigations		23,634	42,747	25,246	31,160	37,060
Blood Bank Account	**Samples Collected**	848	1,170	985	986	1,459
	Samples Issued	773	947	828	933	1,226
Total No. of Nurses		160	160	160	160	169
Cost per Nurse per month (Rupee:Aana:Paisa)		109:3:2	115:10:5	145:4:11	145:9:3	135:4:2

	1951	**1952**	**1953**	**1954**	**1955**
Schedule Strength of Beds	510	510	510	550	550
Daily Average No. of Indoor Patients	582.5	603.16	610.25	636.68	692
Total No. of In-Patients treated during the year	19,792	19,148	19,674	19,257	20,895
Total No. of Outdoor Patients treated during the year	6,31,276	5,59,901	5,70,742	5,79,505	6,37,637
Daily Average No. of Out-Patients Attendance	2,118	1,890.2	1,919.3	1,955	2,145
Total No. of New OPD Patients treated during the year	1,57,690	1,56,888	1,66,812	1,75,995	1,82,265
Daily Average No. of New OPD Attendance	585.4	590.2	620.5	657.6	681.2
Expenditure Annually	21,83,332	23,73,978	26,22,268	26,49,895	27,60,574

Average Cost per In-Patient per day (Rupee:Aana:Paisa)		7:12:9	8:4:11	8:15:11	8:12:6	8:8:2
Average Cost per O.P Attendance (Rupee:Aana:Paisa)		0:12:4	0:14:9	1:5:8	1:5:10	1:4:2
Total No. of Attending in School Clinic		998	811	926	1,000	1,112
Total No. of Indoor Operations		-	8,874	8,955	8,186	9,734
Total No. of OPD Operations		-	20,347	23,147	20,339	26,578
Skiagram of No. of Patients		-	-	-	-	-
Fluoroscopic Examination of No. of patients		-	-	-	-	-
No. of Patients treated in El. Therapy Department		-	-	-	-	-
Electro Cardio Grams		-	-	-	-	-
Clinical Lab Investigations		-	-	-	-	-
Blood Bank Account	**Samples Collected**	-	1,883	1,832	1,888	1,901
	Samples Issued	-	1,613	1,566	1,760	1,792
Total Number of Nurses		-	-	-	-	-
Cost per Nurse per month (Rupee:Aana:Paisa)		-	173:4:3	197:12:7	202:4:0	201:15:2

Vital Statistics for the Hospital (1946–55)

- From 1954 onwards, there is a significant increase in the Schedule Strength of Beds from 510 to 550.
- Although there isn't a consistent yearly increase in the Daily Average Number of Patients, the overall figure has increased from 556.3 to 692 during this decade.
- There was a spike in the Total Number of In-Patients treated during a year in the first four years of this decade, from 16,221 to 20,843 just between 1945 and 1949, perhaps connected to the bloodshed and forced migration caused by the Partition.
- The total number of outdoor patients treated was the highest in the year 1950 of this decade at 7,13,658 people. 2,372 Out-Patients on average visited the hospital every day during this year. This was also the year when the newest OPD patients were treated at the hospital.
- During 1955, the highest number of new OPD patients were treated in the hospital compared to all the other years in the decade, which was on average 681 new OPD patients every day.
- The annual expenditure of the hospital more than doubled during this period of the decade, from around 12 lac rupees to almost 28 lac rupees. The same trend can be seen in the average cost per In-Patient per day, which too nearly doubled from 4 Rs. and 12 annas to 8 Rs. and 8 annas over the decade, and there was a consistent increase except in 1954 and 1955, the two years when the average cost went down rather than up. Even the cost per OP attendance doubled from 7 annas to 1 rupee and 4 annas.

- Total Number of Attending in School Clinic largely went down over the years, and the highest number was in the beginning of the decade in 1946 when 1,219 physicians attended in the school clinic.
- While the total number of indoor operations increased from almost 7,000 to almost 10,000 over the decade, the total number of OPD operations more than doubled from almost 12,000 to 26,000 operations.
- The blood bank numbers have also more than doubled over the decade.

		1946	1947	1948	1949	1950
Fresh Admissions		86	86	82	82	82
Undergraduate Students	**Male**	396	394	427	404	411
	Female	123	126	135	132	117
	Total	519	520	562	536	528
Postgraduate Students		69	70	70	91	115
Total Students		588	590	632	627	643
Total Amount of Expenditure		2,60,832	2,80,322	3,27,180	3,41,878	3,73,344
Gross Cost per Student (Rs.)		502.1	539.01	675.03	797.15	844.05
Net Cost per Student (Rs.)		259.05	252.05	394.08	431	480.11

		1951	1952	1953	1954	1955
Fresh Admissions		86	82	82	82	-
Undergraduate Students	**Male**	383	378	354	373	384
	Female	121	109	109	116	111
	Total	504	487	463	489	495
Postgraduate Students		110	105	121	146	171
Total Students		614	592	584	635	666
Total Amount of Expenditure		4,39,154	4,40,672	4,83,194	5,05,806	5,02,836
Gross Cost per Student (Rs.)		871.03	904.09	1,943.06	1,034.04	1,015.08
Net Cost per Student (Rs.)		521.01	548.04	659.02	644.08	658.02

Vital Statistics for the Medical College (1946–55)

- In 6 out of 10 years, the yearly fresh admissions were 82 instead of 86.
- The number of undergraduate students has remained the same throughout the decade, while the number of postgraduate students has more than doubled from 69 in 1946 to 171 in 1955 and so has the total amount of expenditure from 2.6 lac rupees to 5 lac rupees.
- Both the gross cost as well as the net cost per student was the highest in 1953 at almost 2,000 rupees and 660 rupees, respectively.

Infrastructure Added During the Decade

In 1951, a Blood Bank was added to the infrastructure of the hospital.

Expansion of Departments During the Decade

1947 Psychiatry and Anesthesia
1949 Hematology [Formally]
1950 Occupational Therapy
1952 Cardiovascular Thoracic Surgery and Neurosurgery
1953 Physiotherapy School and Neurology
1954 Medico Social Service Department and Diabetology

How Departments Grew During the Decade

Department of Anesthesiology: On October 16, 1946, during the centenary Celebration of "Ether Anesthesia", a meeting was held at Seth G.S. Medical College which was attended by Drs S.K. Bakshi, B.N. Sircar, Satyendra Singh, G.S. Talwalkar, M.N. Desai, Mukteshwar Prasad, and F. Saher and it was decided to form the Indian Society of Anesthesiologists. The very first convention was held at this very institution in 1949. As surgical super-specialties like cardiothoracic and neurosurgery were started in the early 1950s, the need for senior anesthetists who could devote their full time to these specialties was felt. Neuroanesthesia was managed by the then senior resident anesthetist Dr G.R. Gode (who later became the Director of Anesthesia of AIIMS), and a special post of senior anesthetist equivalent to Assistant Professor was created for cardiac anesthesia, for which Dr A.J. Dhruva was selected.

Department of Cardiovascular and Thoracic Surgery: The first reported successful cardiac operation was the repair of a left ventricular stab wound performed by Dr K.M. Shah, a surgical registrar at the KEM Hospital, Bombay, in 1946. A few months later, in 1947, his senior colleague in the same department, Dr A.V. Baliga, performed a pericardial drainage to relieve the cardiac tamponade of a patient. A brilliant thinking innovative Bengali surgeon, Dr P.K. Sen, revolutionized the cardiac surgery scenario of India in the 1950s. He performed the first real intracardiac procedure, a digital closed mitral valvotomy at KEM Hospital in 1952. Using an otolaryngology nasal polyp removal snare and replacing the wire with a braided silk for controlling the entry of the index finger inside the left atrial appendage, he opened the stenosed mitral valve. By 1955, it was established as a regular procedure at KEM Hospital. In 1953, Dr P.K. Sen performed the first repair of coarctation of aorta. The foundations of this department, which was set up in 1952, were firmly laid by Dr P.K. Sen.

Department of Ear, Nose, Throat and Head-Neck Surgery: In 1946, the Department was headed by Dr Sadashiv Joshi who visited USA and Europe to acquire skills in otological surgery, and started the same for the first time in India.

Department of Neurology: The vision of the Dean, Dr Dhayagude, encouraged deserving stalwarts to go for training abroad and to develop various specialties and super-specialties back home. Dr R.G. Ginde went to Wilder Penfield at Montreal to study neurosurgery and returned around 1949. He started preliminary neurosurgery as part of general surgery as there was no special neuro ward. It

was around this time that two important events took place. Dr E.P. Bharucha, who was an assistant physician to Dr Hamid went abroad to study neurology, and the Reserve Bank of India donated some money to build a new ward. Dr Bharucha returned in 1952 and continued with Dr Hamid till 1953. The combined efforts of Dr Ginde and Dr Bharucha made a strong foundation for neurosciences in KEM Hospital.

Department of Neurosurgery: The Department of Neurosurgery was established by Dr Ram G. Ginde in April 1951. The patients were housed in the general surgery ward. Dr Ginde carried out all neuroradiological tests himself and performed two to three operations every week. It was not until October 1953 that the department of neurology and neurosurgery was opened with a separate ward of 40 beds and a separate operation theater.

Department of Nursing: Since January 1950, a regular monthly conference of the nursing staff has been held, where papers on nursing problems were read by sisters and staff nurses.

Department of Occupational Therapy: This was a very important decade for the Department of Occupational Therapy. In 1950, the first department of Occupational Therapy (OT) in Asia was established at the KEM Hospital. The founder of the 'OT profession in India' as well as the 'first school of OT in India/Asia' was Mrs Kamala V. Nimbkar (born Elizabeth Lundy). Mrs Nimbkar was a social activist who spent her early 30s at Mahatma Gandhi's Sabarmati Ashram. She became interested in OT when she came across an article written by Ms Helen Willard, a notable occupational therapist in the United States. Dr Nimbkar went to the US to study OT at the Philadelphia School of OT at the age of 45. After passing the OT board exam in February 1948, she returned to India and persuaded the KEM Hospital Administration to start the OT department.

Department of Pathology: Dr Y.M. Bhende, after succeeding Dr Dhayagude, as the head of the Department in September 1945, discovered a new blood group in 1952, i.e. the Bombay Blood Group, thus putting KEM Hospital on the world map. He also wrote a book on General Pathology, which was affordable to poor students.

Department of Physiotherapy: Due to the polio outbreak in Mumbai, Southeast Asia's first School for Physiotherapy was set up during this decade at the Seth G.S. Medical College.

Department of Preventive and Social Medicine: While this Department officially started in 1959, the concept of starting separate departments of preventive and social medicine was mooted in 1955 at an "All India Conference on Medical Education."

Department of Psychiatry: This Department was set up by Dr Nalinkant S. Vahia way back in 1947. At that time, psychiatric patients were confined to mental asylums and there was no facility of treating them in a general hospital setting. Prior to 1947, Dr K.A.J. Lalkaka used to attend this hospital with appointments whenever any patient developed a psychological problem. Under the guidance of the innovative Dean, Dr R.G. Dhayagude, Dr N.S. Vahia started an

outpatient department for consultation of patients with psychological disturbances. It was a one-man show, and other physicians and surgeons were skeptical about having a psychiatric OPD fearing that the patients here would disturb the other patients. But the Dean provided a room next to his office where Dr Vahia could look after psychiatric patients. With a decreased apprehension of psychiatric patients, the OPD was gradually shifted next to the other OPDs, and thus clinical psychiatry achieved the status of other clinical branches in medicine. Historically, this was an important milestone that contributed to reducing the stigma attached to this branch.

Department of Radiology: In 1945–46, the Department was shifted to its present location on the Ground Floor (OPD No. 10) of the main hospital building. One 200 mA machine was purchased around this time. It was called "Kala Ghoda" as the machine was black in colour and it worked sturdily like a horse. In 1950, Dr L.H. Athale, a stalwart of Indian Radiology, became honorary professor after receiving training in the UK. Dr M.M. Mehta and Dr M.S. Warawadekar also joined the department in 1955.

Department of Urology: Even though this department was officially set up in 1980, Late Dr G.M. Phadke had already completed the first 100 retropubic prostatectomies in this country by the end of 1955 and had thus sown the seeds of urology in KEM Hospital.

Milestones of the Decade

1946 Sion Hospital started with 50 beds under KEM Hospital

1947 Formal Inauguration of Sion Hospital with 100 beds
Past GOSUMECS society started
Psychiatry OPD started
DA Bombay University started at KEM

1948 Gymkhana Seth GSMC had Cultural Department as the 10th unit

1949 Old RMO Quarters started in place of the then Nurses' Home
Diploma in Medical Radiology and Electrology started
Seth GSMC Gymkhana canteen started

1950 Gift Shop started
Dr N.A. Purandare stadium constructed on college playground
Psychiatry In-Patient

1952 Research Society started from Silver Jubilee Fund

1953 RBI ward started
EEG machine obtained in psychiatry department
1st Intracardiac operation in India performed at KEM Hospital
Neurology ward started

1955 Journal of Postgraduate Medicine started

Significant Developments

Blood Bank: While the storing of blood or blood banking started in 1944 in one room in the Central Clinical Laboratory with the availability of one refrigerator by Dr Dhayagude, a properly planned Blood Bank with a cold room was set up in 1951. This was because of the large number of wounded patients who were admitted into the hospital following the naval mutiny of 1945. The staff members and

students donated blood for the injured. This also impressed upon the authorities concerned the need for a proper Blood Bank. At the time of the silver jubilee of the twin institutions, with a significant donation by Shantilal Mathurdas and small contributions from relatives and voluntary donors, the Blood Bank was finally set up at KEM Hospital.

Setting Up of the 'Past Gosumec's Society': The Gosumec Alumni Association was established as 'Past Gosumec's Society' way back in 1947, when a few ex-students of Seth G.S. Medical College and KEM Hospital met at the All India Medical Conference held in Bombay. The Society was formed with the Dean, Dr R.G. Dhayagude as the President and Dr B.N. Purandare and Dr V.P. Mehta as Vice Presidents. Dr S.V. Joglekar and Dr N.H. Keswani were the Hon. Secretaries. In March 1948, an appeal was sent to all past students of the college for the first time encouraging them to become members of the society.

Donations to the Library: In 1947, Dr Bacha donated Rs. 35,000/- and his personal collection of books and periodicals to the Library. The library also received donations in the form of books from the State Department of USA in 1949.

Setting up of King Edward VII Memorial Hospital & Seth G.S. Medical College Research Society: The society was formed in 1952–1953 at the time of the celebration of the silver jubilee of the twin institutions. The Research Society was established to give perpetuity for promotion of medical research in all its branches, including industrial disease and accidents.

Beginning of the Department of Social Services: This department was set up with the appointment of two trained medical social workers in September 1954.

Illustrious Achievements of the Decade

Asia's First School for Occupational Therapy Set Up in 1950

The founding of the profession of Occupational Therapy in India & Asia was due to the very deep and personal feelings of Mrs. Kamala V. Nimbkar (born Elizabeth Lundy) towards her adopted country, India. She first met her future husband in America at the International House in New York and after they got engaged, both felt that she should make some contributions on coming to India.

After several years of dedicating herself to building kindergarten schools and personally managing one in Bombay, she came across an article on Occupational Therapy by Miss Helen Willard. Mrs. Nimbkar realized that this was something that India did not have but needed. Hence, at the age of 45, Mrs. Nimbkar went back to the United States and enrolled for the Occupational Therapy course at the school that was headed by Miss Willard. Between classes and clinical training periods, Mrs. Nimbkar returned to Mumbai and contacted Dr Dhayagude, the then Dean of Seth G.S. Medical College and KEM Hospital, who showed interest in her project and was ready to help.

Upon completion of her training, a year of demonstration of what occupational therapy was and what it could do for patients under doctor's guidance, was arranged with the municipality, backed by the then Commissioner Shri P.R. Nayak.

Work started in the orthopedic ward under Dr Katrak and also in the children's ward. Thus, in 1949, it was a familiar sight to see an American woman wearing a sari and a hospital coat, moving about with odd-looking things such as strings and frames in the corridors of KEM Hospital. That lady was none other than Mrs. Nimbkar and the odd-looking equipment was treatment media used in Occupational Therapy.

After a year, the work was appreciated so much that a committee from the municipality and the KEM hospital authority decided to approve the Occupational Therapy project for a school and center with Mrs. Nimbkar as Honorary Director. On November 14, 1950, Smt. Rajkumari Amrit Kaur, then Minister for Health, Government of India, inaugurated the center. The certified course in OT began.

Thus, in 1950, the first such school in India and Asia was started at the KEM Hospital, which received recognition from the World Federation of Occupational Therapy, and became one of their founding members.

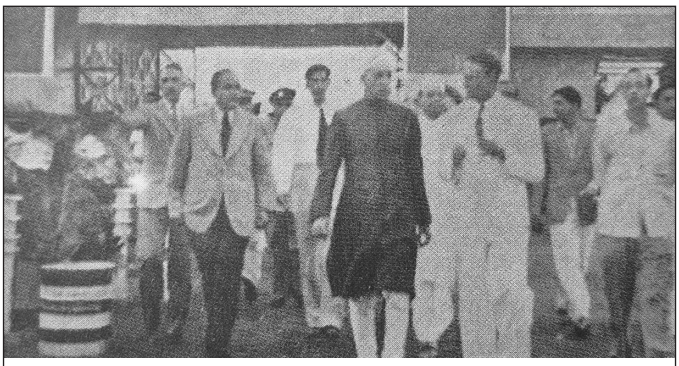
Southeast Asia's First School for Physiotherapy Set Up in 1953.

The year 1952 witnessed a major epidemic of poliomyelitis in Mumbai. During that period, known philanthropist Mrs. Ismail's daughter was also afflicted by the same. This motivated her to take the initiative to start a Physical Therapy training center. Mrs. Kellock, a British National, who was an army trained physiotherapist, helped her start the Center at Haji Ali Barracks.

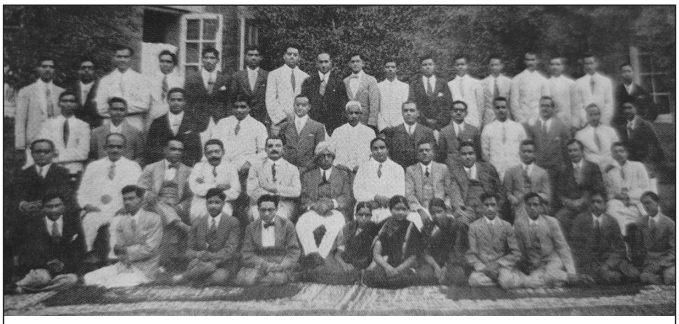
Also at KEM Hospital, Mr. Joshi, a Swedish remedial gymnast offered Rehabilitation Services to physically handicapped patients under expert guidance from Mrs. Page Mehta, a US trained physiotherapist, and the daughter-in-law of the then Dean, Dr Jivraj Mehta.

Soon after, a WHO team was invited to India to survey facilities to start a Physiotherapy Training Center. After visiting several hospitals in India, Seth G.S. Medical College, Mumbai was selected as it had the best infrastructure and medical personnel. Hence, in 1953, the first Physiotherapy School in South-East Asia was started at Seth GSMC and KEM Hospital, as a joint venture of the Government of India, Government of Maharashtra, and the Municipal Corporation of Greater Mumbai.

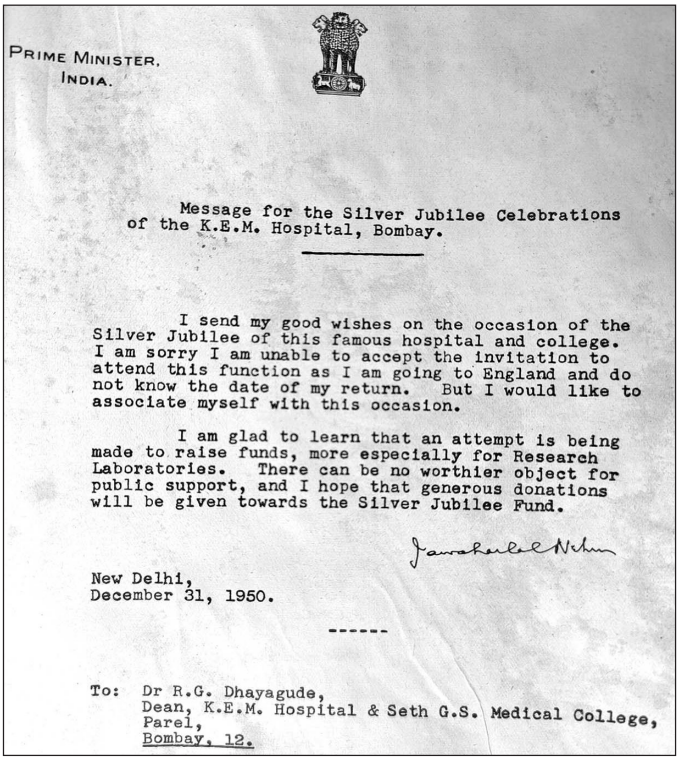
Mr. Jacques was the first teacher. He trained the first Diploma batch of students. This batch graduated after two years, in 1955. Prof. Manik Shahani, who graduated from this first batch was selected as Head of the Department of Physiotherapy.



Panditji visiting Science Exhibition during Silver Jubilee



First batches of students at Seth G.S. Medical College.



PRIME MINISTER,
INDIA.

Message for the Silver Jubilee Celebrations
of the K.E.M. Hospital, Bombay.

I send my good wishes on the occasion of the Silver Jubilee of this famous hospital and college. I am sorry I am unable to accept the invitation to attend this function as I am going to England and do not know the date of my return. But I would like to associate myself with this occasion.

I am glad to learn that an attempt is being made to raise funds, more especially for Research Laboratories. There can be no worthier object for public support, and I hope that generous donations will be given towards the Silver Jubilee Fund.

Jawaharlal Nehru

New Delhi,
December 31, 1950.

To: Dr R.G. Dhayagude,
Dean, K.E.M. Hospital & Seth G.S. Medical College,
Parel,
Bombay, 12.

26

Decadal Report (1956–1965)

In the aftermath of Independence, both the newborn independent nation and the old city of Mumbai underwent significant social, political, economic, and cultural changes. Even as the borders of the state of Maharashtra were being determined through the States Reorganization Act (1956), the capacity and boundaries of the KEM Hospital and Seth G.S. Medical College expanded at an exponential pace during this decade. By the mid-20th century, KEM Hospital had established itself as a leading institution in both clinical care and medical education. In the 1950s and 1960s, the hospital continued to grow in both the number of specialties offered and the volume of patients treated. Due to significant donations from international philanthropist foundations and individuals, many super-specialties became independent departments, and massive infrastructure was added to the structures of the twin institutions. Whether it was infant health or kidney treatments (including transplant), KEM Hospital was a pioneering institution. As the Journal of Postgraduate Medicine and the Research Society had already been formed and established, KEM became a hub for research initiatives in public health and clinical medicine, often focusing on issues pertinent to the Indian context, such as tuberculosis, malnutrition, and the treatment of infectious diseases like malaria and leprosy. As the number of women students grew, more infrastructure was prepared for Ladies' Hostels and newer specializations, and experiences with cutting-edge medical technologies and equipment were made available to medical students. KEM Hospital was not just a medical institution it was also a symbol of India's ongoing effort to provide healthcare to the masses in a newly independent nation. The institution was steered by Dr S.G. Vengsarkar and Dr S.V. Joglekar.

Vital Statistics

	1956	1957	1958	1959	1960
Schedule Strength of Beds	550	550	630	668	704
Daily Average No. of Indoor Patients	758.7	736.5	796	878	919
Total No. of In-Patients treated during the year	23,874	27,208	29,599	31,052	33,859
Total No. of Outdoor Patients treated during the year	6,84,459	7,01,891	7,12,683	7,97,819	8,07,743
Daily Average No. Of Out-Patients Attendance	2,324	2,421	2,464	2,686	2,718
Total No. of New OPD Patients treated during the year	1,91,071	2,07,956	2,11,380	2,34,117	2,35,249
Daily Average No. of New OPD Attendance	722.12	796.2	804	873	877

Expenditure Annually		29,10,960	33,13,867	36,30,445	41,36,051	40,58,845
Average Cost per In-Patient per day (Rupee:Paisa)		8:6	9:70	9:19	10:06	9:21
Average Cost per O.P Attendance (Rupee:Paisa)		1:19	0:92	1:04	1:07	0:97
Total No. of Attending in School Clinic		2,019	2,516	2,801	2,459	2,134
Total No. of Indoor Operations		9,607	9,497	13,577	12,716	13,477
Total No. of OPD Operations		29,844	31,480	41,167	41,763	45,032
Skiagram of No. of Patients		-	-	-	-	-
Fluoroscopic Examination of No. of Patients		-	-	-	-	-
No. of Patients treated in El. Therapy Department		-	-	-	-	-
Electro Cardio Grams		-	-	-	-	-
Clinical Lab Investigations		-	-	-	-	-
Blood Bank Account	**Samples Collected**	2,111	2,149	2,663	3,809	3,600
	Samples Issued	2,009	2,059	2,634	3,791	3,583
Total No. of Nurses		-	-	-	-	-
Cost per Nurse per month (Rupee:Paisa)		186:62	188:17	177:76	194:72	185:07

	1961	**1962**	**1963**	**1964**	**1965**
Schedule Strength of Beds	756	756	1,005	1,038	1,113
Daily Average No. of Indoor Patients	941	989.2	1,196	1,213	1,300
Total No. of In-Patients treated during the year	38,197	41,309	47,099	50,394	52,210
Total No. of Outdoor Patients treated during the year	8,54,327	8,15,980	7,46,707	8,23,824	7,89,265
Daily Average No. of Out-Patients Attendance	2,801	2,675	2,480	2,692	2,588
Total No. of New OPD Patients treated during the year	2,66,879	2,81,767	2,84,605	2,94,408	3,14,699
Daily Average No. of New OPD Attendance	731	772	780	804	1,032
Expenditure Annually	42,14,804	49,91,099	67,39,679	72,58,041	75,16,577
Average Cost per In-Patient per day (Rupee:Paisa)	9:48	11:07	12:85	13:64	13:03
Average Cost per O.P Attendance (Rupee:Paisa)	0:99	1:09	1:41	1:57	1:60
Total No. of Attending in School Clinic	2,350	2,664	2,917	2,993	2,091
Total No. of Indoor Operations	15,191	13,913	16,264	17,104	19,336
Total No. of OPD Operations	51,895	58,191	34,473	33,401	30,875
Skiagram of No. of Patients	-	-	-	-	-

Fluoroscopic examination of No. of patients		-	-	-	-	-
No. of Patients treated in El. Therapy Department		-	-	-	-	-
Electro Cardio Grams		-	-	-	-	-
Clinical Lab Investigations		-	-	-	-	-
Blood Bank Account	**Samples Collected**	4,611	4,823	-	-	-
	Samples Issued	4,591	4,582	-	-	-
Total No. of Nurses		-	-	-	-	-
Cost per nurse per month (Rupee:Paisa)		188:94	196:91	187:34	-	-

Vital Statistics for the Hospital (1956–65)

- During this decade, the schedule strength of beds has doubled from 550 to 1,113, and the Daily Average Number of Patients steadily increased from around 759 to 1,300.
- Between 1962 and 1963, there was a significant increase in beds from 756 to 1,005. Most beds during this year increased in the Department of Orthopaedics. This also reflects the addition of the Orthopedic Center to the infrastructure of the Hospital in 1956 as well as the addition of the Seth Dhurmal Bajaj Orthopedic Center, an independent building opposite the Tata Memorial Hospital in 1964.
- Other than one spike between 1962 and 1963, the total number of In-Patients treated during the year has steadily increased every year and more than doubled from almost 24,000 to more than 52,000 over the decade, perhaps also reflecting the increase in beds as well as the significant infrastructural expansion that took place during this decade (presented in further detail in the table below).
- The total number of outdoor patients treated was the highest in the year of 1961 during this decade at 8,54,327 patients. The daily average number of Out-Patients was also the highest this year at 2,801 patients.
- The number of new OPD patients treated in the hospital had risen steadily from around 1,91,000 to almost 3,15,000 during the span of ten years. By the end of the decade, on average, 1,032 new OPD patients were visiting the hospital every day.
- The annual expenditure of the hospital more than doubled during this decade, from around 29 lac rupees to around 75 lac rupees. The highest increase occurred between 1962 and 1963, perhaps due to the significant increase in beds during this period.
- The average cost per In-Patient per day rose mildly from almost 9 Rs. to around 13 Rs during this decade. Even the cost per OP attendance barely rose and remained under 2 Rs.
- Total Number of Attending in School Clinic was inconsistent throughout the decade, and while the highest number was in 1964 when 2,993 children attended in the school clinic, there was a steep decline in the following year with 2,091 children, a number almost

equal to the one at the start of the decade. But it is notable that this decade started with more than 2,000 children attending in the School Clinic which is more than twice the number of children who were attending during the last year of the last decade (888 in the year 1955).

- The total number of indoor operations doubled from almost 10,000 to more than 19,000 over the decade. While the total number of OPD operations were rising at an accelerating pace till 1962 from almost 30,000 to more than 58,000 operations, this number declined from 1963 onwards, and the decade ended with almost 31,000 operations being conducted in 1965.

		1956	1957	1958	1959	1960
Fresh Admissions		-	-	84	87	85
Undergraduate Students	**Male**	339	343	287	314	304
	Female	126	128	136	179	188
	Total	465	471	423	493	492
Postgraduate Students		169	141	207	226	247
Total Students		634	612	630	719	739
Total Amount of Expenditure (Rs.)		5,80,256	6,13,094	7,15,319	7,53,536	9,62,792
Gross Cost per Student (Rs.)		1,247.9	1,301.69	1,691.06	1,528.47	2,400.97
Net Cost per Student (Rs.)		846.80	961.07	1,339.53	1,249.45	1,999.20

		1961	1962	1963	1964	1965
Fresh Admissions		87	115	160	168	160
Undergraduate Students	**Male**	293	296	-	-	-
	Female	197	215			
	Total	490	511			
Postgraduate Students		180	287			
Total Students		670	798			
Total Amount of Expenditure		8,09,926	10,16,960	10,49,520	10,82,506	15,22,014
Gross Cost per Student (Rs.)		1,652.90	1,990.14	1,794.05	1,652.68	1,954.94
Net Cost per Student (Rs.)		1,286.65	1,672.89	1,374.04	1,279	1,652.46

Vital Statistics for the Medical College (1956–65)

- By the end of the decade, the number of Fresh Admissions every year had doubled from 84 to 160.
- The total expenditure almost tripled from Rs. 6 lakh to Rs. 15 lakh during this decade. The gross cost per student largely remained stable except in the year 1960 when it went up to Rs. 2,400. The net cost per student doubled from around Rs. 800 to almost Rs. 1,700.

- While the number of women students was lower than the number of male students throughout this decade. The number of women students was steadily going up while the latter was fluctuating and overall went down during the decade. This is also perhaps reflected in the expansion of Ladies' Hostel that took place during this decade.

Infrastructure Added During the Decade

While the previous decade saw only the establishment of a Blood Bank, this decade witnessed a great expansion in the infrastructure of the twin institutions, leading to the massive increase in the capacity and scale of the hospital that is reflected in the numbers in the above tables.

1956 Orthopedic Center
Staff Quarters
Convalescent Home

1957 Naigaon Hostel
Ladies' Hostel Additional Floor
2nd floor over OPD for full-time departments

1958 2nd floor over AD Bungalow
Additional Floor Nurses' Home
Additional Floor Department of Psychiatry

1959 Additional Floor over convalescent home

1960 Additional Floor over Ward 17–18
Additional Floor over college
2 Additional Floors over convalescent home
Additional Floor over Ladies' Hostel

1964 Additional Floor over CO Quarters 2

Expansion of Departments During the Decade

1957 Preventive and Social Medicine

1958 Pediatric Medicine, Obstetrics Restarted Tetanus Ward

1959 Biochemistry and Nutrition, Surgical Pathology, and Diabetes Clinic

1960 Diagnostic Radiology and Gastroenterology Clinic

1961 Plastic Surgery

1962 Endocrinology, Nephrology, and Epilepsy Clinic

1963 Pediatric Surgery

1964 Cardiology

How Departments Grew During the Decade

Pioneering work on the association of tuberculosis with non-specific aortoarteritis (1963).

Department of Biochemistry & Central Clinical Biochemical Laboratory: Biochemistry existed as a section of the Department of Physiology till 1959, after which it was given an independent status as a full-fledged department, becoming one of very few Biochemistry departments in the country which held an independent status at this time. Dr R.G. Chitre was appointed as Professor of Biochemistry and Nutrition in October 1959. Before receiving an independent status, the biochemistry section was given recognition for guiding postgraduate students at this time. Students could register for an MSc as well as for a PhD under the auspices of the University of Bombay. As many as a dozen PhDs and a large number of

MScs in Biochemistry were turned out till 1959. As the Biochemistry section, it has also conducted numerous research projects on Indian dietary conditions and the nutritional status of the Indian population as part of the Indian Council for Medical Research. This meant that several rice-strains from all over the country would come to the hospital and be analyzed for their vitamin content and nutritional value. Dr V.N. Patwardhan laid the foundations for the activities of the Biochemistry Department in the field of nutrition, which were then carried out by Dr Chitre.

Department of Cardiology: While the discipline of cardiology at KEM Hospital goes back as far as 1925 when Dr R.D.D. Gilder housed a Bulliet ECG Machine on the ground floor of the old building (now housed in the Janus Archive), the Department was only formally established in 1964 with Dr K.K. Datey as the first Head of Department. The machine mentioned above is now housed in the Rustom Jal Vakil Institute of Cardiology. Dr R.J. Vakil, a stalwart in the field of cardiology, spent most of his professional life in KEM Hospital where he pioneered the use of reserpine to control hypertension. Reserpine is derived from Indian Snakeroot, *Rauwolfia serpentina*. It was later explored as a treatment for schizophrenia. For this and his significant contributions to Indian cardiovascular epidemiology, Dr R.J. Vakil was given a Padma Bhushan in 1958. In 1965, the departments of cardiology, cardiovascular surgery, cardiac pathology, and chest diseases were shifted to a newly constructed Cardiovascular and Thoracic Center (CVTC) across the street. This streamlined the functioning of these departments and resulted in better patient care.

Department of Cardiovascular and Thoracic Surgery: Dr P.K. Sen made significant advances in this department during the decade. He started with closed heart surgeries but was soon closing atrial septal defects using hypothermia and inflow occlusion techniques (1957) before doing so on extra corporeal circulation in March 1962.

Department of Endocrinology: In 1959, a diabetes Clinic was started by Dr J.C. Patel. He was the Head and Late Dr M. K. Dhirwani was the Hon. Asst. Physician. Dr S.D. Bhandarkar joined this as soon as he joined the institution in 1961. In 1962, the Endocrinology Clinic was established with Prof. P. Raghavan as the Head and Dr S.D. Bhandarkar as the Hon. Asst. Physician.

Department of Gastroenterology: In 1956, with aid from the Rockefeller Foundation, the Department of Medicine established its first full-time unit headed by Prof. Raghavan. On learning about recent trends in medical education, Prof. Raghavan established a full-fledged GE Clinic in 1960 with the help of Dr Arthur E de Sa, an acclaimed gastrointestinal surgeon. Prof. Raghavan carried out pioneering work on the augmented histamine test and set up what was probably the first facility in the country for upper gastrointestinal endoscopy. He documented the epidemiology of peptic ulcer disease in Mumbai, while Dr de Sa refined the techniques of surgery in this condition. Prof. Raghavan was a founder member of the Indian Society of Gastroenterology (ISG) and became its second President (1961–62).

Department of Hematology: While this department was formally started

in 1949, it was only in 1961 when Dr J. C. Patel, Hon. Physician at Seth G.S. Medical College and KEM Hospital, obtained a grant of Rs. 30,00,000 from Glaxo Laboratories Ltd. to start work in Hematology. A full-time medical officer and a technician were appointed to work under the guidance of Dr J.C. Patel and Prof. N.M. Purandare. Over a period of six months, they established most of the laboratory tests necessary for diagnosis of various hematological disorders that were encountered in practice. Data of the hematological cases seen over a period of ten years was compiled, analyzed, and presented to the administration with a suggestion that the corporation should start a hematology department. Corporation started a Hematology Department and appointed Hon. Asst. Hematologist. Gradually, with the help of a generous donation of Rs. 600,000 from Dr J. C. Patel; grants and assistance from BARC and ICMR, the diagnostic and therapeutic range for various hematological diseases was expanded, which resulted in reference of cases from various hospitals in the city as well as from all over the country.

Department of Medicine: This is the parent Department from which several specialty divisions have branched out over the century. During most of this decade (1956–67), Dr P. Raghavan was the first full-time professor of the Department of Medicine. In 1957, he was deputed abroad for education and research, a result of which were clinical seminars and meets, which continue till today. He also introduced the concept of integrated teaching learnt from the West which had the vertical and horizontal schedule, along with assessments and periodic tests. In 1960, he started the Department of Gastroenterology with the first endoscopy unit. Dr Sahiar and Dr J. C. Patel started the tetanus unit in 1958. Dr Raghavan and Dr Khanolkar started the dialysis unit of nephrology in 1963. A lot of this work was supported and funded by the Rockefeller foundation in 1956, through which the establishment and purchase of equipment essential for investigation and research to develop areas of interest was made possible.

Department of Neonatology: While the Department of Neonatology was founded in 1994, its seeds were sowed in 1958 when the Department of Pediatrics was founded. From 1958 to 1968, normal neonates were looked after by the Obstetrics department. Sick neonates were looked after by the Pediatric department. 2 incubators, an isolation area, and separate nurses were allotted for them.

Department of Nephrology: Modern nephrology development in the western world took place in the mid and late 50's. Dr P. Raghavan, the Head of the Department of Medicine, visualizing the needs of the future, took the first step towards the setting up of the Department of Nephrology, when he started the hemodialysis unit in 1962. May 31, 1963 was a red letter day in the lives of Dr Raghavan's 3 residents (Drs Palekar, Borade, and Acharya), Mr. Claud Lobo and Staff Nurse Waingankar (now Mrs. Bagyatkar), who performed the herculean task of setting up the dialysis machine with its 800 liters steel tank and using it for the first time in the history of the Hospital as well as Mumbai. Meanwhile, on the research front, the study of histopathology in glomerulonephritis—a poorly understood subject—was the

topic of the very first account of the clinicopathological correlation in 41 cases of nephrotic syndrome which appeared in the Journal of Postgraduate Medicine in 1963.

Department of Neurology: Around 1962, epilepsy clinics were started as Dr E.P. Bharucha and Dr V.P. Mondkar felt the need for special care for epilepsy. Since then, epilepsy work has been progressively expanded and KEM Hospital has one of the best epilepsy management clinics till date.

Department of Obstetrics and Gynecology: While this Department had commenced functioning at the time of the Hospital's inauguration, very soon the services were terminated and deliveries were conducted at the Nowrosjee Wadia Maternity Hospital. In October 1958, the obstetric services were restarted in the KEM Hospital.

Department of Pathology: Dr N.M. Purandare succeeded Dr Y.M. Bhende as the Head of the Department in 1961. In 1964, he expanded and improved the Blood Bank. Dr Girish Vyas, then a postgraduate student of this institution envisaged a centralized collection and distribution service for the municipal hospital at KEM Hospital. The scheme was accepted and the name of the bank was changed to Bombay Municipal Blood Center in 1965.

Department of Pediatrics: Between 1929 and 1958, the Bai Jerbai Wadia Hospital for Children was the only hospital in this part of the city which cared for the medical needs of children and imparted training to undergraduate students of the Seth G.S. Medical College and KEM Hospital. For nearly thirty years after KEM Hospital was set up, pediatrics did not exist as a separate entity. Physicians who looked after the health needs of adult patients considered children as miniature adults and treated them as such. It soon dawned that children and infants need specialized attention. Following a world-wide trend, a separate Department of Pediatrics was started in 1958 with two pediatric units and a total strength of 48 In-Patient beds. The units were headed by two honorary pediatricians—Dr P.E. Bharucha and Dr M.P. Bhagat.

Department of Pharmacology and Therapeutics: Dr U.K. Sheth, who is considered the Father of Clinical Pharmacology in India, succeeded Dr Lewis in 1956 and stayed the Head of the Department till 1978. Dr Satoskar, who was sent to the UK to learn about radioisotopes by Prof. Lewis returned to the KEM hospital and set up the first radioisotope unit in the city in 1956.

Department of Plastic Surgery: At the time of the inauguration of the twin institutions, plastic surgery was mistakenly regarded synonymous with cosmetic surgery and hardly any need was felt for the establishment of a separate department devoted to this discipline. But, Dr Charles Pinto and Dean Dr S. V. Joglekar had a vision, the outcome of which was the setting up of the Plastic Surgery Department on December 1, 1961. This was the very first plastic surgery department in Mumbai. Ward 16 was established as the plastic surgery ward and Dr H.M. Dastur, head of the neurosurgery department, shared his neurosurgery theater with the department. From 1965,

the department also began to participate in the management of acute trauma involving hand and maxillofacial surgeries.

Department of Preventive and Social Medicine: The department of preventive and social medicine at Seth G.S. Medical College was started in 1959 under the leadership of Dr D.N. Pai, who had started his career as a tutor in anatomy and rose to become the first professor and head. Comprehensive health care delivery program was first developed in the shape of a family care clinic started through a Diagnostic Center at F/South. The real breakthrough came in 1964 when there was an outbreak of Gastroenteritis in Bombay. The Department rose to the challenge, organized mobile health units (the first of its kind in Bombay), and in a matter of 17 days a million people were immunized and many were educated about care to be taken at homes.

Department of Psychiatry: In 1960, a separate ward (No. 19) was allocated for psychiatric In-Patients and the Regular Child Guidance Clinic was started in 1963. MD in Psychological Medicine was started in 1965 along with the DPM Course.

Department of Radiology: During this decade, through the Rockefeller Grant, Dr P. K. Sen got a special radiology set-up for cardiac and angiographic work. In the early 60s, the neurosurgery department was busy setting up neuroradiology equipment next to the operation theater on the second floor. A little later, in 1963–64, the orthopedic center was getting set up opposite Tata Hospital, so the orthopedic radiology set-up which was near the ophthalmic OPD was shifted there, perhaps with addition of new equipment.

Department of Skin and Venereal Diseases: Dr Sharat Desai, who became the head of the department in 1955, set up the Mycology Lab in 1960 due to his keen interest in mycology

Department of Surgery: During this decade, in 1956–57, the full-time departments of Medicine and Surgery were established in the medical college with the financial support of The Rockefeller Foundation. A major portion of this grant was for import of sophisticated equipment and the remaining portion for construction of laboratories. During this period, the department was able to develop most of the super-specialties, including cardiovascular surgery, neurosurgery, urology, plastic surgery, pediatric surgery, and gastroenterology surgery.

Department of Urology: The first kidney transplantation in India was performed in KEM Hospital in May 1965 under the dynamic leadership of the late Dr P.K. Sen.

Milestones of the Decade

1956 Full-Time Departments started
First radioisotope unit in city at KEM Hospital
Obstetric ward created. 76 RMOs

1957 Blood group research center started
First municipal employees (Labor) strike

1958 WD 15A gynaec extension ward started convalescent home occupied
Non-residential system for nurses
Padma Bhushan to Dr R. J. Vakil

1959 Ceremonial opening of convalescent home
Family care clinic started by

preventive and social medicine department
Occupational Therapy entrance post inter from post degree

1960 Mycology Lab started
Midwifery Training started
Pyrogen testing unit started in pharmacy department above blood bank
Psychiatry ward extended
MD (Pediatrics) started
First endoscopy unit established

1961 Biochemistry Department started functioning independently
Plastic Surgery Department used part of neurosurgery operation theater
Home Nursing Classes started for general public

1962 Ward 19 started
Auxiliary nurse midwife training started
Convalescent home converted into orthopedic center
1st Dialysis unit in Mumbai
1st open heart VSD correction using extracorporeal circulation

1963 Child guidance clinic started
Medical Records Department established

1964 Under five clinics started
Mobile Health Care started by the department of preventive and social medicine following an epidemic of gastroenteritis
Bombay Municipal Blood Center made a separate unit
Cardio Vascular Thoracic center fifth floor given to nurses
3 units in Orthopedic Department
Orthopedic Radiology in OC

1965 First renal transplantation in India at KEM Hospital
MD Psychiatry & DPM started

Significant Developments

Setting Up of the Medical Record Department: Till 1963, Registration and In-Patient records was looked after by a Head Clerk (Registration). In 1963, the Medical Record Department was established and in 1965, Mr. Masurekar was the first Medical Records officer, who was deputed to CMC Vellore for training in Medical Records sciences to meet the requirements of patients, students, and doctors.

Expansion of the Hostel for Lady Students: After independence, the number of lady students increased so a floor was added with 12 rooms in 1957–58 to accommodate 14 more students. However, with the increase in the intake of students after the Indo-China war, from 80–120 to 160 in 1963, 78 students were accommodated in the hostel.

Illustrious Achievements of the Decade

The Artificial Kidney Department

In 1960, through the good offices of Prof. V. R. Khanolkar, the then Director of the Indian Cancer Research Institute and Shri S. S. Moolgaonkar of Tata Industries Pvt. Ltd., Mr. Axel Axison Johnson, Swedish business magnate and philanthropist donated a complete Alwall Dialysis System, one of the first 5 units produced and gifted by Nils Alwall of Sweden to 5 different centers in the world. The dialysis system—artificial kidney as it is popularly known—was set up in 1962 with the collaboration of municipal engineers and the institution was the first to set up

a dialysis unit in Bombay. With another grant from the Rockefeller Foundation in 1964, a Sweden Freezer Seattle System was added to the dialysis section.

Making of the Largest Orthopedic Center in the Country

In 1964, the department gained further in strength with the addition of the Seth Dhurmal Bajaj Orthopedic Center, an independent building opposite Tata Memorial Hospital. It housed not only the wards for In-Patients, but also the operating theaters, emergency services and the outpatient department, as well as the first physiotherapy and occupational therapy schools in the country. As is also reflected in the numbers in the tables above, the bed strength went up from 60 to 240, making it the largest orthopedic department in the country, as well as the single largest department in the hospital.

देख लूँ

तेरी आखों के नज़ारे देख लूँ
मेरे कुछ आँसू कँवारे देख लूँ |

देख लूँ दहलीज़ तेरे दिल की मैं,
राज़ कुछ मैं भी तुम्हारे देख लूँ |

रौशनी दामन छुपाये जाती हैं,
चाँद को छत पे उतारे देख लूँ |

देख लूँ तेरी अदा की मस्तियाँ,
तेरे गेसू मैं सवारे देख लूँ |

खूबियाँ ना हो के मुझमे अब कहीं
कम से कम मैं ऐब सारे देख लूँ |

देख ना पाया मैं रुख़सत की घड़ी,
गर्दिशो मे कुछ सितारे देख लूँ |

आजिज़ी में इश्क़ ये मुमकिन नहीं,
बस एक दफा तुझको पुकारे देख लूँ |

-AARADHYA KONDAWAR
II/I MBBS(2019 Batch)

ISHQ-E-MIA

नादान

बांधे होंगे पुल कई गैरों ने तेरी तारीफ़ो में,
मैंने तो शब्दों में तेरे अक्स को पिरोया है।

मुद्दते बीत गई तुझसे मुलाक़ात किये बिना,
इस सहरा में तेरी यादों ने मुझे बरसात-सा भिगोया है।

कुछ अनकही बातें है, कुछ अधूरी मुलाकातें है,
कभी तो मुकम्मल होगी ऐसा एक सपना भी संजोया है।

नींद नहीं आती थी जब तक हाल नहीं पूछ लेती थी वह मेरा,
आज मैं जाग रहा हूँ रातों को पर वह शख्स सुकून से सोया है।

शायरियाँ मेरी पढ़कर अक्सर मुझसे पूछते हैं लोग,
"पासी कौन है वह नादान जिसने तुझको खोया है?"

-SHUBHAM PASI
Intern(2016 Batch)

27

Decadal Report (1966–1975)

Between 1965 and 1975, KEM Hospital and GS Medical College stood at the front lines of health crises in the city of Mumbai. From labor strikes in the city to the war with Pakistan in 1965 to the Emergency being declared in 1975, the twin institutions constantly provided healthcare to the working class and marginalized population while continuing to maintain high standards of research and cutting-edge medical technology. The 1960s and 70s also saw a rapid population growth in India which further strained resources and infrastructure. KEM Hospital's response through Dr D.N. Pai, Head of the Department of Preventive and Social Medicine (who became the Director of Family Planning), was a creative government program that was carefully planned and implemented by the Government of Bombay. From performing the first human heart transplant in India to Kiil dialyzers being brought into the Department of Nephrology to accolades like Padma Shree and Padma Bhushan being granted to stalwarts like Dr D.N. Pai and Dr P.K. Sen, this was a significant decade for the twin institutions. Several new specialties like that of Neonatology, Nuclear Medicine, and Sports Medicine came into being during this decade. The decade ended with the celebration of the Golden Jubilee of the twin institutions. Three Deans oversaw this decade, namely - Dr S.V. Joglekar, Dr T.H. Rindani, and Dr C.K. Deshpande.

Vital Statistics

	1966	1967	1968	1969	1970
Schedule Strength of Beds	1,113	1,179	1,187	1,232	1,333
Daily Average No. of Indoor Patients	1,436	1,565	1,667	1,826	1,798
Total Number of In-Patients treated during the year	53,335	52,629	57,989	61,011	60,761
Total No. of Outdoor Patients treated during the year	6,86,064	6,78,973	7,04,428	6,71,070	7,17,150
Daily Average No. of Out-Patients Attendance	2,250	2,230	2,690	2,207	2,351
Total No. of New OPD Patients treated during the year	3,19,476	3,14,901	3,42,112	3,45,096	3,66,994
Daily Average No. of New OPD Attendance	1,047	1,031	1,118	1,135	1,203
Expenditure Annually	75,79,125	1,11,73,658	1,26,65,897	1,55,44,106	1,77,43,760
Average Cost per In-Patient per day (Rupee:Paisa)	14:39	15:67	15:71	18:47	19:46
Average Cost per O.P attendance (Rupee:Paisa)	2:84	3:42	3:60	5:69	6:64

		1966	1967	1968	1969	1970
Total No. of Attending in School Clinic		2,261	1,609	1,684	2,239	1,825
Total No. of Indoor Operations		19,176	22,289	22,512	24,411	25,849
Total No. of OPD Operations		35,131	40,387	40,119	41,292	45,209
Skiagram of No. of patients		-	-	-	-	-
Fluoroscopic examination of No. of patients		-	-	-	-	-
No. of Patients treated in El. Therapy Department		-	-	-	-	-
Electro Cardio Grams		-	-	-	-	-
Clinical Lab Investigations		-	-	-	-	-
Blood Bank Account	**Samples Collected**	-	-	-	-	-
	Samples Issued	-	-	-	-	-
Total No. of Nurses		-	-	-	-	-
Cost per nurse per month (Rupee:Paisa)		-	178:25	234:07	284:98	272:14

	1971	1972	1973	1974	1975
Schedule Strength of Beds	1,450	1,450	1,450	1,450	1,450
Daily Average No. of Indoor Patients	1,847	1,791	1,698	1,709	1,904
Total No. of In-Patients treated during the year	60,079	60,930	-	-	-
Total No. of Outdoor Patients treated during the year	7,55,180	7,52,098	-	-	-
Daily Average No. of Out-Patients Attendance	2,476	2,466	2,778	2,740	3,041
Total No. of New OPD Patients treated during the year	3,78,015	3,78,013	3,73,902	3,76,090	4,17,178
Daily Average No. of New OPD Attendance	1,240	1,292	1,225	1,233	1,369
Expenditure Annually	1,95,52,219	2,07,34,830	2,23,10,407	2,90,59,336	3,39,04,413
Average cost per In-Patient per day (Rupee:Paisa)	24:34	26:64	29:04	33:64	37:53
Average cost per O.P attendance (Rupee:Paisa)	4:21	9:27	11:47	7:35	8:13
Total Number of Attending in School Clinic	2,189	2,047	2,248	2,636	2,429
Total Number of Indoor Operations	26,331	27,239	27,936	28,451	31,070
Total Number of OPD Operations	42,879	47,371	72,086	67,559	51,429
Skiagram of No. of Patients	-	-	-	-	-

		1971	1972	1973	1974	1975
Fluoroscopic examination of No. Of patients		-	-	-	-	-
No. of Patients treated in El. Therapy Department		-	-	-	-	-
Electro Cardio Grams		-	-	-	-	-
Clinical Lab Investigations		-	-	-	-	-
Blood Bank Account	**Samples Collected**	-	-	-	-	-
	Samples Issued	-	-	-	-	-
Total No. of Nurses		-	-	-	-	-
Cost per nurse per month (Rupee:Paisa)		342:65	343:33	-	-	-

Vital Statistics for the Hospital (1966–75)

- The beds increased from 1,113 to 1,450 from 1966 to 1971 and then stayed the same till the end of the decade.
- The daily average number of indoor patients increased from 1,436 to 1,904 during this decade although this increase was not linear. The same was the case with the daily average number of Out-Patients attendance which went from 2,250 to 3,041 during this decade although in 1969, this number was lowest at 2,207.
- The total number of new OPD patients treated annually also increased by almost a lakh during this period. By 1975, 4 lac new OPD patients were entering the hospital every year. Subsequently, the daily average OPD attendance also increased by more than 300 patients per day from 1,047 to 1,369.
- There was a gigantic increase in the expenditure by almost 5 times, from almost 76 lakhs in 1966 to more than 3 crores in 1975.
- The average cost per In-Patient has more than doubled during this decade, from 14 rupees to 37 rupees and the average cost per O.P. attendance increased from almost 3 rupees to 8 rupees.
- The total number of attending in school clinic have been stable during this decade and oscillated at around 2,000 children every year.
- The total number of indoor operations every year has almost doubled during this decade from 19,000 to 31,000.
- The total number of OPD operations every year reached a high in 1973 with 72,000 operations happening during the year, but overall too there has been an increase in the OPD operations from around 31,000 operations happening in 1966 to more than 50,000 operations happening in 1975.

		1966	1967	1968	1969	1970
Fresh Admissions		160	160	160	160	160
Undergraduate Students	**Male**	428	428	436	540	527
	Female	409	409	408	444	356
	Total	837	837	844	984	883
Postgraduate Students		277	277	323	500	432
Total Students		1114	1114	1167	1084	1315
Total Amount of Expenditure (Rs.)		19,41,216	22,43,168	22,59,941	25,53,305	27,25,016
Gross Cost per student (Rs.)		2,472.95	2,013.62	1,936.54	1,720.62	2,072.26
Net Cost per student (Rs.)		1,742.56	1,625.37	1,549.96	1,380.31	1,753.21

		1971	1972	1973	1974	1975
Fresh Admissions		160	160	158	178	258
Undergraduate Students	**Male**	520	693	655	680	625
	Female	339	460	333	348	368
	Total	859	1,153	988	1,028	993
Postgraduate Students		478	561	716	661	693
Total Students		1,337	1,714	1,704	1,689	1,686
Total Amount of Expenditure		27,26,500	29,59,209	-	-	-
Gross Cost per student (Rs.)		2,054.63	1,696.79	-	-	-
Net Cost per student (Rs.)		1,722.64	1,424.24	-	-	-

Vital Statistics for the Medical College (1966–75)

- In 1975, the Fresh Admissions spiked from 160 at the start of the decade to 258.
- The undergraduate male students increased by a higher number while the number of undergraduate female students stayed the same or even went down in some years.
- The number of postgraduate students increased from 277 to 693 by the end of this decade.

Infrastructure Added During the Decade

1966 CVTC Building

1967 2nd Floor constructed over radiology department

1971 New RMO Quarters

1975 Ophthalmology seminar hall

Expansion of Departments During the Decade

1966 Intensive Cardiac Care Unit

1967 Epilepsy Clinic

1968 Andrology Unit

1969 Pediatric Rheumatology Clinic

1970 Neonatal Care Unit

1971 Pediatric Nephrology

Rheumatology Clinic

Nuclear Medicine

1972 Sports Clinic

1973 Surgical Intensive Care Unit

1974 Tumor Clinic

How Departments Grew During the Decade

Department of Anesthesia: M.D. in Anaesthesiology started in 1968. Dr V.M. Divekar, Dr Deval, and Dr Parekh represented the first batch to receive this degree in anaesthesiology. Dr A.J. Dhruva became the first Professor to head the full-time department of anaesthesiology in India. Dr A.J. Dhruva was Professor and Head of Department from 1963 to 1973. He studies the effect of deep hypothermia on various body functions. When the cardiovascular center started functioning, the post of professor of cardiovascular anesthesia was created in 1966 and Dr M.M. Bhatt was appointed as the first Professor of cardiovascular and thoracic anesthesia. This was the first of its kind in India. She was a team member of the very first heart transplant which was performed in KEM Hospital. The first Maharashtra State Conference on Anesthesia was held at the KEM Hospital.

Department of Cardiology: Dr K.K. Datey started the first Indian Intensive Coronary Care Unit (ICCU) in the side room of Ward IX in 1966. The ICCU was supported by a facility for cardiac biochemical investigations.

Department of Cardiovascular and Thoracic Surgery: The CVTS activities were restricted to the TST and Ward 23 in the main hospital building with only one operation theater and 14 beds allocated for the specialty until 1966. In that year, a new edifice was dedicated to the cardiac and thoracic specialties, in the form of the CVTC Building. There were now 60 beds and two operation theaters dedicated only to CVTS. The Department grew rapidly from there on with several energetic, dedicated, and eminent surgeons like Dr G.B. Parulkar, Dr Sharad Panday, Dr A.P. Chaukar, and Dr S.S. Bhattacharya.

Department of Chest Medicine: This Department was established in the year 1967 by a very eminent teacher Dr S.D. Store. He started the OPD in January 1967 and the indoor services were established in September 1967. One of the indelible impressions as quoted by his students is "chest medicine is a service-oriented specialty catering to the underprivileged and the poor and may be unglamorous, choose it only if you like it. It takes more heart to be a good chest specialist." Dr S.R. Kamat, who took over this department in 1973, carved a niche for the specialty of chest medicine. Intensive respiratory care unit was established in 1975 with 2 pressure cycled ventilators.

Department of Forensic Medicine & Toxicology: In August 1970, Dr Tembe was appointed full-time lecturer and promoted

in 1975 as an Associate Professor and Head of Department. He was first employed as a laboratory attendant in this institution to Associate Professor, head of Department of Forensic Medicine and first Vice Principal of Krishna Medical College, Karad.

Department of Gastroenterology: Dr B.D. Pimparkar, who took over the Gastroenterology Clinic in 1967 on the previous head and founder of the Department, Prof. Raghavan's retirement, carried his interest in peptic ulcer disease forward. Dr Pimparkar, who had trained with the father of gastroenterology, Dr Henry C. Bockus, pursued his interest in clinical research, with work on gastric acid secretion and malabsorption syndrome. For this purpose, he had access to a dedicated research laboratory in the Department of Medicine and had six beds allotted separately to him for clinical services.

Department of Neonatology: Before a separate neonatal care unit next to postnatal wards was established in 1970 (with 10 cribs, 2 incubators, phototherapy units, and separate nurses), the pediatric department took charge of normal neonates.

Department of Nephrology: Kiil dialyzers arrived in 1967 making the procedure of hemodialysis less cumbersome, easier and smoother. A second cadaver transplant followed in April 1966—the condition on this occasion being chronic renal failure. The late Dr P.V. Cherian, the then Governor of Maharashtra, breaking all protocol, came unannounced to the department. He liked what he saw and complimented the staff of the Dialysis unit. His visit sparked an interest in the unit which then started receiving demands from VIP patients. This forced the administration to make more space available. The Cardiology Lab and the Animal House were shifted out and by 1973, an air-conditioned area became available for patients needing observation and close monitoring. The visit also set in motion the formation of the Dr P.V. Cherian Trust, set up to make facilities available to needy patients.

Department of Nursing: In 1974, Sister Tutor V. Shapurkar was the first to be deputed for masters in nursing at CMC College of Nursing, Vellore, and she specialized in pediatric nursing. On 28th November 1973, the darkest day in the history of the hospital, a young staff nurse, Aruna Shanbhag, was assaulted. Till 2015, she was in a vegetative stage but in spite of being bedridden for 37 years, she experienced not one bedsore as she was taken care of by the entire nursing staff. Her funeral was performed by the hospital nurses and other staff members.

Department of Obstetrics and Gynecology: The postpartum program started in November 1970.

Department of Occupational Therapy: Prof. M.M. Shahani was responsible for taking Occupational Therapy education to the realms of university and started first Bachelors education program at Bombay University in the year 1967.

Department of Pathology: Dr S.M. Sant became head of the Pathology department in 1972. She studied the effect of snake venom in kidney and brain autopsy tissue of human beings, as well as on experimental animals. The department of neuropathology had started functioning as

a part of the pathology department under the charge of Dr D.H. Deshpande in 1973. The Blood Bank had completely switched over to voluntary blood collection in 1975. Work in the area of immunology was started at the CVTC Laboratory in 1968, with the help of ICMR grants. During the period 1968 to 1976, work was mainly oriented towards transplant immunology.

Department of Pediatrics: In 1967, a third unit was added and the bed strength of the department was increased from 48 to 72 beds. In 1968, took over the responsibility of all newborns delivered at the KEM Hospital which was then given to the Neonatal Care Unit in 1970. Infants born in KEM Hospital are followed up in a Well Baby Clinic since 1970.

Department of Pediatric Surgery: Pediatric surgical patients were treated by general surgeons before 1967. Each of the six surgical units had four pediatric beds. During the tenure of Dr R.K. Gandhi, honorary lecturer in pediatric surgery, the pediatric surgical beds were removed from general surgeons and a full-fledged pediatric surgical department was formed in 1967. In 1968, the department was shifted to the gynecology-obstetric block. Dr Gandhi was promoted as professor and head. The department had, in addition, a full-time assistant professor, senior registrar, two registrars and two house surgeons. There was no separate operation theater and operations were carried out in the general surgical theater. The University of Mumbai was then approached for a separate MCh degree in Pediatric Surgery in 1969. This was sanctioned in 1972 when the first batch of students was admitted.

Department of Physiotherapy: The Diploma course was revised in 1967 to a year degree course.

Department of Plastic Surgery: In 1968, a surgical technique for the treatment of trismus in sub-mucous fibrosis was developed by Dr K.S. Goleria, an ENT surgeon who had received his training in plastic surgery from Sir Harold Delf Gillies (Father of Modern Plastic Surgery). Trismus was released and the defect was covered with a skin graft taken from the thigh. Dr Goleria was appointed as the Honorary Professor and Head of Department after the untimely death of Dr Pinto in September 1970.

Department of Preventive and Social Medicine: The first national conference of Indian Association of Preventive and Social Medicine was organized in 1972. With the advent of the Dr J.B. Shrivastava Committee Report in 1974, the subject of preventive and social medicine gained further recognition. It became mandatory for every medical college to develop a field practice area of community-oriented teaching.

Department of Psychiatry: Modified electroconvulsive therapy (ECT) with pentothal anesthesia and scoline muscle relaxation was regularly practiced from 1970.

Department of Radiology: The diploma course in Medical Radiology and Electrology, which was introduced by the University of Bombay in 1949, was split into two separate diplomas DMRD (for diagnostic radiology) and DMRT (for therapeutic radiology) in 1966–67. The MD degree course in Radiology was also started around this time but it was combined for diagnosis and therapy. In 1966, an image intensifier with a TV Monitor (the first in the BMC) and a 16

mm cineradiography camera were added to the angiographic set up. And then the life became a bit more comfortable doing the fluoroscopic work of catheterization. Before this, it was all dark room fluoroscopy. Dr Dara Kooka, a vascular radiologist, who went on to do pioneering work in interventional radiology, joined the department initially as a tutor in 1973 and then as an assistant professor in 1975.

Department of Surgery: The department conducted the first liver transplant in India in 1968. Dr A.B. Samsi and Dr Bapat established the first sports medicine services in 1973.

Milestones of the Decade

1966 Cardiovascular Thoracic Center started
School Health Clinic started
First ICCU in India
D.M.R.D., D.M.R.T. and M.D. Radiology started
Image intensifier with T.V. monitor installed in radiology

1967 PFT started
3rd Pediatric Unit started
Chest Ward started
BSc OT & PT started
Kiil dialyzer arrived

1968 Pediatric surgery ward started in obstetrics-gynecology building
Neonates totally under the care of the pediatric department
First Liver Transplantation in India
M.D. Anesthesia started
World's 5th and 6th heart transplants

1969 Staff Society took over Journal of Postgraduate Medicine
Padma Bhushan to Dr P.K. Sen

1970 Postpartum Program started
Well Baby Clinic started
CVTS Radiology shifted to CVTC
Neonatal Care Unit started

1971 Endocrine unit started
NSS started

1972 Arthritis Clinic started
Modern blood gas equipment operational
MCh Pediatric Surgery started

1973 Hiking Department added to gymkhana

1974 CR Elections started

1975 Cancer investigation and immunology laboratory started
Micro ear surgery workshops started
OT/PT 3.5 year course
'High Risk New Born' OPD started

Significant Developments

Additional Responsibilities and Decentralization for Medical Record Department: In 1969, the Medical Record Department and additional responsibilities were given to the department, which included Medicolegal cases, i.e., deputing doctors to represent in the courts. The medical certificate was issued by Medical Record Department. In 1970, due to heavy load of patients registration department was decentralized, i.e., separate registration counters were provided for Orthopedic and CVTC section. Due to the success in decentralization in Registration department, some other departments were also decentralized.

Staff Society taking charge of the Journal of Postgraduate Medicine: Before 1969, the Journal and its editorial board was an

autonomous body which was then handed over to Staff Society to regularize its issues and help make it a premier journal of the country.

New RMO Quarters: In 1971, the new RMO quarters was a five-story building with 75 rooms, a parking lot, and 2 recreation rooms on the ground floor.

Illustrious Achievements of the Decade

Padma Bhushan to Dr P.K. Sen

The world's 5th and 6th heart transplants have been recorded at the KEM Hospital in 1968. In the absence of a law on brain death in those days, the results were poor as the donor hearts could be harvested only after the heart had ceased to beat. This obviously was a setback to the program. But, Dr P.K. Sen's contributions were richly rewarded when he was awarded the Padma Bhushan in 1969. He was the recipient of the Dr B.C. Roy Oration and the Nilratan Sircar Oration in the same year.

Padma Shree to Dr D.N. Pai

In 1966, the country was plagued with the problem of population explosion. Dr D.N. Pai was requested by the Municipal Commissioner to take additional charge as Director of Family Planning. His careful planning inspired implementation and commitment to the family planning program and brought Bombay to the limelight not only in India but also in the rest of the world. Conventionalist looked on in disbelief as vasectomies were performed on railway platforms, condoms were distributed at all vantage points and loops inserted in mobile vans. All this proved to be a great success as was indicated by a fall in birth rate. This program earned Dr Pai the prestigious Padma Shree Award from the Government of India.

SPORTS ACHIEVEMENTS

Seth GSMC Cricket Team. Runners Up at ' Mahayuddha 2020 ' Cricket Tournament organized by TNMC Students' Gymkhana.

28

Decadal Report (1976–1985)

During this period, India, including Bombay, saw significant shifts in governance, social movements, economic challenges, and cultural transformation. From the state of emergency in 1975 till 1977, to growing regional political parties to the liberalization of the economy in the 1980s, the country and its microcosm, the city of Bombay, were in a state of flux. This shows in the numbers below. The number of In-Patients and Out-Patients, and especially emergency cases, have been really high during the Emergency years. Even though the only infrastructure that had been added during this decade was the new library building, the departments have steadily branched out into super-specialties such as urology, gastroenterology, sexual medicine, and pediatric chest clinic. KEM Hospital was a pioneering force in pediatric surgery and sexual medicine and it was at the forefront of both political crises as well as cutting-edge technological development. By setting up the model Malvani Urban Health Center and the Plasma Fractionation Center, the twin institutions left an indelible mark on the history of public health in not only Mumbai but also Asia. The 12-bedded burns ward for adult female patients shows KEM Hospital's responsiveness to the social context and the desire to make an impact on the oppressed population of the country. During this tenuous period, Dr C.K. Deshpande was steering the ship delicately and strategically as the Dean of the Hospital and Medical College. Dr G.B. Parulkar inherited this massive responsibility from him in 1984.

Vital Statistics

	1976	1977	1978	1979	1980
Schedule Strength of Beds	1,450	1,450	1,450	1,450	1,595
Expenditure on In-Patient	3,12,93,156	3,63,34,923	3,53,51,506	3,75,21,871	4,16,75,160
Expenditure on Out-Patient	48,13,377	87,77,762	63,30,937	72,51,143	96,66,154
Cost of In-Patient per day	42.3	50.43	54.47	55.47	63.12
Cost of Out-Patient per day	5.16	9.46	6.88	8.05	10.77
Daily Average In-Patients in wards	1,947	1,904	1,778	1,808	1,672
Average stay of In-Patients (in days)	11.7	11.05	10.86	11.57	11.37
Out-Patient New & Old	9,32,028	9,27,803	9,19,681	9,18,830	8,96,697
Major Operations	36,015	35,985	23,235	23,631	29,792
Minor Operations	57,471	55,741	30,902	26,572	23,901

		1976	1977	1978	1979	1980
Booked Cases		6,240	6,623	3,992	3,992	4,127
Emergency Cases		3,421	3,820	507	508	448
Open Heart Surgery		246	122	304	458	417
Other Operations		1,017	140	682	521	657
Daily Average No. of Out-Patients attendance		3,056	3,042	3,015	2,517	2,457
Total No. of New Out-Patients treated during the year		4,28,248	4,01,273	4,00,095	3,83,559	3,69,568
Daily Average No. of New O.P.D. Attendance		1,404	1,316	1,311	1,050	1,013
Total No. of Attending in School Clinic		1,988	1,828	2,407	2,109	2,361
Students	**Male**	693	694	819	721	706
	Female	335	348	503	456	503
Fresh Admissions		160	160	161	159	160
Postgraduate Students		678	561	670	495	617
Total Students		1,706	1,603	1,992	1,672	1,826

	1981	1982	1983	1984	1985
Schedule Strength of Beds	1,595	1,595	1,615	1,615	1,615
Expenditure on In-Patient	4,59,93,887	5,12,16,445	5,20,85,670	5,05,17,253	6,10,67,101
Expenditure on Out-Patient	1,16,02,214	1,38,75,924	1,45,77,234	1,63,12,935	2,10,10,457
Cost of In-Patient per day	70.69	85.58	82.71	112.26	113.05
Cost of Out-Patient per day	13.31	21.17	37.18	24.05	19.17
Daily Average In-Patients in wards	1,683	1,576	1,615	1,614	1,599
Average stay of In-Patients (in days)	-	11.44	11.17	11	11.5
Out-Patient New & Old	8,80,029	6,93,225	6,74,480	6,65,449	9,41,747
Major Operations	17,790	16,700	18,294	16,921	17,769
Minor Operations	41,806	31,895	32,075	28,710	32,218
Booked Cases	-	3,616	3,597	3,370	3,568
Emergency Cases	-	277	278	372	180
Open Heart Surgery	-	535	510	623	606
Other Operations	-	462	452	350	419
Daily Average No. of Out-Patients attendance	-	1,899	1,849	2,196	3,087

		1981	1982	1983	1984	1985
Total No. of New Out-Patients treated during the year		-	2,78,640	2,68,209	2,49,220	2,84,295
Daily Average No. of New O.P.D. Attendance		-	764	735	823	932
Total No. of Attending in School Clinic		-	1,932	2,640	1,690	2,100
Students	**Male**	-	639	567	594	587
	Female	-	526	518	550	629
Fresh Admissions		-	160	161	199	200
Postgraduate Students		-	620	681	567	710
Total Students		-	1,785	1,766	1,711	1,926

Vital Statistics for the Hospital (1976–85)

- The bed strength increased from 1,450 to 1,615 during this decade.
- The expenditure on In-Patients doubled from 3 crores to 6 crores during this decade and the per-day cost also increased by almost 3 times by the end of the decade and went from Rs. 42 to Rs. 113.
- The expenditure on Out-Patients increased by more than 5 times from 48 lacs to more than 2 crores and the per-day cost of an Out-Patient was Rs. 5 in 1976 and it peaked at Rs. 37 in 1983 after which it went down Rs. 19 by the end of the decade.
- The daily average In-Patients in wards remained consistent in the range of 1,500 to 1,900 throughout the decade as did the average stay of a patient which was around 11 days the entire decade.
- The Out-Patients (old and new) kept going down from 9 lacs to 5 lacs over the decade but there was a sudden spike in 1985 when the number went back to being 9 lacs. The daily average number of new O.P.D. attendance also went down from 1,404 in 1976 to 735 in 1983 which was the decade's low.
- The major operations that happen annually also come down during this decade from 36 thousand to almost 18 thousand by the end of the decade. The same trend is also visible in the minor operations which come down from 57 thousand to 32 thousand.
- The emergency cases fluctuated from being in three thousands in 1976 and 1977 to 180 in 1985.
- The open heart surgeries tripled from 246 in 1976 to 606 in 1985.

Vital Statistics for the Medical College (1976–85)

The number of female students increased during this decade and at the end of the decade, in 1985, the number of female students (629) is more than the number of male students (587).

Infrastructure Added During the Decade

1983 New Library Building

Expansion of Departments During the Decade

1976	Molecular biology
1977	Cardiology
1978	Urology
	Microbiology
1979	Pediatric Chest Clinic
	Puberty and growth clinic
1982	Sexual Medicine
	Gastroenterology
1983	Endocrinology
1985	Neonatology (as a Division)

How Departments Grew During the Decade

Department of Anaesthesiology: Dr A.J. Dhruva, the head of department from 1963 to 1973, became the president of the Indian Society of Anaesthesiology in 1976. The All India Annual ISA Conference in 1985 was successfully held at the KEM Hospital with a large attendance.

Department of Cardiovascular and Thoracic Surgery: Since 1975, there has been a phenomenal increase in work output. Unlike many other teaching institutions, the Department has had a significant load of thoracic and vascular cases making the training program very comprehensive. The surgical excellence of the department attracted patients from the rest of Maharashtra as also from all over the country and a few from neighboring countries. The pursuit of professional excellence did not come in the way of fulfilling the community obligations of the Department. Dr R. Magotra and Dr A.G. Tendolkar conducted camps at Amravati and Bidada (Kutch) beginning in 1982–83. In the field of education, the department not only trains the postgraduate students to become cardiovascular and thoracic surgeons but also trains science graduates in extracorporeal technology, by running a one-year course in the department beginning from 1985.

Department of Chest Medicine: This department was recognized by University of Mumbai for postgraduate degree in 1976. Permanent network of air quality monitoring cells was established in 1977. Fiberoptic bronchoscopy services were started in 1980. Indian Chest Society, a major national body was formed in 1981 which held three national conferences in Mumbai. A collaborative project with chest medicine and city Hospital Edinburgh and institute of occupational medicine on in-depth study of chronic bronchitis was conducted during 1983-86. Under this scheme on foreign exchange program, stalwarts in chest medicine Prof. Flenley and Dr Michael Sadlow visited the department.

Department of Ear, Nose, Throat, and Head-Neck Surgery: Dr S.R. Rege, Dr P.P. Karnik, and Dr K.L. Shah began cadaveric temporal bone and micro ear surgery workshops in 1976 for the first time in India.

Department of Endocrinology: In 1979, the Diabetes and Endocrinology clinics were combined into the "Division of Endocrinology and Metabolic Disorders". Dr Bhandarkar, Hon. Physician, was appointed in charge of the Division. In 1979, "Puberty and Growth Clinic" was added to the activities of the Department. In 1980, the Division was given 13 more beds, bringing the total to 25 beds,

with the specific purpose of making it possible to seek recognition for a DM in Endocrinology. In 1981, the Division was recognized provisionally by the National Board of Examinations to enroll Postgraduate students for MNAMS (Endocrinology). In 1983, the Division was recognized by the University of Bombay to enroll students for DM in Endocrinology.

Department of Gastroenterology: Dr B.D. Pimparkar, who had taken over the Gastroenterology Clinic in 1967, became the President of the Indian Society of Gastroenterology (ISG) in 1979-80. An autonomous Division of Gastroenterology, with its own full-time staff and beds and funding, took shape under Dr Subhash R. Naik in 1982. He took over from Dr Pimparkar, who had retired the previous year. Dr Naik set up a fully-equipped endoscopy unit, along with the Gastroenterology surgeon. The only internationally indexed national journal of Gastroenterology, the Indian Journal of Gastroenterology (official organ of the Indian Society of Gastroenterology), was started from Bombay in 1982. Dr Naik became its Associate Editor soon after.

Department of Hematology: The Department was named after Dr J.C. Patel in 1977.

Department of Medicine: The Department of Cardiology was born out of this parent department in 1977. Dr K.G. Nair, the then HoD of Medicine, separated to hold the throne.

Department of Microbiology: The ever-increasing plethora of infections and the need for better diagnosis and clinical correlation necessitated an independent status to clinical microbiology. Molecular Biology existed as a separate entity and was established as a research laboratory in 1976. The date of this department's birth is January 1980 with the Medical Council of India serving as the Consultant Obstetrician and the Departments of Pathology and Bacteriology being the two parents. The first guardian or head of this department was Dr V.V. Kale in 1980, followed by Dr Geeta Bhave in 1982. Dr V.V. Kale's area of interest was Clinical Bacteriology, and under his guidance, a full-fledged bacteriology laboratory was set up. In its initial phases, the department, which was situated in the college building, first and second floor of the autopsy building, had facilities for bacteriology and serology only. The department was the first amongst the teaching institutes in Mumbai to introduce emergency clinical microbiology laboratory services in 1984.

Department of Neonatology: In 1977–78, high-risk newborn OPD Services started for follow-up of nursery graduates.

Department of Nephrology: The Division of Nephrology was recognized by the Academy of Medical Sciences and by the National Board of Examinations for imparting specialized training in Nephrology in the year 1977.

Department of Nursing: A pediatric nursing course was conducted by the Hospital and Medical College in 1981.

Department of Occupational Therapy: Prof. M.M. Shahani started a Masters' Program in Occupational Therapy in 1980 at Bombay University. She worked as a Dean of the Academic Council of All India Occupational Therapist's Association

and was responsible for uniformity of Occupational Therapy education in India. Her vision enhanced development of OT Departments in different states of India. She encouraged and guided research work in the field of Occupational Therapy. She was awarded Fellow of the Academic Council by All India Occupational Therapist Association in 1983.

Department of Ophthalmology: In 1977, construction was carried out on the terrace block adjoining the operation theater and the ophthalmic library/ ophthalmic seminar hall along with an additional ward for retinal detachment and keratoplasty were planned. This was possible due to the generous donation by Dr D.G. Mody in memory of his late father Dr G.T. Mody. Since 1978, the ophthalmic seminar hall has been used for taking lectures/clinics for undergraduate and postgraduate students of ophthalmology. Dr S.D. Adrianwalla was the first to introduce in KEM Hospital the use of superior rectus transplantation for treatment of cases of bilateral ptosis with poor levator action in 1982. Dr R.P. Jehangir was the first to introduce microsurgery in KEM Hospital and performed the first micro-surgical post-chamber IOL implantation in the Department of Ophthalmology at KEM Hospital in 1983. He was also the first to introduce the microsurgical use of pars plana vitrectomy with silicon oil injection for advanced retinal detachment and for intraocular foreign body removal in 1984.

Department of Pathology: The "Shri Madhukar B. Madgaonkar Cancer Investigation and Immunology Laboratory" was established in 1976 with a donation from the Madgaonkar Trust. In 1978, the departments of pathology and microbiology were separated and Dr S.G. Kinare, the renowned cardiac pathologist, took charge as head of department. Under her leadership, the cardiothoracic pathology section, the first of its kind in India, was started which was used by postgraduates from cardiothoracic surgery, cardiology, and pathology to improve their academic skills. Her dedicated work on aorto-arteritis, congenital heart disease and acute rheumatic heart disease in the Indian context was recognized at the national and international levels. Dr Sita Naik, who joined as a Reader in the Department of Pathology in 1982, firmly established the techniques of cellular immunity. The laboratory was chosen as one of the centers by ICMR to collect HLA antisera. Amongst the other studies conducted were investigation of neutrophil functions in acute rheumatic fever and immune responses to Hepatitis B vaccine. The cytology section was started in 1981 and the credit for its development and progress goes to Dr Ajita Pandit, Professor, with full encouragement and guidance by Dr S.G. Kinare.

Department of Pediatrics: The bed strength of the department increased from 72 to 90 beds in 1976. The Pediatric Chest Clinic was set up by Dr M.D. Shah in 1979. This Clinic undertakes treatment for chronic chest ailments and also educates patients in home management and prevention of some common chest conditions like bronchial asthma, chronic lung disorders, etc. The Genetic Clinic and the Pediatric Research Laboratory were started in 1979 by Dr N.B. Kumta. Here, patients are investigated for the diagnosis of genetic and metabolic disorders and the clinic gets referrals from all over India.

Department of Pediatric Surgery: The department has organized many zonal, national, and international conferences including the World Congress of Pediatric Surgery in 1980. In 1982, a complete renovation of the department was undertaken. A separate twin theater block along with an 8-bedded intensive care unit for neonates was constructed and the entire block was centrally air-conditioned.

Department of Pharmacology and Therapeutics: Interactions with CDRI strengthened under Prof. Satoskar and several products were evaluated for them in close collaboration with clinicians. Among the products tested, the notable ones include centbutindole, centbucridine, centchroman, centperazine, and curcumin. The department started national training courses for clinical pharmacology sponsored by ICMR at this time. Dr S.M. Karandikar, the head of the Department from 1985–89, took training in computer applications in medicine in the UK in 1983 and the department was the first in the institute to acquire a PC. With the help of the British Council, two management programs for the hospital administrators were set up in the 1980s.

Department of Physiology: Dr Ramchandani, in 1980, as the head of the department acquired several new microscopes, bicycle ergograph, expirograph, ECG machines, peak flow meters, etc. so as to advance research and training.

Department of Physiotherapy: The Diploma course was upgraded in 1977 from a year degree course to a three years six months degree course. Postgraduate degree course, Master's in Physical Therapy was started in 1978.

Department of Plastic Surgery: Microvascular surgery was another leap towards progress and in 1979, an operating microscope was obtained due to the keen persuasion of Dr S.R. Tambwekar (Hon. Asst. Prof.) who received his training in microvascular surgery in Japan. This made free flaps and replantation surgeries possible. In 1980, part of the plastic surgery ward was converted to a 12-bedded burns unit for adult female patients with or below 50% burns. The aim was to do early grafting so as to prevent the development of deformities and contractures. From 1983, the field of Maxillofacial and Craniofacial surgery was slowly and steadily developing.

Department of Preventive and Social Medicine: With the acceptance of the Krishnan Committee Report by the Central Council of Health in 1985, revamping of the urban health infrastructure took place with the setting up of health posts. The faculty of preventive and social medicine had a key role in the practical training of outreach staff of the Public Health Department in basic concepts of community health.

Department of Psychiatry: Insulin sub-coma therapy was discontinued in 1980.

Department of Sexual Medicine: The department of sexual medicine was started in 1982, under the instructions of the Municipal Commissioner, Mr. S.S. Tinaikar. Initially, in the OPD, there were hardly 4 to 5 patients. In just a few months, the number multiplied to a total of over 50. The department was one of its kind catering to the needs of sexual disorders of the entire country. One department for 1 billion people.

Department of Skin and Venereal Diseases: From 1980 onwards, a number of revolutionary and innovative devices were added to the armamentarium of the skin department which greatly enhanced both the diagnostic and therapeutic modalities. For example, the Electrocautery machine, with its diverse utilities was acquired in 1980. In 1984, the tissue processor was obtained, thus making the department self-sufficient in the processing as well as reporting of the skin histopathology slides. Special staining technique was started. Also, in 1984, the first cryomachine was acquired to do painless minor procedures.

Department of Surgery: The Association of Surgeons of India Conference was held in 1982 and it was conducted by the Department of Surgery.

Department of Urology: It was in 1978 that urology was separated from general surgery and upgraded at the University of Bombay for the MCh degree. Dr D.K. Karanjawala was Hon. Professor and head then. He was awarded the Huntarian Oration for his contributions to urology and tropical urology in particular. Dr D.S. Pardanani took charge as the first full-time professor and head of recognized urology in 1980. He laid the sound foundation of this department and brought academic status at both national and international levels. Throughout his tenure, he made significant contributions to clinical research and performed dramatic operations with his surgical skills. The first operative workshop with live demonstrations was conducted in the department in September 1981 by Dr Pardanani and his team gave an excellent exposition of rare operative skills. This department was the first to start percutaneous renal surgery (PCNL). Dr S.V. Punekar, Associate Professor in urology was trained at the University of Minnesota and Mayo Clinic in 1984–85 and Dr M.K. Sobti was trained in Germany for PCNL and Ureteroscopy (URS). In May 1985, a live workshop was conducted on these techniques, again the first of its kind in India.

Milestones of the Decade

1978 Malvani (Field practice area for Preventive and Social Medicine) started
MCh Urology commenced

1979 Pediatric Research Laboratory started
USG in Radiology started
Plastic Surgery obtained operating microscope

1980 World Congress of Pediatric Surgery held at KEM Hospital
Electric cautery installed in Skin department
Burns Unit started

1982 Pediatric Surgery theater and intensive care unit started

1983 DM Endocrinology started

1984 KEM Hospital became the first teaching institute to start emergency clinical microbiology laboratory services
Dr M.D. Motashaw Renal Transplant and Research Unit started
Tissue Processor and Cryo started in Skin Department

1985 Library started a xeroxing facility.
Significant Developments

Blood Bank: From 1976 onwards, professional donors were completely eliminated. The gap between supply and

demand still remained. One of the ways of bridging this gap was the use of blood components instead of whole blood.

Gosumec Alumni Association: The association published its first newsletter in June, 1984. On 25th April, 1985, the association established the Dr R.B. Redkar Memorial Fund for awarding prizes to the Administrative Staff of Seth G.S. Medical College and KEM Hospital.

Library: In 1983, the Seth GSMC Library was shifted to a new, separate, centrally air-conditioned building. In 1985, a xeroxing facility was started in the library. This was essential because many rare books and latest editions of books are kept for reference only and are not allowed outside the library. Bound volumes are also allowed to be read in the premises only.

Illustrious Achievements of the Decade

Setting Up of the Malvani Urban Health Center

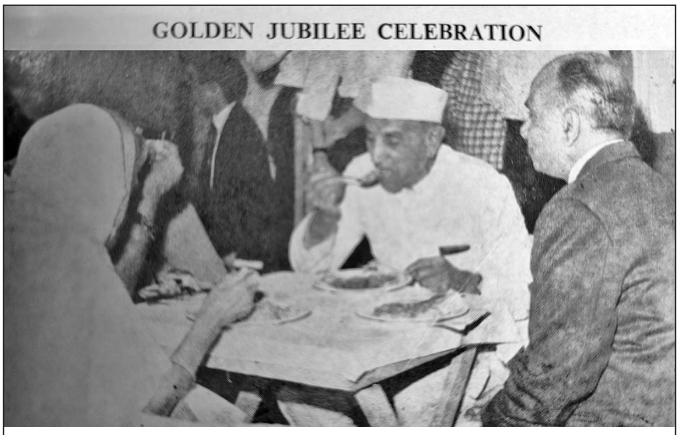
Following the J.B. Shrivastava Committee Report in 1974, the Comprehensive Health Services Program was started at Malvani, 33 km away from KEM, in the year 1978 under the guidance of Dr V.R. Bhalerao, who subsequently took over as Professor and Head in the year 1982. The full-fledged Urban Health Center was started at Malvani in 1980, which developed into a field practice area for not only SGSMC students but also nursing students from SNDT, RN Cooper, Bhagawati, and Harkisondas Hospitals. It has been the birth of the famous Child-to-Child program which is an activity-based health education program using school children as messengers of health. With its wide scope of services, the Urban Health Center at Malvani has become one of the highly acclaimed model urban health centers.

First National Plasma Fractionation Center in Asia

There was a long-felt need for safe plasma products in our country since most of the products were either imported or manufactured by private companies who were using professional donors' plasma for manufacturing the same. The quality control of the products was also questionable. In 1985, the Director General Health Services (Govt. of India) initiated the proposal for setting up a plasma fractionation plant on a non-profitable but self-financing basis. The Swedish International Development Agency (SIDA) was approached for support and establishment of the plant. The KEM Hospital Blood Bank was identified as an ideal place for setting up the first plant. The cost of the project then was 35 million rupees along with facilities for component preparation in the blood bank. The Bombay Municipal Corporation and the Ministry of Health, Govt. of India, provided the infrastructure. This was going to be the first plasma fractionation unit in Asia.

Dr. Khanolkar Felicitation at the University Hall

The Dean and Drs. Sheth, Parulekar and Nair with Christiaan Barnard



Dr Jivraj Mehta and Dean Dr CK Deshpande.

Golden Jubilee Celebration.

CHIEF MINISTER

MAHARASHTRA

Sachivalaya,
Bombay-32.BR.

December 22, 1975.

I am very happy to learn that the King Edward VII Memorial Hospital and the Seth Gordhandas Sunderdas Medical College have completed 50 years of their distinct existence and that a Golden Jubilee Souvenir is proposed to be brought out on this occasion.

The selfless service, the dedication and the inspiring work done by the pioneers who started these institutions is well known. These institutions were indeed fortunate to have a succession of distinguished administrators amongst whom Dr. Jivraj Mehta is to be specially mentioned. Thanks to them, the Medical College and the Hospital have attained, over a course of time, a national status of eminence both in the field of Medical Education and in specialised medical relief. The progress made by these institutions in the field of Cardiology and Cardiothoracic Surgery, Neurology and Nephrology is particularly noteworthy.

I am confident that the twin institutions would continue to flourish and serve the cause of humanity, medical education and research in years to come. My best wishes.

(S.B.CHAVAN)

Nanalal D. Mehta
MAYOR OF BOMBAY

CORPORATION HALL,
MAHAPALIKA MARG,
BOMBAY—400 001.

PHONES { 268251 CHAMBER
451323 BANGALOW

8 December 1975

I am happy to know that the King Edward VII Memorial Hospital and Seth Gordhandas Sunderdas Medical College have completed fifty years and are now celebrating the Golden Jubilee Year. These institutions have made pioneering work in the field of medical science and brought relief to the suffering humanity.

I am hopeful that they will continue to do further useful work.

Nanalal D. Mehta
Mayor of Bombay.

B. G. DESHMUKH
Municipal Commissioner

MUNICIPAL CORPORATION OF GREATER BOMBAY
बृहन्मुंबई महानगरपालिका

OFFICE OF THE
MUNICIPAL COMMISSIONER
BOMBAY

December 17, 1975.

MESSAGE

The Seth G.S. Medical College and the K.E.M. Hospital will conclude the year-long Golden Jubilee Celebrations in January, 1976.

Fifty years in the life of any institution is a glorious event. The Seth G.S. Medical College and the K.E.M. Hospital should feel proud of the fact that they were afforded the rare privilege of attending upon lakhs of patients and also to prepare doctors in various disciplines of medical science, most of whom, I have no doubt, have occupied eminent positions in our national life.

On an occasion like this, it is but natural that our hearts go to these medical men for their dedicated and humanitarian services to our community. I as the Chief Executive offer my heartiest greetings to the Dean, the doctors, nurses and other members of the staff and the students and wish them all the best in the years ahead.

May these twin institutions grow stronger and prove to be model medical institutions in our country.

(B.G. Deshmukh).

Information Adviser

प्रधान मंत्री सचिवालय
नई दिल्ली-११००११
PRIME MINISTER'S SECRETARIAT
NEW DELHI-110011

December 16, 1975

No. 14(11)/75-PMP.

Dear Sir,

The Prime Minister thanks you for your letter. She sends her good wishes for the success of the golden jubilee celebrations of the King Edward VII Memorial Hospital and Seth Gordhandas Sunderdas Medical College, which are being held from January 1975 to January 1976 in Bombay.

Yours faithfully,

(H.Y. Sharada Prasad)

Dr. C.K. Deshpande
Dean, Seth G.S. Medical College
Bombay 400012

ASSISTANT SECRETARY.

SECRETARY TO THE GOVERNOR MAHARASHTRA

No. GS— 3281

RAJ BHAVAN
Bombay-400 035.
3 December 1975.

Dear Dr. Deshpande,

Please refer to your letter of 25 November 1975 addressed to the Governor.

The Governor sends his good wishes for the success of the Golden Jubilee celebrations of the King Edward VII Memorial Hospital and Seth Gordhandas Sunderdas Medical College.

Yours sincerely,

(S.D. Sawant)

Dr. C.K. Deshpande,
Chairman,
Golden Jubilee Celebrations,
Seth G.S.Medical College and K.E.M.Hospital,
Bombay-400 012.

OFFICE OF THE MINISTER FOR
PUBLIC HEALTH, SOCIAL WELFARE
MAHARASHTRA STATE
Sachivalaya, ~~Bombay 400 032~~
Camp Office, Nagpur.1.
4th December 1975.

MESSAGE

I am glad to note that the K.E.M. Hospital and the G.S. Medical College are jointly celebrating their Golden Jubilee next month. I am pleased to know that a Souvenir is being published to commemmorate this important event.

Seth Gordhandas Sundardas Medical College has made significant contribution to the medical education during the last fifty years. So also the King Edward VII Memorial Hospital has rendered yeomen service to this metropolis during the last half country. Both these institutions have made their mark in medical field and I hope that they will carry on their good work with the same vigour in future also.

On this occasion I appeal to the hospital authorities and staff to pay sympathatic attention to the poor and needy patients and see that they get the treatment they need immediately. I request the college authorities to develop this humanitarian attitude in their students who would be taking to this noble profession after the completion of their medical course.

I wish all success to the Golden Jubilee Celebrations.

Pratibha Patil

(Smt. Pratibha Patil)

Secretary,
Golden Jubilee Celebrations,
Seth G.S.Medical College and
K.E.M. Hospital, Bombay-400 012.

सत्यमेव जयते

राष्ट्रपति भवन नई दिल्ली - 110004
RASHTRAPATI BHAVAN NEW DELHI 110004
INDIA

December 16, 1975.

I am glad to know that the Seth G.S. Medical College and the K.E.M. Hospital, Bombay, are celebrating their Golden Jubilee.

The Medical College and the Hospital have been rendering valuable service to the community ever since their inception and can look to their past record with a sense of gratification. I felicitate all those associated with the institutions and wish the Celebrations all success.

Fakhruddin Ali Ahmed

29

Decadal Report (1986–1995)

As the country slowly moved towards economic liberalization and the tough period of violence followed with riots in 1992 and bombings in 1993, the KEM Hospital and Seth G.S. Medical College responded to all that was happening in the city with resilience and innovation. As the twin institutions embraced the future by equipping itself with personal computers, facilities like MEDLINE, as well as a Medical Education Technology (MET) Cell, it also sought to provide cutting-edge care and treatment to the marginalized sections of the society in the form of the Diamond Jubilee Society Trust (DJST) and memorialize its roots and legacy in the form of the archives section—Janus. Even during this decade, the twin institutions managed to reach both the poorest person in the vicinity (through a separate Department of Social Services, De-Addiction Center, and AIDS Surveillance Center) as well as doctors and medical specialists abroad (by becoming a Center of Excellence in order to conduct a research study in urology). Dr G.B. Parulkar, originally Head of Cardiovascular Surgery, held the reins of the Hospital and the College from 1984 to 1989. From 1989 to 1999, Dr P.M. Pai led the hospital into the 21st century.

Vital Statistics

	1986	1987	1988	1989	1990
Schedule Strength of Beds	1,615	1,615	1,615	1,615	1,615
Expenditure on In-Patient	7,29,80,436	7,18,36,747	10,60,11,653	10,96,33,647	13,62,08,420
Expenditure on Out-Patient	2,45,75,682	2,77,17,663	4,63,81,135	2,90,54,973	4,62,10,091
Cost of In-Patient per day	127.7	151	230.16	231.27	225.13
Cost of Out-Patient per day	19.76	18.67	18.55	19.11	31.15
Daily Average In-Patients in wards	1,598	-	1,610	1,589	1,616
Average stay of In-Patients (in days)	10.02	9.71	9.44	9.5	9.14
Out-Patient New & Old	12,72,251	13,84,935	14,85,274	15,45,292	14,28,064
Major Operations	17,775	18,839	21,804	19,653	21,869
Minor Operations	33,337	33,058	34,829	37,795	35,517
Booked Cases	3,397	3,487	3,571	3,829	3,863
Emergency Cases	205	221	268	195	263

		1986	1987	1988	1989	1990
Open Heart Surgery		604	699	758	-	828
Other Operations		470	753	590	-	790
Daily Average No. of Out-Patients attendance		4,144	4,571	5,116	4,984	4,792
Total No. of New Out-Patients treated during the year		2,91,723	3,05,151	3,27,096	3,17,021	3,22,671
Daily Average No. of New O.P.D. Attendance		950	1,007	1,083	944	1,083
Total No. of Attending in School Clinic		2,481	2,843	2,963	3,023	3,219
Students	**Male**	542	528	452	660	556
	Female	686	687	453	973	796
Fresh Admissions		199	200	200	184	179
Postgraduate Students		692	614	-	500	617
Total Students		1,920	1,829	-	2,133	1,969

	1991	1992	1993	1994	1995
Schedule Strength of Beds	1800	1800	1800	1800	1800
Expenditure on In-Patient	15,44,54,651	18,64,77,675	22,45,24,281	26,54,22,752	24,45,80,229
Expenditure on Out-Patient	3,91,66,652	4,56,60,348	5,49,62,479	6,54,26,608	6,02,66,951
Cost of In-Patient per day	292.72	321.05	400.63	470.2	478.12
Cost of Out-Patient per day	32.25	31.58	33.97	40.2	37.94
Daily Average In-Patients in wards	1,500	1,604	1,485	1,555	1,800
Average stay of In-Patients (in days)	-	-	9.42	9.27	8.9
Out-Patient New & Old	12,41,876	14,73,522	15,11,864	16,01,041	16,27,342
Major Operations	21,100	22,650	22,922	22,932	21,563
Minor Operations	35,768	40,187	36,304	39,438	38,867
Booked Cases	3,868	4,302	3,729	4,226	4,536
Emergency Cases	299	284	321	469	469
Open Heart Surgery	680	699	674	728	630
Other Operations	622	814	536	695	511
Daily Average No. of Out-Patients attendance	4,139	4,914	5,056	5,391	5,479

		1991	1992	1993	1994	1995
Total No. of New Out-Patients treated during the year		3,11,495	3,80,343	4,05,424	4,37,114	4,43,287
Daily Average No. of New O.P.D. Attendance		1,038	1,276	1,356	1,472	-
Total No. of Attending in School Clinic		3,836	2,340	2,514	2,455	403
Students	**Male**	534	-	596	519	567
	Female	587	-	698	496	529
Fresh Admissions		180	-	180	176	180
Postgraduate Students		274	-	27	40	33
Total Students		1,395	-	1,321	1,055	1,129

Vital Statistics for the Hospital (1986–95)

- In 1991, around 200 beds were added to the schedule strength of beds and the total number rose to 1800 for the rest of the decade.
- The expenditure on In-Patients rose exponentially during the decade. The number tripled from 7 lakhs in 1986 to more than 26 lakhs in 1994. This is reflected in the cost of an In-Patient per day which quadrupled from Rs. 127 to Rs. 478 by the end of the decade. The same was the case with expenditure on Out-Patients which also tripled from 2.4 lakhs in 1986 to 6 lakhs in 1995.
- In 1990 and 1995, the daily average In-Patients in wards was the same as the scheduled bed strength which means that all the beds were full on an average day at the KEM Hospital.
- The number of major operations performed every year increased from almost 18,000 in 1986 to almost 23,000 in 1994. The number of minor operations too crossed 40,000 only in 1992 and otherwise stayed in the range of 33,000 to 39,000.
- The annual number of emergency cases increased from 205 in 1986 to 469 in 1995.
- The open heart surgeries performed every year remained consistent in the range of 600 to 800 every year.
- The total number of new Out-Patients treated during the year has increased from almost 3 lakhs in 1986 to 4.4 lakhs in 1995.
- The total number of attending in school clinic went up to almost 4,000 in 1991 but there was a major decline in 1995, the year when only 403 children were attending in school clinic.

Vital Statistics for the Medical College (1986–95)

- The female students were higher than the male students during almost the entire decade. In 1989, there were almost 973 female students and 660 male students.
- The fresh admissions stayed consistent throughout the decade in the range of 170–200 every year.

- The number of postgraduate students was in the 600s in the first half of the decade and this number significantly declined in the second half, especially in 1993, 1994 and 1995 when there were 27 to 40 postgraduate students. This also led to the total number of students coming down from around 2,100 in 1989 to 1,055 in 1994.

Infrastructure Added During the Decade

1990 Multi-Storeyed Building Inaugurated
Ladies' Hostel also at GTB Hospital

Expansion of Departments During the Decade

1993 Medical Neurological Intensive Care Unit
Social Service (separate from Preventive and Social Medicine)

1994 Neonatology (as a full-fledged Department)

How Departments Grew During the Decade

Department of Anatomy: In 1986, the Department of Preventive and Social Medicine was shifted to a newly constructed library building and the second floor was fully allotted to the Department of Anatomy. The area had been suitably modified and a number of small teaching cubicles have been created where small group teachings were carried out. The specialty was that each cubicle was named after a prominent personality in the field of Medicine along with a plaque depicting the photograph and the life history of the personality. Each cubicle has a fully articulated skeleton and an X-ray view box to facilitate teaching of osteology and radiology in an integrated manner. The central area became the embryology section of the museum. This department received the "Best Department" Award in 1995.

Department of Biochemistry & Central Clinical Biochemical Laboratory: The Central Clinical Biochemistry Laboratory (CCBL) was established in April 1991 under the then Head of Biochemistry Dr A.V. Potnis to carry out routine clinical investigations by amalgamating previously segregated departments like Central Clinical Laboratory, Lab No. 44, Medicine and Surgery, Gastroenterology Lab, Endocrinology Lab and the CVTC Lab. The management of CCBL was handed over to the Pathology Department from 1992 to 1997.

Department of Cardiovascular and Thoracic Surgery: Dr R. Magotra and Dr A.G. Tendolkar conducted camps at Amravati and Bidada (Kutch) beginning in 1982–83. In 1986, it was realized that the demand for the department had outstripped the available facilities. The department temporarily shifted to the multistory building while the available space was refurbished to have a new 12-bedded ICU and 4 operation theaters. This effectively encroached on the bed strength but the surgical excellence had by now made it possible to reduce the ICU and ward stay. Dr Parulkar retired as Dean and Professor-Director of Surgery in 1989 and Dr Ratna Magotra became the first woman head of the Department. She foresaw the need for close cooperation with the corporate sector and got handsome donations from the Indian Oil Corporation to equip the ICU with state-of-art monitors, ventilators and blood

gas analyzer. She pursued her interest in infant cardiac surgery using the new technique of conventional bypass with low flows along with hypothermia to repair complex defects in small infants to avoid the deleterious effects of total circulatory arrest. This department became the national center of the Indian Association of Cardiovascular and Thoracic Surgeons in 1991. In 1994, Dr M.R. Girinath took a workshop on coronary bypass surgery.

Department of Chest Medicine: In the field of education, this department has achieved international recognition and the first British Council course on advances in respiratory medicine was conducted with 8 foreign faculty and 12 Indian faculty members in 1989. In 1990, Prof. Mahashur took over this department. He established and updated the department to its present state.

Department of Dentistry: Since 1990, full-time lecturers from the Nair Hospital Dental College have been posted as in-charge of the department in accordance with an administrative understanding with KEM Hospital and Seth G.S. Medical College. In 1995, the posts of Honorary Dental Surgeons were abolished.

Department of Endocrinology: The hormone assay laboratory of the Bai Vijkorbai Mayaram Khakhar Foundation Trust was started in 1989–90 with a donation received from the above trust and this has resulted in better service to patients.

Department of Gastroenterology: The Prof. P. Raghavan Oration (the first GE oration in the city) was initiated in the Division in 1987, and the trend of hosting eminent speakers from abroad to deliver this has continued to this day. Dr Naik became the Editor of the Indian Journal of Gastroenterology. Although the Division was ready in 1984 to send up students for the examination for the Diplomate of the National Board (DNB) in Gastroenterology, procedural delays ensured that the first student appeared and passed only in 1987. From 1987 to 1992, nine students cleared this examination. In 1990, an independent Department with 25 beds was formalized and moved from its earlier nomadic existence into its current premises in the Multi-Story Building. It was recognized by the University of Bombay for DM (Gastroenterology) studies. In 1992, the department started an Esophageal Laboratory with manometry facilities, one of only three in the country today. A separate OPD was started for esophageal disorders. The laboratory was expanded in 1995 to include pH studies. Simultaneously, services in anorectal manometry were started.

Department of Neonatology: Level II Neonatal Care Unit was established on the 10th floor of the New MS building at KEM Hospital in 1990. In 1992, Level III Neonatal Intensive Care Unit (NICU) was established. Palanpur Samaj Kendra Charitable Trust donated funds for the Mother-Neonatal Intensive Care Unit (MNICU) in 1993. In 1994, the Division of Neonatology was separated from the parent department of Pediatrics and started functioning as a full-fledged Neonatology Department. It was also recognized for its DM (Neonatology) degree course by the University of Mumbai.

Department of Nephrology: In 1986, the department was recognized by

the Medical Council of India for the DM degree in Nephrology. In 1994, coinciding with the completion of thirty years since the establishment of dialysis facilities, the Nephrology Janus meeting was held. This meeting was attended by pioneering geniuses like Dr Karl D. Nolph, Dr Dimitrios Oreopoulos, Dr Ramesh Khanna—our own Alumnus, and Dr Peter Morrin.

Department of Nursing: KEM Hospital had started training for male nurses and discontinued it in 1992. The nurses always extended their helping hands at the times of natural or unnatural calamities such as during the bomb blasts in 1992, Latur earthquake, Orissa cyclone, etc. Nursing staff and students regularly participate in various competitions arranged by the departments of KEM Hospital and SNA (Student Nurses' Association) unit state level/local level. Many students have bagged the prizes. Tetralogy of Fallot model received 1st prize at State Level SNA conference in 1992. The National Neonatal Nursing Workshop was held in 1992 and the ICU Nursing course was held in 1993. An international course for pediatric nursing was attended by sister tutor U Shetkar in 1993 at Israel. Two nursing management workshops were held in 1994; the latter was about nursing management in disaster. The Nurses Welfare Society in collaboration with Shree Ambika Yog Kutir, Thane, started Yoga classes for all nursing staff in 1994.

Department of Ophthalmology: Since 1990, the ophthalmic operation theater has had a separate room for the argon laser machine. It is equipped with all ophthalmic instruments including facilities for argon laser therapy, cryosurgical apparatus, vitrectomy machines. In 1993, the ophthalmic ward was shifted to the second floor adjoining the ophthalmic operation theater. The indoor ward has separate sections for male and female patients. In addition, there is a separate area for keeping septic ophthalmic male and female cases.

Department of Orthopedics: The already high standards of spinal surgery in the institute got a tremendous boost with the commissioning of the spine OT complex in 1995. This is a highly advanced operation theater with a laminar airflow system, pneumatic micro-power tools, special tables, lamps and instruments so that extremely complex spinal surgeries can be carried out.

Department of Pathology: Dr A.P. Desai, a neuropathologist, took charge as head of the department in 1988 and, under Dr Desai's leadership, the department got tremendous recognition for its work in Neuropathology. In 1987, Dr Padma Shastry, a scientist, was appointed as Senior Scientific Officer in charge of the Immunology Laboratory. She carried out extensive studies involving the detection of heart reactive antibodies by ELISA and immunochemical characterization of myocardial antigens in rheumatic fever, as also quantitation by ELISA of the antibody response to tetanus immunization in pregnant women. From 1990, Dr Smita Bijur, Associate Professor of Pathology, was posted in-charge of this section. She had undergone specialized training under the auspices of a British Council Scholarship in the UK in various aspects of immunology, particularly tissue typing for cadaveric transplants. The residency program started in 1989.

Department of Pediatrics: The Neonatal facility was expanded by the efforts of Dr N.B. Kumta and Dr S.F. Irani provided Level II and Level III care in 1991–92; as it was felt that a neonate is not a miniature child but one whose care required knowledge and expertise. With the survival of more and more premature infants, better understanding of neonatal physiology and healthcare needs and technological advances, it was time that some pediatricians dedicated themselves to look after neonates. The neonatal unit was given the status of a separate department in 1994 and it trains postgraduate students for DM Neonatology course.

Department of Pharmacology and Therapeutics: Work on gerontology started in 1986 under the leadership of Dr S.M. Karandikar, the head of the Department from 1985 to 1989. Dr K.C. Gupta took over as the head of the department after Dr Karandikar retired in 1989. During her tenure, the Ayurvedic Research Center grew and flourished. The Clinical Pharmacology Division got a boost and the Gerontology Project, which Dr Karandikar had set up, took off in all seriousness. At this time, the Clinical Pharmacology Ward moved to the second floor of the multistory building. The CDRI too developed unfettered.

Department of Physiology: In 1987, the Department had the honor of acquiring a personal computer on which other departments had their initial computer training. Under the guidance of Dr S.M. Kendurkar, who was the Head of the Department during this decade, the postgraduate training became more regular and definitive. She also worked as the Editor of the Journal of Postgraduate Medicine for many years.

Department of Plastic Surgery: A cross forearm transplantation took place in 1986 which must receive a special mention. The patient presented with injury to both upper limbs due to a railway accident. He had amputations through the right elbow and left forearm. Because of the nature of his injury, replantation of the right amputated forearm to the right elbow would have resulted in a pseudo-arthritic elbow joint with uncertain function of hand. Similarly, replantation of left hand to forearm would have resulted in a short forearm with an uncertain survival and function. Therefore, it was decided to opt for the loss of the right forearm and to restore the function of the left forearm by doing cross transplantation of the right forearm to the left.

Department of Preventive and Social Medicine: Till 1993, the head of this department was looking after both preventive and social medicine as well as medical social work (MSW) departments. In 1993, a separate social service department was established. The department was taking a lead role in trying to incorporate mental health into its primary health care program. It is perhaps one of the first departments in the whole country to start a psychiatry service at the urban health center at Malvani as early as 1994 and to conduct a survey on mental health morbidity in the community. The department has incorporated a teaching of yoga for promotion of mental health. In keeping with the needs of the institution, the department of Preventive and Social Medicine since 1993, is coordinating and conducting a general OPD. This served as a good training ground for interns

and also reduced the load on clinical specialists in medicine OPD. First regional conference of Maharashtra Chapter of the Indian Association of Preventive and Social Medicine was held at the hospital in 1992 as well as a regional workshop on Child Survival and Safe Motherhood. A workshop on Child-to-Child program for senior faculty from the Education Department of the Maharashtra State Government was held in 1993.

Department of Psychiatry: In 1987, the Geropsychiatry Consultation began and one year later, in 1988, the Suicide Counselling Clinic was set up. In 1989, a Community Awareness Program began followed by a Drug De-Addiction Center of Excellence in 1991 and Geropsychiatry Liaison Services and a Psychoeducational Program in 1992. Until 1994, the department was run by honorary consultants. At a given time, there were six honorary professors or assistant professors. Dr S.R. Parkar stepped in as the head of the department in 1994.

Department of Skin and Venereal Diseases: In 1989, a Reader's post was created for the first time, which was filled by Dr Deepak Parikh. In the same year, the residency system was introduced, and every year, 2–4 new residents joined the Skin Department. The special binocular microscope was obtained in 1987. In 1988, the Skin Department acquired the SLR camera, improving close-up photography. In 1990, the Hansens' clinic was taken over by neurology OPD and was shifted to the main OPD.

Department of Surgery: The annual conference of the Maharashtra Chapter of the Association of Surgeons in India was hosted by this department in 1988. The Indian National Association for the Study of Liver conducted their annual scientific meeting at the KEM Hospital and it was hosted by the Department of Surgery in 1992. It was the first to conduct an International workshop on laparoscopic cholecystectomy in 1992 and also started a laparoscopic program.

Milestones of the Decade

1986 Preventive and Social Medicine shifted to the Library Building
AIDS Surveillance Center initiated
First Test Tube Baby in India

1987 D.M. Nephrology started
Library started audiovisual facility
First Gastroenterology Oration in city started at KEM Hospital
First national workshop on endoscopic sclerotherapy held
Geropsychiatric consultation started
Special Binocular Microscope came into Skin Department

1988 National Plasma Fractionation Center started
HIV/AIDS Surveillance Center started

1989 Library added computer facility
Hormone Assay Laboratory started

1990 Gastroenterology department given 25 beds in multistory building
Level II neonatal care unit started
RMO Quarter in multistory building
Residency System started

1991 Central Clinical Biochemical Laboratory established
Shidori started
Urology Department shifted to multistory building

1992 International Workshop on laparoscopic cholecystectomy held
Esophageal laboratory with manometry facilities started in Gastroenterology Department
Level III Pediatric Intensive Care Unit started

1993 Janus started
CT Scan obtained
Medical Intensive Care Unit upgraded to Medial-Neurology-Neurosurgery ICU
Diploma in Child Health started
Library added MEDLINE facility
Medical Education Technology Cell started
Department of Preventive and Social Medicine started general OPD

1994 DM Neonatology started
Yoga classes started

1995 Spine OT complex started
pH studies in Esophagus started

Significant Developments

Establishment of the Diamond Jubilee Society Trust (DJST): The Seth G.S. Medical College and KEM Hospital Diamond Jubilee Society Trust was established in 1989. DJST is registered as a Public Charitable Trust with the Charity Commissioner, Mumbai. It is registered with the main objective of providing patients care with up-to-date and modern equipment and instruments in an intensive manner, imparting training to staff and students in KEM and also to upgrade Medical Research Laboratories.

Engineering Department: In 1988, two more Sub-Engineers were assigned to the M&E Department and one Sub-Engineer and Jr. Engineer to the Civil Department.

Library: In 1987, a separate 'Audiovisual' Section was started with a kind donation received from Dr Laxmi Baxi, in memory of her sister, late Chandrika Bhatia. It is on the ground floor and is well equipped with two TV Sets, Two VCRs, audio tape recorder, slide projector, and screen. We have 103 video cassettes and 442 audio cassettes. This section is used by students and staff for teaching purposes. In 1989, Information Technology was introduced by purchasing a computer for the library. In 1993, MEDLINE on CD-ROM was purchased. This enabled a search for medical information on the computer from the MEDLINE database. This has proved to be a boon to medical students, research workers, and doctors. The 'Yeshwant Doshi, Home lending library for undergraduates' was started in 1993 with a kind donation of Rs. 1,80,000/- by Dr Himanshu Doshi and Dr Mayank Doshi, in the memory of their father, Mr. Yeshwant Doshi.

Medical Education Technology Cell: Rapid expansion of medical sciences and pedagogy has necessitated the need for training medical teachers. For a teacher to be conversant with the latest trends in medical education, he/she has to keep upgrading themselves at frequent intervals. It was with this aim that the Medical Education Technology (MET) Cell of Seth G.S. Medical College and KEM Hospital was established in 1993. Its objectives were: a) to create awareness amongst the teachers regarding the principles of education technology, b) to initiate teachers to evolve educational strategies to minimize lacunae existing in the present system, and c) to disseminate knowledge and allow diffusion of activities to other institutes.

Medical Record Department: In 1989, OPD/In-Patient fees, delivery charges and ward collection, etc. was also entrusted to

the Medical Record Department.

National Plasma Fractionation Center (NPFC): In 1988, the NPFC, an autonomous body, was born, governed by a trust "Research Foundation for National Blood Transfusion Services". Regular fractionation and standardization of products began in 1990. The method of fractionation was based on the latest column chromatographic techniques.

Beginning of Shidori: The Students' Counselling Cell was started in 1991 with an Orientation program for the Grand Juniors. At this time, 8 students were allotted to a staff member who remained with them as a preceptor throughout their medical career. In 1992, a new concept was introduced. The Orientation program was termed 'Shidori', meaning a tiffin that is given to the students to carry with them as they grow in medical college. At the same time, the concept of Associate Preceptors was introduced. Senior students volunteered to become the Associate Preceptors and, along with the Preceptor, took charge of 8 students each. The Shidori Workshop is conducted in a participatory manner for students from every year and covers everything from communication skills to medical ethics to doctor-patient communication.

Independent Social Services Department: On World Health Day, 7th April 1994, the Social Service Department, consisting of 16 social workers, surfaced as an independent department with Mrs. Daksha Javeri, as its head.

Janus: In 1993, a long felt need for a museum depicting archives of the institution materialized with the inauguration of Janus on 22nd January. The archives section is named 'Janus', which houses numerous photographs, publications, instruments and curios from the early days of our institutions. Included therein is the heart-lung machine on which the first open-heart surgery in India was performed. There is also the gentle giant—a curiously monstrous ECG Machine from the days before solid state technology and miniaturization took over. The collection of old photographs of a newspaper clipping carrying the momentous declaration to found the twin institutions dates back to 1912.

Illustrious Achievements of the Decade

KEM Hospital Becomes the Zonal Center of Excellence

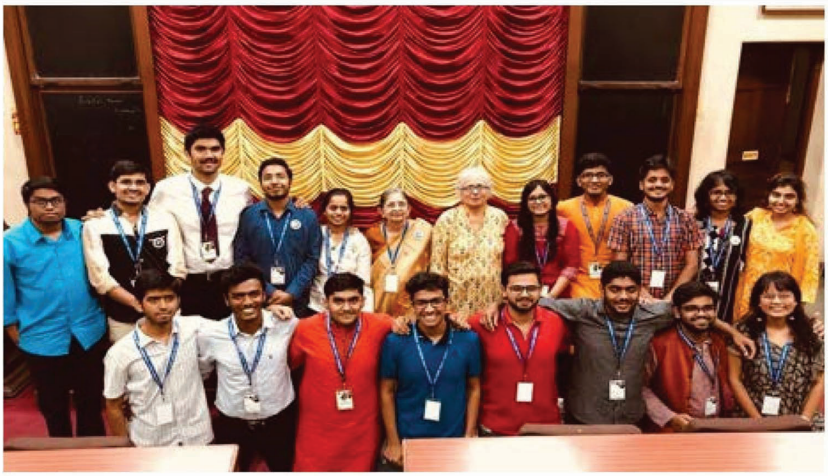
Thanks to the efforts of the Department of Urology, in 1988, the Government of India chose the KEM Hospital as a zonal center of excellence (COE) for microsurgical recanalization project in collaboration with UNFPA and AVSC. Dr S.V. Punekar was selected and trained at the University of California, San Francisco, in microsurgery. She has conducted several workshops through this COE to train professors from four neighboring states in this zone.

Setting Up of the AIDS Surveillance Center

Pioneering work in the fields of anaerobic infections, diagnostic ELISA and HIV have been carried out by the Department of Microbiology. The advent of HIV/AIDS in 1986 and the subsequent establishment of the serosurveillance center in 1988/1989, ironically, gave a much-needed boost to the department. In 1986, Dr G.G. Bhave was instrumental in establishing the AIDS Surveillance Center at this hospital. This center then expanded to provide counseling to all patients who had to undergo HIV testing and to HIV-positive patients in particular who had their dream

worlds shattered. This was a continuing program with many of the patients following up for months to years. This center also undertook educational lectures and demonstrations to create an awareness about prevention of HIV/AIDS.

ASCENSION 19



CONFLUENCE 19

30

Decadal Report (1996–2005)

As India marched towards a new century, so did the KEM Hospital and Seth G.S. Medical College. The Information Technology (IT) boom also impacted the workings of the hospital and the library as well as all the departments embraced technology by computerizing departmental records and enabling internet facilities to make research as well as operations more efficient. During this decade, many workshops were conducted by the various departments, some of them being organized in collaboration with international partners like the Japanese with whom a workshop on vascular surgery was organized by the Department of Cardiovascular and Thoracic surgery. The hospital was also revamped and renovated to make space for a centralized Emergency Medical Services area. The twin institutions continued to lead the way towards cutting-edge medical technology and treatment with the creation of a State-of-art Cardiac Catheterization Lab and upgradation of gastrointestinal surgery. After Dr P.M. Pai's retirement in 1999, Dr R.G. Shirahatti became the Dean, followed by Dr N.A. Kshirsagar who was also given the prestigious Dr B.C. Roy Award in 2002. Dr G.B. Parulkar, a towering cardiothoracic surgeon, was awarded the B.C. Roy Award in 1997 and a Padma Bhushan in 1998 for his contribution to Medicine. This was the Platinum Jubilee Decade and the celebrations included many new renovations and creation of solid infrastructure that would carry the equipment, the people, as well as the legacy through many many more decades to come. In the Platinum Jubilee year, the President of India K.R. Narayanan had made a visit to the Hospital and Medical College.

Vital Statistics

	1996	1997	1998	1999	2000
Schedule Strength of Beds	1800	1800	1800	1800	1800
Expenditure on In-Patient	38,27,27,259	30,84,44,110	35,15,34,768	38,45,28,206	45,79,38,973
Expenditure on Out-Patient	9,51,18,394	9,38,42,317	8,70,12,813	9,54,58,644	11,43,19,694
Cost of In-Patient per day	689.71	552.65	639.41	748.48	963.3
Cost of Out-Patient per day	57.51	53.03	49.3	53.3	109.48
Daily Average In-Patients in wards	1,532	1,532	1,527	1,431	1,366
Average stay of In-Patients (in days)	8.71	8.71	8.21	8.08	8.1

Out-Patient New & Old	17,66,852	17,66,852	17,77,237	18,21,771	11,61,573
Major Operations	21,735	21,735	23,186	21,515	22,641
Minor Operations	35,208	35,208	35,558	37,036	30,944
Booked Cases	7,201	5,072	5,667	5,425	5,300
Emergency Cases	131	427	405	699	360
Open Heart Surgery	706	1,210	888	821	878
Other Operations	1,105	427	450	335	1,391
Daily Average No. of Out-Patients attendance	5,948	5,948	5,905	6,052	3,965
Total No. of New Out-Patients treated during the year	4,97,877	4,97,877	4,98,072	4,97,426	4,42,170
Daily Average No. of New O.P.D. Attendance	1,676	1,676	1,655	1,653	1,501
Total Expenditure on Hostel	2,99,793	81,37,693	8,86,014	74,02,350	84,41,895
Revenue from Tuition Fees, Hostel Rent	52,91,190	45,49,795	53,90,040	96,380	5,54,950
Revenue from Postgraduate Fees	34,99,645	35,87,898	48,17,590	33,23,355	54,24,132

	2001	**2002**	**2003**	**2004**	**2005**
Schedule Strength of Beds	1800	1800	1800	1800	1800
Expenditure on In-Patient	48,94,25,689	50,97,83,519	53,26,54,750	56,07,98,507	70,01,44,126
Expenditure on Out-Patient	11,91,75,719	12,44,07,586	12,90,29,895	13,50,69,920	16,73,63,366
Cost of In-Patient per day	885.48	858.35	965.98	1004.13	1100.3
Cost of Out-Patient per day	89.15	125.83	80.73	90.03	114.99
Daily Average In-Patients in wards	1,342	1,542	1,525	1,532	1596
Average stay of In-Patients (in days)	7.28	7.72	7.23	7.1	6.88
Out-Patient New & Old	14,25,124	14,47,750	15,97,350	15,14,011	14,99,030
Major Operations	27,880	22,860	22,701	22,996	23,816
Minor Operations	27,079	30,135	30,423	31,966	34,595
Booked Cases	4,802	5,841	5,225	7,318	8,054
Emergency Cases	832	699	1,259	1,553	1,548
Open Heart Surgery	860	821	625	726	670
Other Operations	2,043	335	487	480	1,294
Daily Average No. of Out-Patients attendance	4,965	4,809	5,325	5,047	4,980

	2001	2002	2003	2004	2005
Total No. of New Out-Patients treated during the year	4,04,289	4,52,719	4,61,896	4,98,175	5,20,642
Daily Average No. of New O.P.D. Attendance	1,385	1,504	1,504	1,661	1,730
Total Expenditure on Hostel	18,79,50,886	9,05,722	12,01,368	1,53,280	8,64,189
Revenue from Tuition Fees, Hostel Rent	5,73,090	1,60,63,374	98,57,650	71,08,040	1,33,17,155
Revenue from Postgraduate Fees	37,59,111	42,77,607	75,24,707	63,00,213	60,81,020

Vital Statistics for the Hospital (1996–2005)

- The Schedule Strength of Beds remained consistent at 1800 during this decade.
- The expenditure on In-Patients almost doubled during this decade from Rs. 38 crores in 1996 to Rs. 70 crores in 2005. The same was the case with the expenditure on Out-Patients which went from Rs. 9.5 crores in 1996 to Rs. 16.7 crores in 2005.
- The cost of an In-Patient per day went from Rs. 689 in 1996 to Rs. 1100 in 2005 and similarly, the cost of an Out-Patient per day went from Rs. 57 in 1996 to Rs. 117 in 2005.
- During this decade, there was a remarkable reduction in the average number of In-Patients from almost 9 days in 1996 to almost 7 days in 2005.
- There was a decline in the annual count of Out-Patients in the period of 1999–2000 when the count went down from 18 lac patients in 1999 to 11 lac patients in 2000. The decade ended with the number being at almost 15 lacs in 2005.
- The number of major operations performed every year stayed in the range of 21,000 to 23,000 except for 2001 when it went to 27,880.
- The number of minor operations performed every year oscillated between 27,000 and 37,000 during this decade.
- The annual number of emergency cases rose rapidly from 131 in 1996 to 1,548 in 2005.
- The number of open-heart surgeries performed every year stayed in the range of 700–800 except in 1997 when it was 1,210.
- The daily average Out-Patients' attendance was highest in the year 1999 at 6,052 but it was consistent at around 5,000 throughout the decade.

Vital Statistics for the Medical College (1996–2005)

- The total expenditure on hostels spiked in 1997, 1999, and 2000 at Rs. 81 lakhs, Rs. 74 lakhs, and Rs. 84 lakhs respectively. During the rest of the years in this decade, the annual expenditure remained below Rs. 12 lakhs.
- The revenue from Tuition Fees and Hostel Rent is very inconsistent

throughout the decade. It is lowest at Rs. 96,000 in 1999 and highest at Rs. 1.6 crores in 2002.

- The revenue from postgraduate fees also overall rose during this decade from around Rs. 34 lakhs in 1996 to Rs. 60 lakhs in 2005.

Infrastructure Added During the Decade

2000 Creation of an Emergency Medical Services Area

2003 Laboratory for Clinical Skills and Research
Cardiopulmonary Resuscitation Center
Renovation of Nephrology Ward
Renovation of O.P.D. in the Multi-Storeyed Building
Renovation of Registration Center
Renovation of Pediatric Ward No. 2

2004 State-of-art Cardiac Catheterization Lab
High-end MRI
Upgradation of Gastrointestinal surgery
A Walkover Bridge connecting the main hospital building with the CVTC building
Expansion of Departments During the Decade

1998 Pediatric Psychological Clinic

2000 Emergency Medical Services Wing

How Departments Grew During the Decade

Department of Dermatology: In 1996, Dr Pushpa Gupte became the first woman honorary dermatologist to head the department. In the same year, the immunoperoxidase techniques for better diagnosis of vesico-bullous disorders and collagen vascular disorders were started. In 1997, the Electrical Dermabrader was obtained. In 1998, an Associate Professor was appointed for the first time. In 1999, the Laminar air-flow started functioning in the Mycology Lab, thereby minimizing contamination of the cultures. In 2002, Dr Uday Khopkar joined the Department as the first full-time Professor and Head of Department. He initiated Ultraviolet therapy, Dermoscopy, and Pulse therapy for vesiculobullous disorders. He was instrumental in getting the first laser to the department.

Department of Cardiovascular and Thoracic Surgery: A workshop on vascular surgery was conducted by the Department with Japanese collaboration in 1996 and one on warm heart surgery was conducted by Dr Arigo Lessana (France) in the same year. The CVTS department has been acknowledged as one of the ten best heart hospitals in the country by Today-Plus (1996) and it was again recognized as having the best training program for MCh students in India Today Opinion Poll (1998). A unique event of Heart Valve Mela was organized in 1997 to bring together patients operated for heart valve replacement over the years and we are happy that several other centers in the country followed this. Dr A.M. Patwardhan joined the department in 1999 and introduced the surgical treatment of chronic atrial fibrillation associated with valvular disease. He initiated a project to study the effect of newer anticalcification strategy for tissue valves. In 1999, a wet laboratory on a stentless valve was conducted by Dr Richard Chard.

Department of Chest Medicine: The Pulmonary Function Test Laboratory

was upgraded and named after Dr S.D. Store, founder member, in 1998. Polysomnography (sleep study) started being used to diagnose sleep disorders in 2002 along with the establishment of intervention bronchology services. In the same year, the National Environment Health Profile and Comparative Health Risk Assessment Project was funded by the Ministry of Environment and Forest, New Delhi for the Environmental Pollution Research Center.

Department of Emergency Medical Services: Before 2000, there were several emergency areas scattered throughout the sprawling hospital complex. Ward 20 and 20A were in the main building and the Orthopedic Trauma area was in the ground floor of the multistory building. Similarly, one found that the Emergency Laboratory was located near the mortuary and the emergency surgical OT on the first floor of the main building. Therefore, though the treatment given was proper, the delays were unacceptable. There emerged a need for a dedicated, centralized emergency management area. However, there was a lack of space in the ground floor OPD area. All the "backbone" OPDs (Medicine, Surgery, and Pediatrics) that had functioned in this area for nearly 75 years had to be shifted. When this proposal was submitted to the Heads of the above departments, they enthusiastically supported the proposal and that is how the Emergency Medical Services (EMS) area was set up in the KEM Hospital. This area can also be converted into a triage area during an accident or a disaster, thus becoming the first step towards establishing Accident and Emergency as a specialty in India.

Department of Forensic Medicine and Toxicology: In 1998–99, the Department was recognized by the University of Mumbai for the commencement of Postgraduate courses (M.D. Forensic Medicine & Toxicology, Diploma in Forensic Medicine - D.F.M.) and the courses commenced in 2002. During this decade, the department was also recognized by the Medical Council of India for undergraduate teaching. In 1997–98, the department started helping Haffkine Institute to establish a Poison Information Center at KEM and Seth GSMC.

Department of Gastroenterology: The Head of Department, Prof. Philip Abraham, and the department facilities (including a microbiology laboratory devoted to Helicobacter pylori studies) were recognized in 1998 for studies in Ph.D. (Applied Biology). Dr Abraham was appointed in 1996 as Editor of the Indian Journal of Gastroenterology and as Chair, Research Committee, Asia Pacific Association of Gastroenterology.

Department of Microbiology: In 2002, a polymerase chain reaction (PCR) test was started to detect extra pulmonary tuberculosis and a workshop was conducted for lab technicians from Voluntary Counseling and Testing Centers (VCTCs) and Blood Banks in External Quality Assessment Services (EQAS) for HIV testing.

Department of Neonatology: In 2000, mothers were allowed to enter NICU and the Humane Neonatal Care approach was initiated. This intensive care approach was established by observing an ideal NICU protocol for protection of babies from overstimulation and by observing

the minimal handling protocol to reduce the NICU environmental stress-related complications for early recovery and positive health of sick neonates. Mothers of these sick neonates started being actively involved in management of their babies at all times. To celebrate the World Breastfeeding Week 2000, a noble project of training 3500 Community Health Visitors, 600 Auxiliary Nurse Midwives 170 Public Health Nurses and 150–200 doctors in the 'Neonatal Care and Lactation Management' were undertaken in 4 phases in collaboration with LTM Medical College and TN Medical College to improve Newborn Care in the community. In 2002, Kangaroo Mother Care program was started for very low birth weight babies.

Department of Nursing: In 1996, the school of nursing started a Child-to-Child program at the BJ Devrukhkar Municipal School. Child Survival and Safe Motherhood (CSSM) modular training for nursing teachers was conducted in 1997, followed by a series of workshops on Psychiatric, Critical Care, and MCH nursing in collaboration with SNDT University in 1998. Teaching technology for nursing teachers was conducted in 1999 and 2000 and HIV/AIDS training for nursing staff was conducted in 2000. From 1999 onwards, the practical nursing sessions are conducted for MBBS Students. The Nurses Welfare Society extended yoga classes to the entire hospital staff in 1997. The structure of the brain model received second prize at the State-Level Student Nurses' Association conference in 2000.

Department of Pathology: Dr A.M. Pathak was the head of the department from July 1998 to April 2000. She was elected as Vice President and then President of Indian Association of Pathologists & Microbiologists in 1999 and 2000 respectively. She was also awarded "Distinguished Leadership" by the American Biographical Institution in 1999. In 2002, an Immunohistochemistry Laboratory was started for estrogen receptor (ER) and progesterone receptor (PR) studies.

Department of Pediatrics: Since 1998, the Rheumatology Clinic incorporated the help of psychiatrists to support children with chronic heart disease who may have associated psychopathology. In 2003, the Parikh Foundation came forward to renovate and upgrade Ward No. 2. In 2002, a task force meeting on Nasobronchial Allergy in Children was organized to formulate guidelines for the treatment of Allergic Rhinitis. A workshop for Asthmatic children was organized in the same year for patients' and caregivers' education.

Department of Pharmacology and Therapeutics: Since 1997, an annual intercollegiate pharmacology quiz is held in memory Prof. A.S. Paranjpe, the founder of the department. The program on Rational Use of Drugs in collaboration with W.H.O. started in 1998. A unique wing for research in traditional medicine, recognized by the ICMR, was one of the major areas this department had developed during this decade. In 2002, this department delivered a series of lectures for MSc (Applied Biology) Students. A Tissue Culture Laboratory was also set up in 2002.

Department of Physiology: Dr K. Radhakrishnamurthy, who joined the department in 1995 and took over as

Head in 2000, has keen interest in the field of toxicology. He also served as the head editor of the Journal of Postgraduate Medicine.

Department of Preventive and Social Medicine: The department has been actively involved in the 'School AIDS Awareness Program' which was being conducted in private schools of Mumbai since 1996 and has contributed to the preparation of valuable audio-visual educational material. The department also coordinated the 'Adolescent Girls' Initiative' for non-school going adolescent girls of the Mumbai slums since 1998. This is a UNICEF-funded project. This department conducted a workshop for curriculum development for the MBBS course for University of Mumbai in 1997 and a workshop-cum-seminar on 'Pregnancy is Special—Let us make it safe', an action plan for Mumbai, sponsored by UNICEF in April, 1998.

Department of Psychiatry: A female ward for Drug De Addiction was set up in 1997 and a Community Drug De-addiction Development Program started in 1999. In 2002, a session was conducted on "Access Services in the Field of Mental Health" in Training of Trainers (ToT) for community health volunteers of Health Posts in "Women and Mental Health". During the same year, a lecture was conducted on "nicotine dependence" for public awareness and "treatment for addiction" for social workers.

Department of Surgery: Dr R.D. Bapat was instrumental in the establishment of the gastrointestinal surgery department on the second floor of the multi-storey building through a donation of Rs. 10 lacs from the Abhyudaya Co-operative Bank. The department also conducted a workshop on laparoscopic suturing and knotting in 1996.

Department of Urology: A cadaver kidney transplant was successfully performed in April 1997. In 2002, Chronic Peritoneal Dialysis was started.

Department of Ear, Nose, and Throat (ENT): In 2002, an oncology clinic was started during afternoons.

Department of Neurosurgery: In 2002, the Neurosurgery Operation Theater was upgraded and the departmental records were computerized.

Department of Neurology: During this decade, Dr P.U. Shah was the editor of the Newsletter of Epilepsy in India and Dr S.H. Ravat was on the editorial advisory board of the same. Dr Shah also published one Gujarati book on Parkinson's Disease. A Comprehensive Epilepsy Care Center and Epilepsy Surgery was started in collaboration with the Neurosurgery Department.

Department of Obstetrics and Gynecology: The Head of Department, Dr S.V. Parulekar developed Obstetric Management and Gynecological Management Computer Programs for decision making and donated copies of the same to the institute.

Department of Occupational Therapy: A Continuing Medical Education (CME) workshop was conducted for Occupational Therapists in Cardiac Rehabilitation along with a camp for the parents of autistic children to help orient them about sensory integration therapy.

Department of Orthopedics: The Western India Regional Orthopedic Conference (WIROC) was organized by this department during this decade.

Milestones of the Decade

1996 Immunoperoxidase techniques used in Skin

1997 Cadaver kidney transplant performed
E-Mail and Internet facility started in the library
Dr B.C. Roy Award to Dr G.B. Parulkar (most eminent medical man of the year)
Female deaddiction ward started

1998 BOTh BPTh 41/2 year course under MUHS
Padmabhushan to Dr G.B. Parulkar, M.D. Forensic Medicine started

1999 D.M. Hematology course approved at KEMH
Laminar airflow started in Mycology laboratory

2000 A specialized Emergency Medical Service was started
Humane approach to neonatal care started
Dhanvantari award to Dr I.N. Hinduja
New department of Surgical Gastroenterology established

2001 Intranet and Internet Facility inaugurated
Platinum Jubilee year

2002 GOSUMEC Foundation (Alumni Association) started in USA
Old Pediatric intensive care unit was renovated into a State of the art Pediatric intensive care unit with capacity to cater up to 10 beds with most advanced intensive care.
Multislice Spiral CT scanner installed

2003 Biplane angiography system installed

2004 Flat panel cardiac cath lab inaugurated
MRI installed

2005 New Ultrasonography section started

Significant Developments

Blood Bank: KEM Hospital's blood bank had the highest Annual Processing of Blood Samples in India (about 36,000/year) in 1998 and 1999 and, in the same years, had the highest annual collection of blood units in India (about 30,000/year).

Recognition of Aavishkaar: Aavishkaar was acknowledged as one of the best socials in the city when it was included along with topmost festivals like Malhar of St. Xaviers, Mood Indigo of IIT and Kaleidoscope of Sophia's for the "Pepsi Independence Cup" in 1997 to commemorate India's 50 Years of Independence.

Upgradation of the Library: In 1997, with the donation of Rs. 7 lacs from the State Bank of India, a CD Net with 14 CD-ROM drive towers and three more computers were purchased. This has enabled access to MEDLINE from two terminals as well as an internet facility. In 1997, e-mail facility and Internet-text search was started, by taking a separate telephone line from MTNL and Internet connection through ERNET (Education Research Network) from National Center for Software Technology. In 1998, the subscription of TCP/IP accounts from VSNL enabled

the staff and students to search the Internet and send/receive emails. In 1999, information about library holdings was entered on the KEM Website, which is searchable on the Internet.

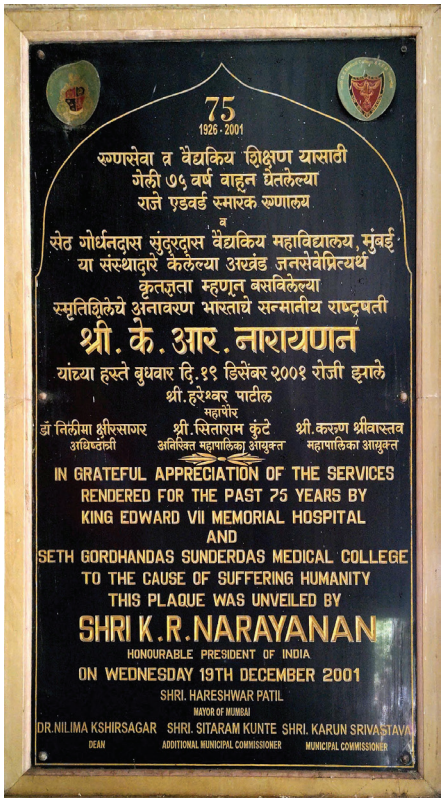
Illustrious Achievements of the Decade

First Department to Have M.D. in Hematology in Maharashtra

During this decade, the Medical Council of India approved the recognition of the Department of Hematology as a teaching center for training in the field of Hematology and Oncology leading to a super speciality course in M.D. (Clinical Hematology) making it the first department in Maharashtra and second in India to have this recognized degree. In 2002, Dr J.C. Patel Hematology Department organized the third Annual Conference on Iron Deficiency Anemia at the KEM Hospital.

A Pioneering Medical Education Technology (MET) Cell

The cell published "The Art of Teaching Medical Students" in 1996. For interacting with various medical schools, the cell has a yearly bulletin published and circulated widely since 1997. The next target was developing a well-defined need-based postgraduate syllabus in every specialty. To initiate this activity, a postgraduate curriculum workshop was held in February 2000.



GOVERNER OF MAHARASHTRA

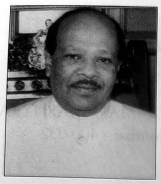
RAJ BHAVAN
MALBAR HILL
MUMBAI 400 035

Message

Ever since their foundation in 1926, the King Edward Memorial Hospital and the Seth Gordhandas Sunderdas Medical College have served the cause of medical care, education and research with distinction. They have carved a niche for themselves as one of the foremost teaching and health care institutions in India. By providing health care at affordable costs to nearly 1.8 million out-patients and 68,000 in-patients annually, most of whom belong to underprivileged sections of the society, the institutions are indeed rendering a great service to the society.

On this happy occasion of the Platinum Jubilee, I convey my congratulations to the students, teachers and staff of the K. E. M. Hospital and the Seth G. S. Medical College and wish them continued success in their endeavours.

(P. C. Alexander)
Governor of Maharashtra



MAYOR OF MUMBAI

HARESHWAR PATIL
Corporation Hall, Mahapalika Marg,
Mumbai - 400 001

24th November, 2000

Message

I am glad to know that the Seth G. S. Medical College and K. E. M. Hospital will be celebrating its Platinum Jubilee.

I am proud that the Seth G. S. Medical College and K. E. M. Hospital have been serving since their inception and serving the cause of medical care, education and research for over 75 years. The present eminence is the culmination of efforts of countless men and women who gave their best under good circumstances and also during difficult situations.

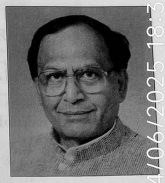
The Medical College is providing training to about 2000 students, undergraduate, postgraduate and superspeciality medical courses and other courses in various allied specialties. The glory of an institution rests on its traditions.

Unremitting zeal, devotion and professional competence of the medical and paramedical personnel have ensured that on completion of study, our young doctors act as a tool in the hands of God to serve the humanity.

I congratulate all those who are connected with the Twin Institutions in putting tireless efforts to maintain the quest for excellence. I also wish the Institutions a glorious future.

(Hareshwar Patil)
Mayor of Mumbai

मंत्री
स्वास्थ्य एवं परिवार कल्याण
भारत सरकार
नई दिल्ली – ११० ०११
MINISTER OF
HEALTH AND FAMILY WELFARE
GOVERNMENT OF INDIA
NEW DELHI - 110 011



पद्मश्री डॉ. सी. पी. ठाकुर
Padmashree
Dr. C. P. Thakur

Message

King Edward Memorial Hospital and Seth G. S. Medical College are amongst the foremost teaching and medical care providing institutions in India which render yeomen services especially to the under-privileged sections of the society. I am happy to learn that these institutions are celebrating their Platinum Jubilee this year. I am sure, these institutes will continue to maintain their quest for excellence and will continue to serve the society with devotion and dedication.

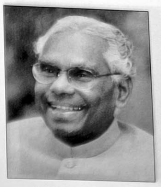
I wish the Institutes all success.

(Dr. C. P. Thakur)

New Delhi, the 19 October, 2000.

भारत के राष्ट्रपति के उप प्रेस सचिव
Deputy Press Secretary to the President of India

राष्ट्रपति सचिवालय
राष्ट्रपति भवन
नई दिल्ली – ११० ००४
President's Secretariat
Rashtrapati Bhavan
New Delhi - 110 004



No. F. 2-M/2000

30th October, 2000

Dear Dr. Shirahatti,

The President of India, Shri K. R. Narayanan, is happy to learn that the Seth G. S. Medical College and K. E. M. Hospital, Mumbai is celebrating its Platinum Jubilee.

The President extends his greetings and felicitations to all those associated with the institutions and wishes the celebrations every success.

With regards,

Yours sincerely,

(K. Satish Nambudiripad)

Dr. R. G. Shirahatti,
Dean,
Seth G. S. Medical College and
K. E. M. Hospital,
Parel,
Mumbai - 400 012.

TONES AND LYING UNDERTONES

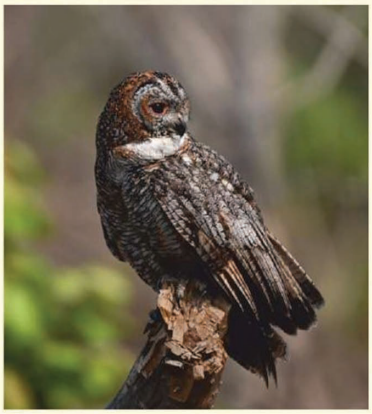
COMING HOME

Dr. Arnav H. Tongaonkar, Senior Resident, Medical Oncology, Tata Memorial Hospital

GOLDEN - GREEN DAYDREAM

Tushar Gangawane, MBBS-2020

MOTTLED WOOD OWL



Tanish Agarwal, MBBS-2021

31

Decadal Report (2006–2015)

During this decade, the KEM Hospital and GS Medical College witnessed and confronted many crises right from the beginning of the decade when Mumbai suffered from train bombings in 2006 to the attacks in November 2008. In 2009, the nation was suffering from the swine flu pandemic. The twin institutions fought all these crises with resilience and innovation. All departments came together to take measures such as creating a helpline for the survivors of bomb blasts and their families and forming an isolation ward for the patients of H1N1 flu. In the midst of all of this, the Department of Transfusion Medicine was born in 2008, yet again pioneering amongst municipal hospitals in the state. Upgradations and renovations in infrastructure such as state-of-art video-endoscopic equipment and procurement of a cardiac ambulance meant effective and timely treatment of complex diseases and successful performance of complicated surgeries which were otherwise extremely expensive in private hospitals. During this decade, multiple captains took the helm of the twin ships. Dr N.A. Kshirsagar passed the baton to Dr M.A. Yeolekar in 2007 who then passed it to Dr Sanjay Oak who was the captain of the ship from 2008 to 2011 who then handed the baton over to Dr Sandhya Kamath who was in charge of the hospital in 2012. In 2013, Dr Shubhangi Parkar was the Dean of the twin institutions and, during the last two years of this decade, the hospital and college were run by Dr Avinash Supe.

Vital Statistics

		2006	2007	2008	2009	2010
Bed Strength		1,800	1,800	1,800	1,800	2,288
Total No. of Admissions		84,609	83,336	86,397	86,574	83,953
Daily Admissions (Average)		232	228	236	237	230
OPD Attendance (New)		5,28,751	5,50,133	5,45,890	5,77,868	6,43,033
Daily Average OPD Attendance (New Patients)		1,768	1,828	1,808	1,543	2,136
Old patients		9,20,477	10,03,323	10,07,864	10,12,723	10,87,204
OPD attendance (average)		4,847	5,161	5,145	5,284	5,748
Surgeries	**Total**	55,908	56,848	56,144	55,622	55,789
	Major	23,862	24,902	24,937	25,531	25,647
	Minor	32,046	31,946	31,207	30,091	30,142
	Endoscopies	7,789	6,612	7,191	7,044	7,854

	2006	2007	2008	2009	2010
Deaths	6,068	6,572	6,497	6,866	7,186
Death Rate	7.17%	7.89%	7.52%	7.93%	8.56%
Total Attendance in Casualty	1,77,652	1,80,773	1,71,543	1,99,231	2,42,489
Medico Legal Cases	30,674	38,221	33,017	31,026	35,005
In-Patient days	5,82,512	5,64,240	5,69,415	5,63,167	5,49,438
Average Bed Occupancy	89%	86%	86%	86%	84%
Average ward stay	6.77	6.51	6.59	6.5	6.54
Total no of Deliveries	7,451	6,074	7,026	7,039	6,527
Full-Time Teaching Staff			447	447	382
Undergraduate Medical Students			1,013	1,013	1,013
Postgraduate Students			387	577	328

		2011	2012	2013	2014	2015
Bed Strength		2,288	2,288	1,800	1,800	2,250
Total No. of Admissions		81,811	87,832	85,942	82,855	84,425
Daily Admissions (Average)		224	240	245	227	231
OPD Attendance (New)		6,32,796	6,45,339	6,36,464	6,36,522	6,47,200
Daily Average OPD Attendance (New Patients)		2,102	2,144	2,114	2,115	2,150
Old patients		11,26,572	11,21,801	10,77,772	11,57,512	11,99,152
OPD attendance (average)		5,845	3,727	5,695	5,961	6,134
Surgeries	**Total**	55,589	69,465	59,317	62,989	61,421
	Major	24,767	28,511	26,073	26,234	28,413
	Minor	30,822	31,370	33,244	36,755	33,008
	Endoscopies	8,231	9,584	8,741	8,733	9,015
Deaths		6,728	6,966	6,451	6,373	6,248
Death Rate		8.22%	7.93%	7.5%	7.7%	7.4%
Total Attendance in Casualty		2,31,264	2,11,857	2,10,583	2,04,503	2,11,840
Medico Legal Cases		30,865	34,559	35,355	38,724	32,721
In-Patient days		5,49,237	6,03,380	5,88,967	5,88,742	5,86,010
Average Bed Occupancy		83.6%	72%	89.6%	90%	89%
Average ward stay		6.71	6.87	6.85	7.11	6.94
Total no of Deliveries		7,037	8,271	8,562	6,780	6,780
Full-Time Teaching Staff		381	384	-	394	380
Undergraduate Medical Students		753	753	-	720	736
Postgraduate Students		317	587	-	254	248

Vital Statistics for the Hospital (2006–15)

- The bed strength was briefly 2,288 between 2010 to 2012 and it went up to 2,250 in 2015. During the rest of the decade, it was 1,800.
- The total number of admissions annually was in the range of 81,000 to 88,000 during this decade.
- The average daily admissions were highest in 2013 when 245 people were being admitted to the hospital daily.
- The annual number of new Out-Patients went up to 6.47 lakhs by the end of the decade as compared to 5.28 lakhs in the beginning of the decade. By 2015, on average 2,150 new patients were entering the hospital for Out-Patient treatment daily.
- Subsequently, the number of old patients who came into the hospital annually too went up from 9.2 lakhs in 2006 to almost 12 lakhs in 2015. The average number of patients (old as well as new) coming into the Out-Patient Department every day increased from 4,847 in 2006 to 6,134 in 2015.
- The total number of surgeries performed annually crossed 60,000 in 2012, a year during which 69,465 surgeries were performed. This was the highest number of surgeries done annually during this decade. This was also the year when the highest number of major operations (28,511) and endoscopies (9,584) were carried out.
- The number of minor surgeries carried out annually was majorly in the range of 30,000 to 33,000 except in 2014 when it was 36,755.
- The hospital had to witness between 6,000 to 7,000 deaths every year during this decade except in 2010 when the number was 7,186. The death rate too was highest (8.56%) in 2010. During this year, the attendance in the casualty ward was also the highest at 2.4 lakh patients.
- The medicolegal cases every year during this decade were in the range of 30,000 to 38,000.
- The number of In-Patient days reduced (during the first half of the decade and again went back up to where it had started (5.8 lakh days) in the second half.
- The bed occupancy was lowest (72%) in 2012 and highest in 2014 (90%).
- The average ward stay remained in the range of 6.5 to 7.1 days throughout the decade.
- The total number of deliveries rose and fell inconsistently and there was no pattern as such. The highest number of deliveries during this decade occurred in 2013 (8,562).

Vital Statistics for the Medical College (2006–15)

- There was a team of at least 380 full-time teaching staff throughout this decade. This was around 447 in the first half of the decade.
- The number of undergraduate medical students went from around 1,000 in the first half of the decade to 736 by 2015.
- The number of postgraduate students enrolled every year was ranging between 248 to 587 with the highest number of postgraduate students in 2012.

Infrastructure Added During the Decade

2006 Bridge linking the Hospital with the Cardiovascular Thoracic Center was commissioned
Department of Neurosurgery obtained Neuronavigation equipment

2007 A tastefully renovated, OPD block inaugurated on the first floor of the main building – the forerunner of the complete makeover of GSMC and KEMH over the next 5–10 years. Ambitious renovation of the college building started. The offices, lecture halls and museums (amongst others) will be totally renovated with restoration of the stately stone building to the glory that it deserves.

2008 Inauguration of PET Scan
Hand Clinic
Cleft Lip Clinic
Liver OPD

2009 New Automated Biochemistry Analyzer for Emergency Services
Fully Automated system for blood grouping and cross matching in the Department of
Transfusion Medicine
Mobile Cathlab
Molecular Diagnosis Laboratory set up for HIV Testing
Maxillofacial Clinic
Pediatric Neurology Clinic
Laparoscopic Donor Nephrectomy
Learning Disability Clinic

2010 Department of Surgical Gastroenterology installed a Modular OT and two ICU facilities
New Automated Biochemical Analyser commissioned in EMS Lab
Department of Chest Medicine obtained a portable Spirometer
Department of Cardiology got a functioning Second Cath Lab and an Intravascular
Ultrasound Machine
Medical Humanities Cell was launched
CVTS obtained a Cardiac Ambulance
Smart Board made available for first year M.B.B.S. students

2011 Department of Clinical Pharmacology set up Warfarin Clinic
Department of Pediatric Surgery was fully renovated

2012 New Hostel Building inaugurated
Department of Gastroenterology equipped with Video Endoscopy
Department of Gastrointestinal Surgery installed a Modular OT complex
Department of Nuclear Medicine installed new Gamma camera
Department of Ophthalmology purchased Slit Lamp and three non-surgical operating microscopes with camera
Pediatric Intensive Care Unit renovated
Department of Psychiatry inaugurated Methadone Maintenance Clinic
Yoga Therapy was inaugurated
Department of Radiology installed Mammography Unit

2013 A new rural health training center was established at Pise-Panjrapur
A clinic for families of patients with lysosomal storage disorders was started
A liver transplant outpatient clinic was started
An outpatient pain clinic was started

2014 Liver Intensive Care was constructed

2015 Forensic Medicine department has a one stop crisis center for survivors of sexual assault
Gastroenterology department successfully started a 6 bedded liver intensive care unit for the management of patients with liver failure.

Expansion of Departments During the Decade

2008 Transfusion Medicine

2009 Pediatric Anesthesia

How Departments Grew During the Decade

Department of Anatomy: From 2006 onwards, the department has been doing audio-visual demonstration of dissection for 1st year M.B.B.S. students. This was a pioneering step in teaching and learning gross anatomy. In 2007, the department came out with the 6th edition of "A Handbook of the Department of Anatomy". Being the West Zone coordinators of the Anatomical Society of India, the Department prepared E-Modules on Surface Living Anatomy and Electron Microscopy Cytology which were implemented as a part of Anatomy Curriculum all over India. The members of the Department were also appointed as Reviewers for International Gray's Anatomy (40th edition) and Wheater's Textbook of Histology. In 2014, the department created a Google page for students to share lectures of faculty members and also enable students to interact with them.

Department of Biochemistry: The Department conducted a certificate course in Good Clinical Laboratory Practices for workers in Laboratory Medicine. In 2007, the Best Teacher in MUHS award was given to Dr S.P. Dandekar.

Department of Cardiology: The Department acquired two new Computerized Stress Test Machines and Holter Machine. In 2007, the Department hosted two live workshops conducted by specialists from France and Germany respectively. In 2013, the department established a WhatsApp mobile application whereby ECGs of patients with chest pain were viewed by senior faculty on a WhatsApp care group. In 2014, a record 2500 procedures were conducted by the department in the cath lab along with several novel procedures.

Department of Chest Medicine: The Department acquired a Rhino Manometer to assess nasal airflow. This enabled the specialists to diagnose, quantify, and assess therapeutic response of nasal airflow obstruction. It also helped in determining the effects of successful treatment of allergic rhinitis successfully on asthma. The Pulmonary Function Laboratory was also upgraded. The department also organized a Pulmonary Function testing training workshop in collaboration with GAIL (India). In 2007, the Department and the Environmental Pollution Research Center (EPRC) conducted a panel discussion on "Air Pollution and Asthma" to discuss the respiratory morbidity of school-going children.

Department of Clinical Pharmacology: In 2006, this department was recognized as the South-West Zonal Center for Adverse Drug Reactions (ADR) monitoring by the Ministry of Health and Family

Welfare. In 2007, the Department, in collaboration with the American College of Clinical Pharmacology, organized the 1st South Asia Chapter conference on "Contemporary Issues and Challenges in Drug Development". In 2014, the department trained several technical associates in the use of the Vigflow software for Pharmacovigilance of the World Health Organization.

Department of Dermatology: Dr Uday Khopkar, who was the Head of the Department during this decade, was also working as the Chief Editor of the Indian Journal of Dermatology, Venereology, and Leprology. Under his editorship, the journal was indexed with Index Medicus (PubMed). Dr Khopkar also pioneered the branch of Dermatopathology in the city. In 2011, the department established the technique of dermatoscopy for the first time for the diagnosis of hair and skin disorders. Services were offered in specialized areas such as acne, psoriasis, vitiligo, hair and Pediatric Dermatology.

Department of Ear, Nose, and Throat: In 2011, the ENT department established a 'Hear for all' program for the management of children with congenital anomalies.

Department of Endocrinology: The Department started two new OPDs: (i) Gestational Diabetes Mellitus OPD for pregnant patients, and (ii) Type 1 Diabetes OPD for comprehensive care of Type 1 Diabetes patients. In 2013, the department of Endocrinology established an ambassador exchange program with an institute from the United States.

Department of Gastroenterology: In 2015, this department successfully started a 6 bedded liver intensive care unit for the management of patients with liver failure.

Department of Gastrointestinal (GI) Surgery: The department acquired a Video-Endoscopic suite with the state-of-art endoscopic equipment. The Department was able to undertake Radio-Frequency Ablation of Liver Tumors deemed inoperable, not just for KEM patients but also patients from other municipal and JJ Group of Hospitals, at Rs. 15,000 when it cost at least a lakh in private hospitals. In 2007, DNB in GI Surgery commenced, making KEM Hospital the first teaching institute in Western Maharashtra and the first municipal hospital to do this. In 2010, the liver transplant program was initiated to provide an affordable treatment option for those in need without the necessary resources. In 2013, a liver transplant OPD was started. In 2014, the construction of the liver intensive care was completed.

Department of Medicine: The Maharashtra University of Health Sciences (MUHS) granted permission to institute a Certificate Course in Intensive Care Medicine. Training workshops were also organized on Emergency Medicine and Disaster Preparedness in collaboration with the USA.

Department of Microbiology: The Department started free CD4 count estimation for HIV-Positive pregnant women and children. In 2012, the HIV and Virology services of the department of microbiology were accredited by the National Accreditation Board for Testing and Calibration Laboratories (NABL). In 2014, The department received ISO accreditation for their virology and immunology divisions. The department also commissioned the Genexpert system for the rapid detection of tuberculosis and

multi drug resistant tuberculosis. In 2015, The department of microbiology became the first department in the municipal corporation to get NABL accreditation for all tests.

Department of Neonatology: The department initiated an in-house Hearing Screening at discharge for NICU-graduates in order to do early diagnosis of hearing impairment in high-risk babies. In 2010, this department was recognized as a "Collaborative Center for facility based newborn care". In 2015, The neonatology department initiated nitric oxide therapy for the management of primary pulmonary hypertension in neonates and total body cooling for perinatal asphyxia.

Department of Nephrology: In 2015, the department established an Interventional nephrology unit.

Department of Nuclear Medicine: This department set up a radionuclide ward for patients suffering from carcinoma of the thyroid.

Department of Nursing: This department implemented three new syllabi for Diploma in General Nursing and Midwifery with newer subjects like Computer Education, Pediatric Nursing, and Community Health Nursing. The duration of this course was also increased by 6 months in order to incorporate a 6-months internship period. In 2014, the nurses of the institute received the Mayor's award for their contributions.

Department of Obstetrics and Gynecology: Patient management guidelines were developed for all emergency obstetric cases, which brought uniformity and improvement in patient management. An Ethical Skills Workshop was also conducted for all the residents in the department. In 2015, This department set up management guidelines for obstetrics to be followed across municipal hospitals.

Department of Orthopedics: The Department started OPD services for patients with cerebral palsy. In 2015, this department set up management guidelines for complex spinal surgeries and arthroplasties to be followed across municipal hospitals.

Department of Pathology: In 2007, the Department organized an "International CME in Surgical Pathology and Cytology" for postgraduate students to understand the classification and concepts of lesions. In 2011, The department set up immunohistochemistry for tumor typing as well as for patients with breast cancer.

Department of Pediatrics: DOTS, a treatment strategy for pediatric tuberculosis was initiated. The department also started offering free antiretroviral therapy (ART) to HIV-infected children under the Government of India/National AIDS Control Organisation (NACO) Program. A Pediatric neurology outpatient clinic was started in 2012. In 2013, a clinic for families of patients with lysosomal storage disorders was started.

Department of Pharmacology: The Ayurveda Research Center strengthened its patient care services by purchasing new equipment (Shirodhara Yantra) for therapeutic procedures in Ayurveda. In 2007, the team of second year students trained by the departmental members bagged the regional and state level trophy for Pharmacology Quiz. Two second-year students were awarded Kishore Vaigyanik

Protsahan Yojana (KVPY) scholarship for the projects they carried out in the department.

Department of Physiology: The Medical Council of India finally recognized the postgraduate degree course in Human Physiology, retrospective from April 1969.

Department of Physiotherapy: The MPTh course was introduced and formulated with the following areas of specialization**:** physiotherapy in musculoskeletal conditions, neurological conditions, and cardiorespiratory conditions.

Department of Plastic Surgery: The department organized a Cadaveric Flap Dissection Workshop in collaboration with the Department of Anatomy. It was well-attended and highly appreciated by delegates from all over the country. The department also started the Comprehensive Cleft Clinic. In 2007, ICMR sponsored a study by a third year student. In 2013, the department organized the Camp Karma for children who were burn survivors.

Department of Preventive and Social Medicine: In 2013, a new rural health training center was established at Pise-Panjrapur. In 2014, the department was instrumental in linking 35 rural centers to the telemedicine facility.

Department of Psychiatry: A training program on "De-Addiction" was organized for medical officers in collaboration with the Government of India in 2007.

Department of Transfusion Medicine: In 2008, the Department of Transfusion Medicine (originally The Bombay Municipal Blood Center) came into existence in 2009. G.S. Medical College was the first medical college to start the Department of Transfusion Medicine in the state. It started with the main objective of starting a postgraduate course in Transfusion Medicine, and also providing quality medical care to patients by dispensing blood and blood components, performing therapeutic procedures, advanced apheresis procedures, keeping pace with the recent developments and advances in Transfusion Medicine and discharging its responsibility to voluntary blood donors. The postgraduate course (M.D. Transfusion Medicine) started in the year 2010. This is the First Medical College among all the State Government and Corporation Medical Colleges in Maharashtra to start MD Transfusion Medicine Course with an annual intake of 2 students per year since July 2010. Our blood center is the largest blood center in Mumbai and one of the largest blood centers in South East Asia. More than 36,000 units of blood are collected annually and separated into various blood components In 2012, the department was also awarded the best performing blood bank with the highest number of blood collections in the state.

Department of Urology: The department started an advanced laparoscopic program along with a reconstructive surgical program. This was the only department in Maharashtra which had started and was regularly performing the laparoscopic donor nephrectomy, which was considered to be the most difficult and complex urological laparoscopic operation. A Laparoscopy Trainer was procured to train postgraduate students. In 2013, the departments of Nephrology

and Urology performed a renal transplant successfully on a patient who was HIV positive.

Milestones of the Decade

2006 President Mr Abdul Kalam and Prime Minister Mr. Manmohan Singh visit bomb blast victims
DNB degree in Surgical Gastroenterology introduced
Gosumeet 2006 – 80 years anniversary celebrated

2007 Department of Endocrinology started OPDs for Type 1 Diabetes Mellitus and Gestational Diabetes Mellitus
Department of Clinical Pharmacology started DNA Extraction Services
Specialized Cell-Based Therapy was established with grant from Department of Biotechnology
Department of Anatomy started audiovisual demonstration in Dissection Hall
Department of Nursing implemented three-and-a-half-years syllabus

2008 Record 37 projects sanctioned by the Indian School of Medical Research under their Short Term studentship scheme

2009 24 Hours Toll Free Helpline for Swine Flu
In N1 Isolation and Treatment Ward
International Accreditation for the Institute's Ethics Committees
Department of Clinical Pharmacology started a Fellowship in Clinical Sciences of one-year duration, funded by Department of Biotechnology

2010 M.D. (Immunohematology and Transfusion Medicine) started with two students
First Live Donor Liver Transplant
First Cadaveric Liver Transplant performed by Department of Surgical Gastroenterology
Medical Humanities, Ethics, and Justice Workshop launched
Department of Clinical Pharmacology launched International Journal of Ayurvedic Research
Department of Anatomy conducted the first intercollegiate quiz and started the Sponsored
Book Scholarship award
Department of Anaesthesiology started a one-year Fellowship Course approved by
MUHS in Cardiac, Neuro, and Pediatric Anesthesia
Journal of Postgraduate Medicine had a new look
Orthopedic OPD had a new look
Diet Department obtained an Automatic Chapati maker

2011 Department of Skin and Venereal Diseases established Dermatoscopy
Department of ENT established 'Hear For All'
Department of Anatomy introduced a Foundation Course
Library completed barcoding of books
Sahasra Darshan Trophy presented to all octogenarians from our institution to Dr Sanjay Oak
Supreme Court appointed the Dean as the guardian of Aruna Shanbaug
22nd Edition of Textbook of Pharmacology by Drs R.S. Satoskar and S.D. Bhandarkar published

2012 Department of Neurology started Corticography
Cortical Dysphasia Surgery started
Department of Obstetrics and Gy-

necology initiated Extraperitoneal Myomectomy
Department of Physiotherapy commenced Doctorate of Philosophy
Department of General Surgery started Comprehensive Breast Care services

2013 Deep Brain Stimulation started for Parkinson's Disease

2014 Record 2500 procedures were conducted by the Department of Cardiology in the Cath Lab
The Department of Microbiology received ISO accreditation for their virology and immunology divisions.

2015 Community Medicine department launched a prevention and control of malnutrition program
Department of Microbiology became the first department to in the municipal corporation to get NABL accreditation for all tests.

Research and Publications

- The Blood Bank participated in a project of cell-based therapy in collaboration with the Departments of Anatomy, Cardiovascular and Thoracic Surgery, and Clinical Pharmacology.
- The Department of Clinical Pharmacology set up a Pharmacogenetic Division with funding from the Department of Science and Technology, Government of India, under their Fund for Improvement of Science and Technology Infrastructure (FIST) in Universities Scheme. This helped in individualizing treatment to maximize efficacy and minimize toxicity.
- The Occupational Therapy Department was running a Sensory Integration Clinic which was collecting normative data on sensory profiles of the Indian population.
- The Department of Pathology harvested endothelial cells in tissue culture, a collaborative project with the Department of Cardiovascular and Thoracic Surgery.
- Dr S.P. Dandekar presented research at the Asia Pacific Conference in Beijing, China.
- The Department of Cardiology presented a paper at the 59th Cardiological Society of India (CSI) Annual Meeting.
- The Department successfully completed a Phase I study on an indigenously manufactured combination meningococcal vaccine.
- Dr A.N. Dalvi presented a paper at the prestigious Meeting of the Society of American Gastrointestinal Endoscopic Surgeons (SAGES) at Las Vegas, USA on Laparoscopic Total Colectomy for benign colonic disorders.
- Dr V.M. Kulkarni presented a poster in Edinburgh, U.K., at the International Conference of International Hepato-Pancreato Biliary Association (IHPBA).
- Dr A.A. Deshpande's poster on "Vasospasm in Severe Acute Pancreatitis" was accepted by the World Congress of IHPBA.
- The Korean FDA inspected the Department of Nephrology, audited research on Erythropoietin, and approved the study.

Illustrious Achievements of the Decade

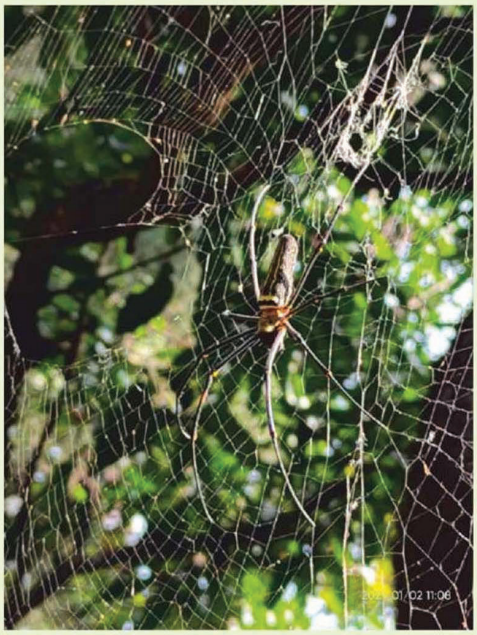
Service during the 2006 Bomb Blast in Mumbai

In 2006, KEM Hospital's Blood Bank rendered yeoman service to bomb blast victims by providing blood products to patients admitted to the KEM Hospital as well as those admitted elsewhere. The Blood Bank staff worked tirelessly to ensure that blood units are continuously collected from donors, who queued up for blood donation, units are grouped and cross-matched without errors and units are released and delivered in time where they were needed. The first patient was operated upon within 45 minutes of admission. There was no mortality in the first 24 hours. The Department of Psychiatry made coordinated efforts with the staff, psychologists, and social workers of Psychiatry Departments of other municipal hospitals and provided helpline and support services to the survivors of the blasts and their family members, who were devastated by the experience. President Mr Abdul Kalam and Prime Minister Mr. Manmohan Singh had visited the KEM Hospital to meet the bomb blast victims.

Rising to the Challenge of Swine Flu

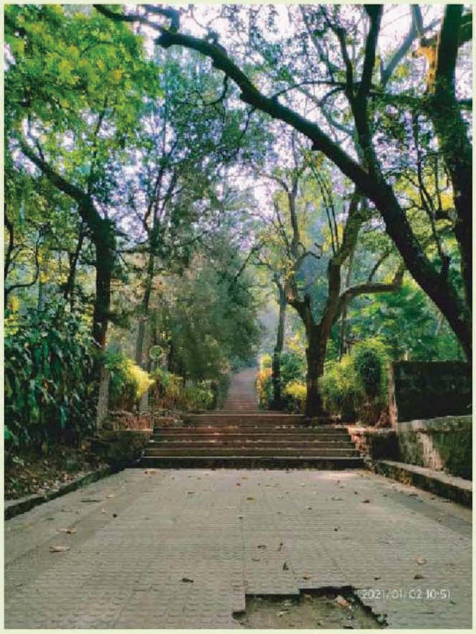
In 2009, when the H1N1 pandemic struck the nation, the institution set up a 24-hours toll-free helpline and started a new Isolation and Intensive Care Ward for H1N1 Influenza patients. As it is a highly contagious disease, this form of treatment and structure proved to be extremely effective.

THE WEB OF LIFE



Mahira Nawrikar, MBBS-2020

THE PATH OF LIFE



Sarthaka Nawrikar, MBBS-2020

32

Decadal Report (2016–2024)

This last decade has been tumultuous as the entire world was turned upside down by the COVID-19 Pandemic. As Mumbai was one of the epicenters of the pandemic as it is a metropolis with a large migrant population, the twin institutions were at the frontlines of this crisis. The trials and tribulations of a public sector institute that stood tall and firm amid the crashing waves of the pandemic is a true tribute to the resilience and spirit of all those who worked and continue to work in testing circumstances. Despite the crisis, the KEM Hospital and GS Medical College continued to grow and innovate. This decade witnessed the establishment of several super-specialty clinics like Pharmacogenetics Outpatient Clinic, Lupus Clinic, Predialysis Clinic, Glomerular clinic, Pediatric ophthalmology clinic, and Liver Clinic. More than 50 years after Dr P.K. Sen first performed a cardiac transplant, the second heart transplant took place in the hospital in 2024. The Hospital has become a rare institution which has a firm footprint in the global health landscape as well as a strong impact on the low-income populations of Mumbai. Whether it's patient care in the pandemic, research on vaccination, setting up infrastructure for community medicine in the outskirts of Mumbai, or education by demonstration, the twin institutions have left no room for compromise. During this last decade, those who led the twin institutions and navigated the tempestuous waters i.e. the Deans, were Dr Avinash Supe till 2017, Dr Hemant Deshmukh from 2018 till 2020, and Dr Sangeeta Ravat has been at the helm of these twin ships since 2021.

Vital Statistics

		2016	2017	2018	2019	2020
Bed Strength		2,250	2,250	2,193	2,250	2,250
Total No. of Admissions		86,290	81,922	84,251	88,390	50,854
Daily Admissions (Average)		236	224	231	242	139
OPD Attendance (New)		6,73,025	6,48,441	6,93,557	6,97,636	3,45,060
Daily Average OPD Attendance (New Patients)		2,229	2,161	2,304	2,318	1,146
Old patients		12,79,431	13,18,725	13,83,589	13,93,533	6,35,902
OPD attendance (average)		6,465	6,557	6,900	6,948	3,259
Surgeries	**Total**	59,586	58,702	61,098	64,552	35,565
	Major	30,321	28,527	28,425	29,413	17,502
	Minor	29,265	30,175	32,673	35,139	18,063
	Endoscopies	10,909	9,946	9,946	11,123	4,790
Deaths		6,313	6,063	10,520	6,771	6,452

	2016	2017	2018	2019	2020
Death Rate	7.3%	7.4%	7.66%	7.66%	12.7%
Total Attendance in Casualty	2,11,355	1,95,138	2,08,620	2,20,805	1,00,981
Medico Legal Cases	33,574	31,312	35,229	36,934	23,423
In-Patient days	6,07,034	5,90,390	6,19,630	6,14,215	3,88,365
Average Bed Occupancy	1,659	1,617	1,697	1,683	1,064
Average ward stay	7.03	7.21	7.35	6.95	7.64
Total no of Deliveries	6,512	6,806	6,506	6,688	5,307
Full-Time Teaching Staff	558	557	369	369	328
Undergraduate Medical Students	732	732	738	808	806
Postgraduate Students (Admissions)	326	247	340	381	359

		2021	2022	2023	2024
Bed Strength		2,250	2,250	2,250	2,250
Total No. of Admissions		60,861	67,399	64,520	65,728
Daily Admissions (Average)		167	185	177	180
OPD Attendance (New)		4,82,744	6,05,612	5,69,947	5,82,312
Daily Average OPD Attendance (New Patients)		1,604	2,012	1,894	1,928
Old patients		9,13,385	11,98,393	12,22,236	12,91,808
OPD attendance (average)		4,639	5,993	5,955	6,206
Surgeries	**Total**	54,988	65,590	66,636	71,438
	Major	28,680	33,022	31,054	33,271
	Minor	26,308	32,568	35,582	38,167
	Endoscopies	6,595	8365	8,823	10,008
Deaths		6,393	6,172	5,722	5,691
Death Rate		9.52%	11%	11.28%	12%
Total Attendance in Casualty		1,22,361	1,63,641	1,43,098	1,47,058
Medico Legal Cases		32,578	37,045	35,461	37,777
In-Patient days		4,67,667	5,06,678	5,16,400	5,23,440
Average Bed Occupancy		1,281	1,388	2,054	1,430
Average ward stay		7.68	7.52	8	7.96
Total no of Deliveries		6,559	6,226	4,960	4,874
Full-Time Teaching Staff		403	558	558	399
Undergraduate Medical Students		806	925	1,009	991
Postgraduate Students		35	312	312	313

Vital Statistics for the Hospital (2016–24)

- The schedule strength of beds was 2,250 throughout the last decade except for 2018 when it was 2,193.
- The total number of admissions annually was above 80,000 from 2016 to 2019, but it dropped to 50,854 in 2020 due to the deeply unfortunate fire in the Intensive Care Unit that caused an infant's death. The total number of admissions have risen since then and last year, in 2024, the total number of admissions were around 65,000. The same is reflected in the daily average number of admissions which are 242 in 2019 and 139 in 2020 and In-Patient days which reduced from 6.14 lakhs in 2019 to 3.88 lakhs in 2020.
- The annual OPD attendance of new patients also went up to almost 7 lakhs in 2019 but halved (3.45 lakhs) in 2020. This number has risen up to 5.8 lakhs in 2024. The same trend can be seen in the annual number of old patients who showed up at the OPD, a number that halved (from almost 14 lakhs in 2019 to 6.3 lakhs in 2020).
- The number of surgeries (both major and minor) too subsequently halved in 2020 (from 64,000 in 2019 to 35,000 in 2020). By the end of the decade (2024) though, the total number of surgeries was 71,438.
- The highest number of deaths (10,520) occurred in 2018 although the death rate was highest (12.7%) in 2020, perhaps due to the onset of the COVID-19 Virus in India.
- The total attendance in casualty too reduced drastically between 2019 and 2020 and went from more than 2 lakhs to 1 lakh. Last year, the attendance was 1.47 lakhs.
- The annual number of medicolegal cases went below 30,000 only in 2020 perhaps as an effect of the decline in attendance in casualty as well as lesser admissions.
- The average bed occupancy also took a hit and was lowest at 1,064 (less than 50%) in 2020.
- The average ward stay was highest in 2023 at 8 days. During the rest of the decade, it remained above 7 days except for 2019 when it was 6.95 days.
- The total number of deliveries performed in the hospital have broadly come down during this last decade from around 6,000 in 2016 to less than 5,000 in 2024.

Vital Statistics for the Medical College (2016–24)

- The annual number of full-time teaching staff was lowest at 328 in 2020. For the rest of the decade, it was above 360.
- The number of undergraduate medical students enrolled in the medical college every year was highest in 2023 when it crossed the 1,000 mark. This number has steadily grown in this decade from 732 in 2016 to 991 last year.
- The number of postgraduate students admitted each year was more than 300 for the majority of the decade and the major exception was 2021 when only 35 students were given admission in the postgraduate programs.

Infrastructure Added During the Decade

2016 Liver ICU
42-bedded state of art neonatal intensive care unit
Interventional Nephrology Unit
Radionuclide ward for patients suffering from carcinoma of the thyroid

2017 Sleep Laboratory
Pharmacogenetics Outpatient Clinic
Lupus Clinic
Predialysis Clinic
Glomerular clinic
Pediatric ophthalmology clinic
Liver Clinic
Liver Transplant OPD
TB culture and drug susceptibility testing laboratory

2018 Theater 3 of the Anatomy department was converted into a Digital Medical Lecture Theater
Link anti-retroviral (ART) center at Malvani
UVA chamber
Renovated Endoscopy room
Five Modular OTs
New Cath Lab

2019 Product Development Center instituted by ICMR
Palliative Care outpatient clinic
Modular OT for Pediatric Surgery
Incontinence Outpatient Clinic

2020 Epidemiology Resource Center
Combined PUVA and narrow band UVB chamber

2021 Memory Clinic

2022 State of the art 32 bedded Medical Intensive Care Unit that includes six stroke beds and two beds for hemodialysis

2023 Tissue Bank
Deaddiction Ward
A new badminton court and table tennis tables

How Departments Grew During the Decade

Department of Biochemistry: In 2017, the department acquired four automated analyzers. In 2023, the department received recognition to start MD in Biochemistry.

Department of Cardiology: In 2016, the department commissioned a state of the art 24-hour ambulatory ECG Holter monitoring system and Wi-fi enabled ECG machines. In 2017, the department added two state-of-the-art computerized stress test (CST) machines. In the same year, the department became one of the first civil-run hospitals in the state to acquire Optical Coherence Technology (OCT) system, a modern cutting-edge technology promising to enhance accuracy of percutaneous coronary intervention. Dr P.G. Kerkar served as the organizing secretary of the prestigious national conference of the Cardiological Society of India in Mumbai in 2018.

Department of Cardiovascular and Thoracic Surgery: The Department obtained a license for starting heart transplants.

Department of Chest Medicine: In 2016, the Department conducted a workshop on Pulmonary Function Tests at National Conference on Pulmonary Diseases (NAPCON) and a CME on Allergy and Immunological disorders. Medical thoracoscopy services were started at the department in 2019. In 2020, a new course DM Pulmonary Medicine was rolled out.

Department of Clinical Pharmacology: The faculty members were invited by the Editor of the Journal of Association of Physicians of India to pen a Biostatistics and Ethics series for the journal over the next two years. In the wake of the COVID-19 pandemic in 2020, the department tested the Serum Institute/ Oxford vaccine in a little over 100 participants.

Department of Community Medicine: The department developed a mobile based app on 1) Rapid detection of water contamination in well water 2) Rapid assessment & redressal of health issues in antenatal, intranatal and postnatal period in collaboration with TCS and Alberta University in Canada. The Head of the Department, Dr R.R. Shinde was invited by the parliamentary Committee, Govt. of India to present his Views on "Reforms in Medical Education in India". In 2024, the department collaborated with the Tata Memorial Hospital to expand palliative care services.

Department of Dentistry: Dr Prasad Bhange, Assistant Professor, was elected as the Scientific Coordinator for IDENTITY 2018, Indian Dental Association (IDA), Thane branch.

Department of Dermatology: In 2016, the Department acquired a new state of the art narrow band UVB chamber. In 2019, the department procured a new excimer laser.

Department of Ear, Nose, and Throat: The department started the Baha Attract program for children without ears (anotia, microtia) in 2016.

Department of Forensic Medicine: The department became a One Stop Crises Center and Center of Excellence for the Survivors of Sexual assault in 2016. It organized a CME on "Communication Skills Towards Management of Untoward Situations At Emergency Patient Care Services" and a national CME on "Child Abuse with Special reference to POCSO Act" in 2016. The department organized XXXVIIIth Annual National Conference: FORENSICON 2017 of Indian Academy of Forensic Medicine.

Department of Gastroenterology: In 2016, the department organized an Endoscopic Ultrasound (EUS) Mentorship conference. This was the first EUS conference among MCGM hospitals. In 2020, this department was nominated as a model treatment center for the National Viral Hepatitis Control Programme. In 2023, The department along with Radiology established intervention for Hepatology and a workshop on spiral enteroscopy.

Department of General Surgery: Dr A.N. Dalvi was elected to the Board of Governors of Endoscopic and Laparoscopic Surgeons of Asia (ELSA) and as an Executive Committee member of the Association of Surgeons of India (ASI) as well as the Congress President of the Indian Association of Gastrointestinal Endosurgeons congress. In 2018, the department conducted the International College of Surgeons Indian Section West Zone Conference–"Multidisciplinary Solution to rare and not so rare Breast and Thyroid issues". In 2023, the department procured advanced laparoscopic surgery systems.

Department of Hematology: In 2016, the department inaugurated a new ward for

Hematology day care center with a facility of 10 beds and 5 reclining chairs. In 2024, the department set up a multi-disciplinary team for Hemophilia care.

Department of Pharmacology and Therapeutics: The department organized the 9th National level workshop for postgraduates of Pharmacology "PHARMATECH 2017—Frontiers in Pharmacology". In 2018, the Department was recognized by ICMR as Advanced Center for Capacity Building.

Department of Physiotherapy: The Physiotherapy School and Center received Medscape National Awards 2017 for "Excellence in Physiotherapy Patient Care, Education and Research".

Department of Plastic Surgery: In 2020, the department partnered with ReSurge International for post burn contracture.

Department of Medicine: In 2016, new facilities were added in the Hypertension OPD such as digital instruments for blood pressure measurement, ambulatory blood pressure measurement, and simultaneous measurement of BP in both limbs. In the wake of COVID-19 pandemic in 2020, the department conducted a study on the use of Itolizumab in patients with COVID-19.

Department of Microbiology: In 2016, the department acquired automated bacterial identification and made available MIC testing for antibiotics. In 2017, the NABL assessment was again successfully completed by the department. In 2020, the department rolled out diagnostics for COVID-19 and successfully renewed its NABL accreditation. The department operationalized the VITEX® MS PRIME system for microbial speciation in 2023. Their Mycobacterial laboratory was recognized by the ICMR as a center for validation of TB diagnostics.

Department of Neonatology: In 2016, the NICU was renovated under MCGM CSR project by Mazgaon Dock Shipbuilders Ltd and a State of art NICU of 42 beds was inaugurated. The department established a 2D ECHO in 2017. In 2019, the department launched a metabolic screening program for neonates.

Department of Nephrology: In 2016, the "Dr V.N. Acharya Division of Interventional Nephrology" was established. In the same year, the department successfully performed a "Swap Kidney transplant", i.e., paired kidney exchange. This is the first incidence of such transplant at a public hospital. In 2019, the ICU dialysis facility was started for critically ill patients in the Medical Intensive Care Unit (MICU) by the department. In 2023, the department established a glomerular nephritis registry and conducted 35 renal transplants.

Department of Neurology: The department conducted (Stroke) awareness program for acute stroke Treatment in Casualty and Nursing staff of Emergency Medical Services (EMS) in 2016.

Department of Neurosurgery: In 2018, intraoperative CT scan and a biplanar digital angiography suite was procured by the department exclusively for neuroangiography and procedures for brain and spine like acute stroke, aneurysm, dural AV fistula, tumor embolization etc.

Department of Nuclear Medicine: In 2016,

the department acquired PET with 128 slice CT, making KEM Hospital the first Municipal hospital in Greater Mumbai to do so.

Department of Nursing: The department conducts regular training workshops. In 2016, Cadaver training was provided to 60 Nurses and Organ transplant training to 400 Nurses.

Department of Obstetrics and Gynecology: In 2016, the department organized CMEs on "Thromboembolism in Pregnancy " and "Myomectomy".

Department of Occupational Therapy: The department conducted a workshop for Parents on 'Management of Child with a diagnosis of ADHD at Home' in 2016.

Department of Orthopedics: The department pioneered "in search of excellence" management protocols for several sub-specialties.

Department of Pathology: In 2016, the department conducted a Cytology CME with visiting international faculty Dr Dina Modi, USA and participation of 280 delegates and an all-India level Autopsy Workshop with 225 delegates.

Department of Pediatrics: Dr Sunil Karande was appointed as Editor of Journal of Postgraduate medicine (2016–2020).

Department of Psychiatry: The department conducted workshops for BEST staffers on stress management.

Department of Radiology: In 2016, the department acquired a 1.5 Tesla state of the art MRI, DSA, CT Scan and Digital Radiology Machine. In 2018, two high end ultrasound machines and four midrange ultrasound machines were installed in the department.

Department of Surgical Gastroenterology: In 2016, the department successfully carried out 3 cadaveric liver transplants and started MUHS Fellowship in Hepato-Pancreato-Biliary surgery (HPB) and Liver Transplant Surgery with intake of 1 candidate annually as well as a Maharashtra Govt Sponsored One year Fellowship for Rural Surgeons in GI Surgery.

Department of Transfusion Medicine: In 2018, Dr Jayashree Sharma was appointed as Editor of Asian Journal & Transfusion Science (AJTS). In 2020, the department of Transfusion Medicine renewed their NABH accreditation.

Milestones of the Decade

2016 A new day care facility for thalassemia patients
Oculoplasty
Indo-UK CME on Pediatrics

2017 Beginning of Cochlear Transplants

2019 Center of excellence for management of aortic aneurysms
Mobile app for auditing biomedical waste
Department of Microbiology organized by the Government of India as a virus reference laboratory

2020 First pediatric swap transplant
First Transcatheter Aortic Valve Implantation [TAVI]
Recognized as a Regional Collaborative Center for facility

based newborn care

2021 Immunobridging Study with a new vaccine [Covovax/Novavax]
First hand transplant
Pacemaker lead extraction program
New ventilators and high flow nasal cannula systems
Point of care testing for interleukin -6 and D dimer
Psychosocial helpline for providing support to COVID -19 patients
Installation of BACTEC FX 200 system
Certification for liquid culture and drug sensitivity testing for first- and second-line anti- TB drugs from the National TB Institute
Awarded the best Regional Organ and Tissue Transplant Organization [ROTTO] and State Organ and Tissue Transplant Organization [SOTTO] by the Ministry of Health and Family Welfare

2022 Endo-Oncology Services
Spiral Enteroscopy Services

2023 Recognition by the Indian Council of Medical Research (ICMR) as a center for conduct of Phase I clinical trials in the country as part of a national network of centers
Glomerulonephritis registry
Digitization of epilepsy health records

Research and Publications

- Dr Swati Ramteke-Jadhav was awarded the AV Gandhi award for excellence in endocrinology [best clinical research award, 2016].
- The Department of Neurology authored five articles which were included in the Highest cited 100 papers published in Neurology India.
- The Department of Neurology authored two articles included in 'The hundred most influential publications in cervical spine research', published in Spine, 2016.
- The Department of Community Medicine was awarded a Research project of National Importance by ICMR entitled " Effect of Pesticides on the population in the vicinity".
- The Department of Community Medicine was awarded a research project on A. "Epidemiological Assessment of Leptospirosis Rural/Urban differences, and B. "Epidemiological basis of maternal Death review" by the Directorate of Health Services & MCGM.
- The Department of Neonatology participated in prospective, multicenter multinational cohort study entitled "NeoAMR Global Neonatal Sepsis Observational Study (NeoOBS) in hospitalized neonates" in collaboration with AIIMS, Delhi, ICMR & Drugs for Neglected Diseases Initiative (DNDi), Switzerland.
- The 4th National conference on scientific awareness on zoonotic disease control was organized by the Department of Physiology in 2018.
- Dr Satarupa Deb received 2nd prize in Dr Pravena Shah poster competition at Indian Society of Nephrology - West Zone 2020 for paper titled "Repeat COVID RT-PCR positivity in dialysis patients".
- The Best Presenter award was given to Drs Yashashri Shetty, Medha Rajappa, Sudha Ramalingam, Vinita Agarwal,

Gaurav Narula for their paper "Perceptions about Ethics of Public Health Behavioral Interventions during the Covid 19 Outbreak" at 20th FERCAP Online International Annual Conference 2020 organized by National Institutes of Health University of the Philippines, Manila.

Illustrious Achievements of the Decade

Excellence in Transplant Surgeries

In 2016, organ transplant training was given to 400 Nurses. In the same year, the department of surgical gastroenterology successfully carried out 3 cadaveric liver transplants and started MUHS Fellowship in Hepato-Pancreato-Biliary surgery (HPB) and Liver Transplant Surgery with intake of 1 candidate annually. From the construction of the Liver Transplant OPD to the beginning of heart transplants to the first Swap Kidney Transplant in a public hospital, KEM Hospital has achieved pioneering success in transplant surgeries and built solid infrastructure for the same. In only 2023, the Department of Nephrology had conducted 35 renal transplants. Since then, cochlear transplants, pediatric swap transplant, and hand transplant have been performed. In fact, in 2021, the Hospital was awarded the best Regional Organ and Tissue Transplant Organization [ROTTO] and State Organ and Tissue Transplant Organization [SOTTO] by the Ministry of Health and Family Welfare

Fighting COVID-19 Pandemic

A Critical Care Committee for COVID chaired by Dr Hemant Deshmukh was formed by the Hospital. The Department of Chest Medicine and Environmental Pollution Research Center identified the presence of platypnea-orthodeoxia in patients of COVID-19 who had hypoxia and this simple-to-use clinical sign helped the hospital tremendously in triaging hypoxic patients. The Department of Psychiatry ran the helpline for caregivers of COVID-19 positive patients admitted in the COVID-19 wards of KEM Hospital. The helpline helped in communicating about the patient to the family members of the patients on a daily basis. A Psychosocial Support Cell helpline for COVID-19 patients was started.

Vedika Joshi
MBBS 2023

Vedika Joshi
MBBS 2023

33

Those Who Made it Possible

The institution as it stands today has been born from the labor and commitment of innumerable doctors, nurses, office staff, engineers and health workers. The contribution of each one is valued which has allowed the institution to reach the top rank of public institutions for health services and medical education, nationally and internationally. An attempt has been made to feature as many of these as was possible, based on Dr Pandya's own research and publicly available information, as well as from contributing authors and the video archives of the Dr MVL Kothari Chair and Division of Medical Humanities. All omissions are inadvertent and do not undervalue their contributions to the glory of the institution.

Past Deans

Dr Jivraj Mehta (1.4.1925 to 20.8.1942)

He was the first dean of Seth G.S. Medical College and KEM Hospital and was involved in the planning of these institutes even before their inception. Dr Mehta suggested that the medical college and hospital should be housed in single multi-storeyed units rather than isolated blocks of buildings. Architectural changes were also made later as the number of patients and students increased. He ensured strict discipline and cleanliness in the institutions as he would randomly visit different working areas at odd hours. At the same time, he was greatly concerned about the welfare of his staff and students. He was an avid proponent of medical research and worked very hard to mobilize funds for research at Seth G.S. Medical College.

Dr Swarupa Bhagwat,
Associate Professor,
Department of Transfusion Medicine

Dr J.P. Padshah (23.9.1942 to 10.4.1943)

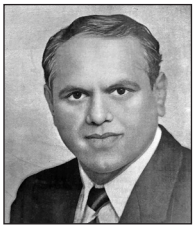
Although Dr Padshah only served these institutions as a dean for the duration of seven months, nevertheless, during his short tenure, his administrative abilities stood out. It was the time when the struggle for independence was at its peak, and agitations were ongoing nationwide. He handled the situation to the best of his ability.

Dr Swarupa Bhagwat,
Associate Professor,
Department of Transfusion Medicine

Dr R.P. Koppikar (11.4.1943 to 26.9.1945)

He was the first teacher to be appointed as the Dean of Seth G.S. Medical College and KEM Hospital. As the Head of Department of Anatomy, he contributed a lot in the form of a vast collection of anatomical specimens and created the Anatomy Museum. As dean, he worked towards the upliftment of medical education and practice by building a team of enthusiastic and trusted colleagues. He was kind, amiable, modest, and popular among staff and students.

Dr Swarupa Bhagwat,
Associate Professor,
Department of Transfusion Medicine



Dr R.G. Dhayagude (27.9.1945 to 8.10.1954)

Dr Dhayagude's association with the twin institutions was unique—he went from being a resident pathologist at the institute to Assistant Professor, Associate Professor, and Professor in the Department of Pathology. After serving as Vice Dean, he became the Dean.

Dr Swarupa Bhagwat,
Associate Professor,
Department of Transfusion Medicine

Dr S.G. Vengsarkar (25.3.1955 to 31.12.1958)

Dr Vengsarkar was the first Consultant Physician to be appointed as an Honorary at KEM Hospital based on Indian qualifications alone.

During his tenure as the Dean, Dr Vengsarkar established new clinical specialties in the hospital, such as neurology, neurosurgery, clinical pharmacology, pediatrics, chest medicine, antenatal and postnatal clinics, and occupational and physiotherapy. He introduced new subjects at the university level as he held a post in the Bombay University Senate and, later, in the Syndicate.

Under his leadership, Dr P. Raghavan and Dr P.K. Sen volunteered to take charge as full-time physician and surgeon, respectively. With a joint contribution from the Rockefeller Foundation for Medical Education and Research and the Municipal Corporation, he was able to establish new departments, viz. Cardiothoracic Surgery and Cardiology. The country's first Cardiac Catheterization and Angiocardiography Laboratory and the Thoracic Operation Center were also started. Dr Vengsarkar also nominated many young staff members for the Rockefeller Traveling Fellowships so that they could develop new departments on their return to India.

Dr Swarupa Bhagwat,
Associate Professor,
Department of Transfusion Medicine

Dr S.V. Joglekar (1.1.1959 to 21.9.1969)

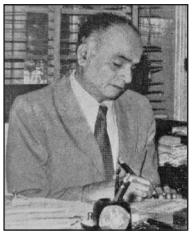
Dr Joglekar's first significant contribution as the Dean was the construction of a porch for incoming and outgoing patients at the entrance of the OPD for patients. He started the departments of Cardiology, Nephrology, Dermatology, Audiometry, Gastroenterology, Pediatric Surgery, Plastic Surgery, Hematology, Urology, Clinical Pharmacology, Endocrinology, and Nuclear Medicine. An additional floor was constructed in the college building to allow more space for the Anatomy and Physiology departments. Dr Joglekar also started formative assessments for resident medical doctors.

Dr Swarupa Bhagwat,
Associate Professor,
Department of Transfusion Medicine

Dr T.H. Rindani (22.9.1969 to 22.9.1972)

As the Dean, Dr Rindani was instrumental in making nonfunctional equipments in the institution functional. He persuaded the municipal commissioner to elevate some professors to the positions of directors, with salaries equivalent to those of the Dean. He arranged for a donation from the Municipal Corporation to name the Main Lecture Theater (MLT) after Dr Jivraj N Mehta.

Dr Swarupa Bhagwat,
Associate Professor,
Department of Transfusion Medicine



Dr C. K. Deshpande (23.9.1972 to 31.3.1984)

Dr Deshpande was a visionary pathologist who modernized the pathology laboratories and greatly revolutionized the diagnostic and research aspects of the speciality. Besides developing speciality services like neurology, oncology, and nephrology, Dr Deshpande established specialized pediatric care in the hospital. He fortified postgraduate medical education and fostered research among students and faculty. Dr Deshpande also upgraded the infrastructure of the institution, including outpatient departments, wards, and diagnostic services. He strongly advocated an emphasis on community care and public health.

Dr Swarupa Bhagwat,
Associate Professor,
Department of Transfusion Medicine

Dr G.B. Parulkar (1984 to 1989)

Dr Parulkar was a Seth G.S. Medical College alumnus who specialized in Cardiovascular and Thoracic Surgery. He was an essential team member who, under Dr P.K. Sen's stewardship, conducted the first heart transplant in India at KEM Hospital in 1968. Later, as the Head of the Department, he upgraded the Cardiovascular Department, which contributed to the modernization and transformation of cardiac surgery practice in India and globally. As the dean, he supervised and ensured the progress of clinical specialties, such as nephrology, neurosurgery, oncology, and gastroenterology. He also strengthened postgraduate education and fellowship programs in various subjects and encouraged faculty and students to participate in clinical research and innovations. Many path-breaking research publications consolidated the standing of KEM Hospital as a premier institute in the country. He put a strong emphasis on improvement in public health while ensuring that many public health initiatives were underway. He was awarded the Padma Bhushan (1998) for his immense contributions to medical science and healthcare.

Dr Swarupa Bhagwat,
Associate Professor,
Department of Transfusion Medicine

Dr (Smt.) Pragna M. Pai (1.12.1989 to 31.5.1999)

It is a very peculiar story about how I became a doctor. When I was born, my aunties made comments about my dark complexion to my mother, and she feared that no one would accept me. She tried all kinds of remedies to lighten my complexion and brainwashed me very early on into thinking that if I remain unmarried, it would only be if I were in ICS (Indian Civil Service) or if I were a doctor that anyone would respect me. Eventually, that led to my decision to go to a medical college even though I didn't know anything about the consequences it would have later in my life.

I joined Nair as an undergraduate student in 1958. I did my postgraduation, became a Lecturer, then Assistant Professor, Professor, and finally, the Head of Department by 1973, so yes, you can say that I'm a Nair girl through and through. I was 32 years old when I became the Head of the Pediatrics Department there; that's a young Head of Department. I thought to myself that instead of criticizing and blaming everything, I would apply for the post and do something for this institution that has given me so much. The earlier deans were much older; they could make promises, but they were out before these things were implemented. It wasn't like that for me, once I committed to something, I knew I was going to be there for ten more years at least and I could not escape that promise.

In 1989, I was transferred to KEM despite my objections in the beginning because Mr Tinaikar, who was the commissioner at the time, felt that KEM was a bigger

challenge and there were certain improvements that needed to be made. Although I was apprehensive of the hostility towards outsiders and a few teachers tried to pressurize him against my appointment, saying KEM should have a KEM dean only, he said curtly that inbreeding is never good and that was that.

At KEM, I wanted discipline and cleanliness in both the hardware and the software, i.e. the handling of issues and rules, etc. Mr. Karandikar, the deputy commissioner, insisted that I take clear decisions and stand by them because he had previous experiences with deans who went back and forth to him for advice but ultimately did what they wanted to. I was also influenced by my grandfather who was the founder principal of Podar School, and although he was very compassionate, he was also strict, which possibly had an impact on me. There were some experiences with the administration where I had to stand my ground. For example, sometimes after our standing committee meetings, somebody would ask me separately or on a call to change a decision taken during the meeting, but I was insistent that we could only go ahead with it once it was discussed again in a meeting. This caused some personal inconvenience, but I was prepared for it. I believe that what is right is right and must be done, it doesn't matter who is correct, what is correct is more important.

A parting thought I'd like to share—when I was standing on the slippery slope and lollipops of temptation were offered to me, I didn't slip. And when I was standing erect and the gush of turbulent water came and surrounded me, I didn't fall down, and I think that's been an achievement.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities

Dr R.G. Shirahatti, Dean (1.6.1999 to 31.05.2001)

I always was fascinated by the uniform and wanted to be in the army, but I was disqualified due to health reasons so then, the second choice was to become a doctor and indeed, I found great success in the medical field. I did my postgraduation from Sion, worked as a Lecturer there in 1984, and was then selected as an Associate Professor at KEM. In those days, it was peculiar being an associate professor as we worked in two units. I was in Ward 7 working with Dr Bhalerao and Dr Deodhar, two people as different as chalk and cheese. One was a bludgeon. He would bludgeon you to death if you made a mistake. The other guy would make you bleed from a thousand cuts with his sharp tongue. But then, if you had the patience and could keep your ego aside, you would learn.

My most memorable experiences involve dealing with emergencies and establishing new services in the college and hospital. I remember establishing emergency medical services and trauma services and managing critical situations like food poisoning cases. I believe doctors can be excellent administrators if they are willing to take risks and face

criticism. They bring a unique perspective that can benefit hospital management greatly. It was a humbling experience being a Dean, knowing that great individuals had occupied the chair before me. It was an honor and a big responsibility. As Dean, handling unions and managing crises effectively become vital aspects of the role and I believe ensuring harmony and proper communication can resolve most issues.

With regards medical education, I would emphasize early exposure to clinical training, integrating an outcome-based curriculum, and focusing on developing critical thinking and research skills in students.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities

Dr Shirahatti recognized the need for a centralized Emergency Medical Service (EMS) at KEM Hospital due to its scattered and outdated setup that led him to design a detailed EMS plan, but the estimated cost exceeded ₹ 3 crores—far beyond what the Municipal Corporation could offer. While preparing to seek funding from the MMRDA, a chance meeting with a young donor led to an unexpected breakthrough. The donor's trust agreed to contribute ₹1.5 crores on two conditions: anonymity of trustees and hiring Mumbai's best architect. Dr Shirahatti added his own terms for transparency and oversight. Renowned architect, Brinda Somayya was chosen, and after months of intense collaboration, the EMS was completed and inaugurated on KEM's 75th anniversary, earning praise for its modern design and efficient layout.

Inspired by the need for better coordination in patient care, Dr Shirahatti envisioned a Local Area Network (LAN) connecting treatment areas with labs and radiology. While developing the proposal, he was unexpectedly contacted by Mrs. Sudha Murty, who visited the new Emergency Medical Services (EMS) facility he had set up. Impressed by the efficiency and vision behind the EMS, and moved by her father's connection as a GS Medical College alumnus, she expressed interest in supporting a computer-related project. After reviewing the LAN proposal, she enthusiastically agreed to fund it. Her team collaborated closely with Dr Shirahatti's MCGM team, and within a year, the LAN was successfully established and inaugurated by the Hon. President of India.

The GOSUMEC Foundation, USA, was initiated by Dr Shirahatti in 2000 during the Platinum Jubilee, recognizing alumni as one of the four pillars of an institution. With support from Dr Ravi Bapat, Dr Nila Vora, Mr. Manu Vora, and Dr Vijay Dave, the foundation's first milestone was the creation of the alumni office "Nostalgia." Dr Shirahatti believes philanthropists support healthcare initiatives that are well-planned, transparent, and ethical. He found satisfaction in successful projects like ICU-lab links, traffic police BLS training (Ayushyadaan), resident beepers, and mass hepatitis immunization for ward staff.

Rama Malik,
Senior Personal Assistant to the Dean

Dr Nilima Kshirsagar (1.6.2001 to 30.6.2007)

Becoming the Dean was a practical move as it promised a phenomenal experience. All applications for starting new disciplines came to the dean for approval, and some of my happiest moments have been spent conceptualizing new disciplines and discussing them with students, only to find that they sometimes have better ideas! If I went home someday looking very happy, my daughter would ask me, "Did you get one square foot extra for your department today?" because it was so difficult to get any space in the institution.

While clinical pharmacology was perceived as benefiting individual patients, it was essential to connect it to public health, especially due to the rising cases of Malaria in the 90s. That was the time we realized that to work in this discipline, you should focus on infectious diseases as that's where we see how drugs are being used and how they can be developed to benefit public health and we even wrote a WHO book on public health. We developed an alternative drug in collaboration with Dr B.K. Bachhawat of Delhi University called liposomal amphotericin to treat a fungal infection in Mumbai; it was developed in our own department in KEM.

It was difficult to maintain a work-life balance; medicine is a very funny master, or a funny friend, you can say, it takes away all the time—the more you study, the more you learn, the more you work on it, and the more it becomes a passion and is enjoyable. It is always difficult to find time for family and friends. My daughter would sometimes look at me suspiciously, and ask, "Right now you're talking to me, but you're not really thinking of me… You're thinking of KEM, aren't you?"

As the dean at Nair, I witnessed the flooding during my first monsoon and the 26/11 bomb blasts, and we prepared a disaster management document after that. I use that as an example to explain that disasters don't happen one at a time, they can come all at once, and you have to learn to be prepared to handle each of them simultaneously.

Promoting the growth and development of our associate professors was very important to me and I was very fond of them all. Ultimately, KEM is about the people that are there. I have learned that you must speak a simple language that anybody can understand. I wish I could've done it earlier, but I tell my students now that they should talk to their mothers and grandmothers and explain their ideas to them. If they can explain and make them understand what that idea is then it is a good idea, and only then should they go ahead with it. Similarly, it is important to be able to communicate effectively with patients, it is one of the missing links to being a good physician.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities

Dr Murar E. Yeolekar (04.07.2007 to 30.09.2008)

I joined KEM as a Professor of Medicine in 1988. It was then that I was appointed as the President of the Indian Society of Hypertension and the Geriatric Society of India. I was also a part of the Indian Society of Ethical Research, Indian Council of Medical Research, and one task force. Hypertension was a special clinical interest of mine, and I had the privilege of running the clinic which was founded in 1991–92. We recognized the importance of public cooperation during the 1993 Bombay Bomb Blasts, as it taught us lessons on how one should mobilize human resources and facilities and how residents, faculty, and the administration can handle situations of tragedy. This experience was invaluable as I later put it into practice during the aftermath of the 2006 Mumbai Train Bomb Blasts.

The experience at KEM was useful for when I joined Sion Hospital in 1998 as Professor and Head of Department. I initiated the expansion of the medicine seminar hall, ensured the consolidation of activities at the geriatric clinic, and created an integrated HIV clinic. Earlier, patients would be required to come in on multiple days to visit different specialists, therefore I instituted Monday as a common day wherein the pediatrician, chest specialist, walk-in center, microbiology and medicine center, etc. could be available on the same afternoon for the patients. This kind of integrated clinic perhaps became something of a landmark in the treatment of HIV care.

An example of innovation within tragedy was the way we handled the dead bodies that came in during the 2006 Mumbai Train Bomb Blasts. We computerized the photos of the victims and assigned them numbers so the families could identify them based on the photos without having to go around lifting sheets and witnessing the ghastly sights. Even the Prime Minister, Manmohan Singh, appreciated the hospital's efforts at the time.

I've always felt that KEM leads when it comes to research, and the KEM Journal of Postgraduate Medicine is very important as it provides a platform to publish the work done here. It was my suggestion to the editorial to reserve at least 50% of the content of the journal for articles from KEM and the rest from international contributors. I myself have over a hundred published articles on Google Scholar.

Modern medicine must respect other disciplines of medicine like Ayurveda and Allopathic medicine, and practices like yoga must not be dismissed out of contempt. Exposure to these practices at a young age can encourage the adoption of preventative measures related to non-communicable diseases, hypertension, and diabetes, etc.

Lastly, I would like to say that when all is said and done, the people who are products of a good institution always have character and integrity. You should look out not only for your own progress but also that of society and you should be informed about the current

state of things, as societal problems are our problems, and we must evolve beyond our specialties to meet those challenges.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities

Dr Sanjay Oak (1.10.2008 to 30.9.2012)

I went abroad for a brief period to work at the world's two best institutes in Pediatric Surgery: Royal Liverpool Children's Hospital and Johns Hopkins University Hospital. When asked if I would like to stay back permanently, I said "No, I want to go back to my hospital". I came back and rejoined KEM as a lecturer. Not once, when I look back, have I lament this decision of not being a British citizen or American citizen; I love this place.

In 2005, as the Dean at Nair, the first thing I did was demolish the two dilapidated and old buildings. Ever since then, I have been known as the Demolition Dean, but I enjoy that status. By the time I left Nair, at the end of four years, seven departments had passed ISO accreditation, and various departments were renovated through the generous donations from the alumni association.

I joined this lovely place on 30th September 2008, and the first four years at KEM were a roller coaster ride. The first thing that we did was give true momentum to the heritage restoration of KEM. As an administrator, you must develop a habit to act swiftly, to act prudently, and to think ten years ahead. One of my prime responsibilities, and I would say I have succeeded in this, was uplighting peripheral hospitals and establishing proper linkages between primary, secondary, and tertiary level units of healthcare. Some changes that can be highlighted include establishing newer departments like the Department of Hematology and establishing postgraduate courses in Hematology. When it comes to the healthcare sector in India, I would push for the development and support for paramedical professionals to ensure they are given their dues in terms of money and respect. During my tenure, I started paramedical courses and diplomas, and BSc degrees for the same.

As the Vice Chancellor of DY Patil, one of the most notable and memorable achievements I will always cherish was the establishment of one of the finest medical simulation laboratories in India. My exposure here was very vast as I was working with twelve other branches that were beyond medicine. I saw medical education not only from the perspective of a doctor and wondered how a management school can also contribute in the growth of a medical college, and how a doctor can help an administrator from a management school understand the nuances of medicine and the specific requirements of building a medical college and hospital.

An idea I would like to put forth is about running the college in two shifts—from 7 am

to 2:30 pm and from 3 pm to 10 pm; the government will prove to be a richer source than any private sector to implement this. Not only will it benefit the patients, but you will also have good postgraduate students being persistently supervised and assisted by the topmost consultants. To date, I have written about fifty books. I also used to write a column in *Chaturanga* called *Tana Mana* and recently, I fell back on my Sanskrit roots and wrote on *Vaidyakiya Subhashita*. I also wrote two poetry books while I was the Dean of KEM hospital; one can say that the Director's post at KEM was poetry in itself.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities

Dr Sandhya A. Kamath (1.10.2012 to 31.1.2014)

I began my medical career in 1973 at the Topiwala National Medical College and I believe that it was destiny that led me to medicine. I did my MD in Medicine but I didn't end up doing a superspeciality. If you ask me, there are very few pure physicians or internists. In fact, I feel that they are the ones who look after medicine as a whole rather than just looking at the heart or the lungs, so I am proud to be a physician. I started at Sion Hospital, and I was also the Dean there for four and a half years. I knew Nair very well too and by the time I reached KEM, I had become adept at administration and management.

When I came to KEM, I realized what a vast and gigantic institute it was. My question from the very beginning was, "What can I give this institute?" KEM had already been running for 85 years and more by that time and I didn't really put my head into the day-to-day management of it. I put my efforts towards developing the Neonatology Department and during my time, we got a Neonatology ward, Neonatology ICU, and a whole setup. I also tried my best to get something for the Department of Cardiothoracic Surgery.

I believe that there is a lot of potential for KEM Hospital to grow academically. All the senior staff members here should be giving their opinions and be heard at a central level in the country. One place we are lacking is in epidemiologic studies and because of that it is difficult to do basic research in the country. Down the line, I think we could have a center in the hospital where we can take this up as currently, India lacks centralized epidemiologic studies. It would help us further our research and go a long way towards grassroots healthcare, and it would allow us to actually invent for ourselves what our community needs.

I recognize that the RMOs work 18 hours non-stop, but they must communicate more humanely with the patients. This will be important later in life as well and not just in clinical practice and will reflect in their behavior towards society. For me, this is what matters now that I have retired am leading a life where I am doing a lot of social service and social work wherein we try to use my medical skills for the good of the community.

Another thing that I would like to tell my students is that when it comes to medicolegal cases, is to keep thorough and complete paperwork. In 1990 at Nair Hospital, we had a case where we received 110 patients who had consumed a mixture of methyl and ethyl alcohol who were all in a very critical condition. Almost 50% of them died and when the case was taken to court, not a single paper was commented upon by the judge. They found that all the papers were complete, but this was because all the seniors had written down the papers as the RMOs were on strike then. So, this is one more thing which I would like the RMOs to know. Today, many court cases go against them because the paperwork is not complete. In the maddening rush of emergencies, they forget to write but it is very important that they write and have checked the patient.

As a Professor at Nair, I headed the Hypertension unit of the Department of Medicine, and I took over Gerontology till I became the Dean. I worked in the Hypertension Society of India, of which I became the President, and as member of the executive committee of the Geriatric Society of India, I also edited their journal. I was the President of the Association of Physicians of India, which has 18,000 members all over India. And now, I am Editor-In-Chief of the API textbook of medicine where I am working on the 11th edition of API textbook of medicine out in 2018.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities

Dr Shubhangi Parkar, Dean (23.01.2014 to 15.01.2015)

During the years 2012 to 2014, I had the privilege of shouldering significant administrative responsibilities at Seth G.S. Medical College and KEM Hospital—initially as Acting Dean, a role entrusted to me by various Deans over the years, and later as Dean. My role during this transformative phase was to facilitate, coordinate, and guide key developments across various domains.

A major achievement during this period was the sanction of a ₹5 crore grant from the Government of India for establishing a Multidisciplinary Research Unit (MRU) secured through a well-conceived research proposal and detailed planning. It marked a significant milestone in strengthening research infrastructure and fostering advanced scientific inquiry. A pressing concern emerged during my tenure, with a surge in tuberculosis cases among resident doctors. In response, a free high-protein breakfast program was introduced with the support of the Municipal Corporation, ensuring better nutritional support for our young clinicians.

This was also a time when the media frequently reported tragic incidents of student suicides in Mumbai and across Maharashtra. Recognizing the urgent need for mental health support, India's first mental health helpline—HITGUJ—was launched with ten trained counselors and soon became a nationally recognized model. It was well received

by elderly individuals as well, who found comfort and relief through their interactions with trained, empathic counselors. The Department of Psychiatry also hosted the Indo–British Workshop on "Learning Objective-Focused Teaching in Psychiatry," further establishing its academic leadership. The institution continued to advance with the introduction of Deep Brain Stimulation therapy for Parkinson's disease.

Special efforts were undertaken to ensure a safe and supportive campus environment, including the expansive hostel facilities spread across this large institute. A policy of zero tolerance towards ragging and bullying was strictly enforced, and robust suicide prevention measures were implemented with the active involvement of mature, committed wardens and trained student volunteers. I believe this remains one of the most vital responsibilities in today's era, reflecting our unwavering commitment to student well-being and mental health.

A Methadone Maintenance Clinic was inaugurated at the De-addiction Center with support from the Government of India and UNODC, reflecting a shift toward evidence-based harm reduction strategies for opioid dependence. A major academic highlight was hosting the National Conference on Health Professions Education (NCHPE) from September 26–28, 2013, in collaboration with MUHS and FAIMER, USA. With the theme "Progress through Partnership," the conference featured pre-conference workshops and over 250 participants. It saw the launch of the India FAIMER Directory and the IAHPE website.

A special mention must be made of the fact that KEM hospital remains the only civic or state-run hospital in Mumbai with the capacity to perform pediatric open-heart surgeries, thanks to the unwavering commitment of the Head and team of the Department. As a result, economically disadvantaged families from across India seek these life-saving services here—leading to long waiting lists that often-attracted criticism without full appreciation of the context. Nevertheless, this stands as a rare and invaluable contribution by any government hospital in the country.

A highlight of this period was the expansion of the 'Advait' Marathi Drama Competition—an entirely student-led initiative, which became a celebrated platform for nurturing theatrical talent and left a lasting legacy of cultural excellence at Seth G.S. Medical College.

I deeply appreciate the opportunity I had to contribute to the welfare of these twin institutes, building on the legacy of Seth G.S. Medical College and KEM Hospital. These institutions represent not only excellence and academic leadership, but also a deep commitment to compassionate care and public health. These achievements were made possible by a collaborative spirit across departments, unwavering support from civic bodies, and the dedication of students, faculty, and staff—working together in service of the community.

By Shubhangi Parkar

Dr Avinash Supe (16.01.2015 to 31.10.2018)

I would introduce myself as a *GSite* who entered this great campus as a student in 1974 and retired as its Director over the last 40 years of my career. Once a clinician, always a clinician; and although I have been an administrator, a photographer, a writer, a hiker, etc., I would like to be remembered as a clinical teacher and clinician first. Although I didn't plan my life and career from the very beginning, I started training myself in my 40s to build my skills to make appropriate interventions into teaching and administration. Similarly, with my hobbies, I saw to it that I do the right things at the right time. Like, I took up hiking when I was young and had the energy, then in my 40s, I shifted to wildlife and nature photography and now, I am into jeep and travel photography.

After being a part of this institution for more than 35 years as a clinician, I think I could understand the patient's needs better than anyone else, and so in my role as the Dean, I tried to develop new specialties, services, and equipment like opening neurointerventional radiology centers in the four hospitals, oncology wards, and special urology theaters, etc. As clinicians, we understand society's needs, and surely as a clinician, I could have perhaps treated 200 to 400 patients more, but as the Dean, I made services available to thousands of patients and that's a larger benefit; I see it as giving back to the alma mater. A lot of infrastructural development was initiated during my tenure. We brought in new technology, established the oncology division, and set up a pediatric center in Borivali with bone marrow transplant facilities, etc.

With regards to the medical education scenario, I believe the teacher to be the role model and facilitator who directs and changes the attitudes of students. Students must realize that the time spent in these institutions leaves them with life-long learning. We need to bring in more clinically based formative and internal assessments so that students can spend more time out in the world.

While clinicians often don't have time for students, I think that taking rounds with them and seeing the way they move around can be very influential. I still remember how Dr D.N. Pai would take us around in his jeep to various villages; it was a huge thing for us. It can completely change your direction, approach, and values in life. I am happy that current students have more clarity of vision about their futures but one must look beyond medicine. Health is a vast subject; health contains Social Sciences, Anthropology, and History but a holistic approach has been lost. The other aspects of your life are just as important as being technically and technologically upgraded, and until we can create a doctor like this, we will not have done our job properly.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities

Dr Hemant Deshmukh (01.11.2018 to 31.12.2021)

Although Radiology is not a surgical field, I've always been inclined towards doing some kind of surgical work in radiology, and that led me to Interventional Radiology. I have been practicing for the past 35 years and I think I have been the longest serving Interventional Radiologist at KEM. I developed the Department at the BMC as the Head of Radiology there, and the students at Nair benefited a lot from it as there were no other public hospitals that practiced Interventional Radiology per se. It has been extremely gratifying to see a patient relieved by the minimally invasive procedures we practiced that I have often seen clinicians struggle with.

As an Interventional Radiologist who became a Dean of this institute, my approach was to try and resolve conflicts first. One of the two things I have learned in my time here has been to believe in your instincts and staying in tune with your surroundings, and the second being that new ideas require time and cumulative group effort to be accepted. Looking ahead at the centenary celebrations, it will be a huge task to create a database and reach out to each MBBS student who has graduated from GS Medical College, but I believe that we need to get a corpus of funds to establish a Centenary Tower or Center of Excellence for internal research and development.

My defining moments as Dean, Seth GSMC & KEM Hospital during the Covid-19 Pandemic:

The Covid-19 pandemic was an unprecedented crisis that tested the resilience of every individual and institution across the globe. As Dean of the hospital and medical college, I found myself at the center of a complex, rapidly evolving situation where decisions had to be made swiftly, often with incomplete information, but always with the safety and wellbeing of patients, staff, and students as the foremost priority.

One of the earliest challenges was mobilizing resources—beds, ventilators, PPE kits, and trained manpower—to handle the sudden surge of patients. I had to coordinate with multiple departments, government agencies, and external partners to ensure that our institution remained prepared at every stage. The creation of dedicated Covid wards, isolation units, and ICU expansions required not just medical expertise but also logistical planning, resource management and mobilizing donations through Corporate Social Responsibility (CSR) under severe constraints.

The most demanding task was to ensure the safety and morale of our healthcare workers. Doctors, nurses, technicians, and support staff were working long hours under immense physical and emotional stress. As Dean, I took it upon myself to lead from the front—being present on the ground, providing guidance, listening to concerns, and ensuring their needs were addressed promptly. Leading a Team of Multidisciplinary Doctors to dwell upon each Critical patient and ensuring rapid Covid Testing was crucial to arrest the spread of this invisible enemy. Transparent communication became critical, both within the hospital and with the public through Media bytes, to combat misinformation and build trust.

Academically, we faced the challenge of sustaining medical education while physical classes were suspended. Transitioning to online teaching, virtual clinics, and digital assessments required quick innovation and adaptability. I encouraged faculty and students alike to see this as an opportunity to embrace new models of learning that will likely remain valuable in the post-pandemic era.

The pandemic also highlighted the importance of research. Our teams participated in Clinical and Vaccine trials, data analysis, and the development of treatment protocols for Critical patients and patients with Mucormycosis, contributing to the global effort against Covid-19. As Dean, I ensured institutional support for such initiatives while maintaining strict ethical and safety standards.

Looking back, the pandemic was a defining period in my career as an Interventional Radiologist. It reinforced the essence of leadership in medicine—not just clinical competence, but compassion, decisiveness, adaptability, and the ability to inspire confidence in others. Though the challenges were immense, I take pride in the fact that G S Medical College & KEM Hospital not only managed the crisis but also emerged stronger, more united, and more future-ready.

By Dr Hemant Deshmukh M.D.,
Ex Dean & Professor Emeritus,
Seth G S Medical College & KEM Hospital, Mumbai.
Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities

Current Dean

Dr Sangeeta H. Ravat (01.01.2022 to working)

Dr Sangeeta Ravat is a distinguished Indian Neurologist and academic leader, currently serving as the 19th Dean of Seth G.S. Medical College and KEM Hospital in Mumbai. Her career spans over four decades, marked by significant contributions to neurology, particularly in epilepsy care, medical education, and clinical research.

Dr Ravat completed all her medical education at KEM Hospital and Seth G.S. Medical College, Parel, Mumbai, where she also received her neurology training. She was awarded the 2nd prize for her academic performance in MD from Mumbai University. Dr Ravat has been a pivotal figure in advancing epilepsy care in India. Along with her team, she has performed over 600 epilepsy surgeries, including temporal lobe surgeries, extra temporal lesionectomy, corpus callosotomy, and hemispherectomies. She has also been instrumental in establishing comprehensive epilepsy care centers and has contributed to the training of numerous residents and fellows in Neurology.

An active researcher, Dr Ravat has authored over 60 publications in national and international journals. Her research interests include surgical outcomes in epilepsy,

neuropsychological assessments, and the use of intraoperative electrocorticography in epilepsy surgery. She has also contributed chapters to various textbooks on epilepsy and congenital brain malformations.

Dr Ravat holds several esteemed positions in professional societies. She is President of SAMMAN, Mumbai Chapter of the Indian Epilepsy Association and an Executive Committee Member of Indian Epilepsy Society and International League Against Epilepsy (ILAE). She is Board Member, Superspeciality Subjects, Maharashtra University of Health Sciences. She is the President of the Indian Academy of Neurology.

She was awarded the prestigious FIAN fellowship at IANCON in October 2022. Dr Sangeeta Ravat's unwavering commitment to Neurology and medical education continues to inspire and shape the future of healthcare in India.

As Dean of Seth G.S. Medical College and KEM Hospital, Dr Ravat oversees one of the busiest hospitals globally, with over 1.8 million outpatient visits and more than 65,000 surgeries annually. Under her leadership, the institution has seen advancements in medical education, research, and patient care, reinforcing its status as a premier healthcare facility.

Recent advancements include successful heart, liver, and kidney transplants, introduction of complex hybrid cardiac procedures, and the launch of pain services in Anesthesia. Several departments received prestigious recognition: Biochemistry began an MD program, three departments earned NABL accreditation, and Clinical Pharmacology was designated an ICMR Phase I trial center. Microbiology and Clinical Haematology also gained national importance for their contributions in TB diagnostics and hemophilia care. Community Medicine expanded palliative care in collaboration with Tata Memorial Hospital, and Neurology enhanced dementia services.

The institutes also prioritized student welfare, research, sports, and digital transformation, ensuring holistic development. As thousands of hopeful patients continue to pass through these revered halls each year, the core commitment remains — to deliver compassionate, world-class care and inspire the next generation of healers. The centenary year celebrates not just history, but the meaningful difference made in countless lives.

Cultural Ethos and the Centenary Celebration

Despite constant evolution, the spirit of the institution remains timeless—ever youthful, even as generations of alumni age. Preparations are underway for the centenary celebrations, set to begin with a curtain raiser in January 2025. These milestones reflect not only medical and academic progress but a continued dedication to ethical care, innovation, and service to society.

Enduring Commitment

As thousands of patients pass through the institution's doors each year, the core mission

remains unchanged: to deliver the best possible care through skilled, compassionate physicians and staff. Quoting Bob Dole, the institution embodies the principle: "When it's all over, it's not who you were. It's whether you made a difference."

*By **Rama Malik**,*
Senior Personal Assistant to the Dean

Suggested Reading

Supe Avinash and Patil Nivritti (Editors). Leaders of Century – Dean on Deans, Bhalani Publishing House, 2025.

Past Assistant Dean

Dr Shashiprabha S. Satoskar

Dr Satoskar was the university gold medalist in OBGYN at her graduation. Before joining KEM, she was the Head at Bhajekar Hospital. She rose through the posts of Junior AMO to Senior AMO before becoming the Assistant Dean at KEM.

She headed the drug acquisition committee with KEM at the time, conducting meetings with committee members for selection to streamline the process and personally ensured that medicines were acquired from reputed companies only. She stood by her colleagues and in one such instance, prevented Dr Suvarna's resignation when there was a wrongful accusation made against her for collecting blood from a leprosy patient. She has made great efforts in looking after and organizing programmes for the Nursing Department. Dr Satoskar was also teaching under the guidance of a retired Forensic Medicine professor when there was a lack of staff in the department. Her interview with Doordarshan has gone a long way in clarifying misconceptions around KEM.

Her contributions towards staff welfare included:

a. Counselling staff with the help of unions and Alcoholics Anonymous,

b. Arranging for *Apna Bazar* mobile vans on campus on paydays,

c. Conducting regular health check-ups for early detection and treatment of hypertension and diabetes, and

d. Establishing a place for study and play with a library for the children of the staff.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities and supplemented by, Professor Dr. R.S. Satoskar

PAST PROFESSORS AND HEADS OF DEPARTMENTS

Department of Anaesthesiology

Dr Meena Bhat, Professor and Head of Department

I joined the institution in 1959 and left it in 1989. Over time, many individuals have made this experience unique for me—Dr Koppiker in Anatomy, Dr Haray in Biology, and Dr P.K. Sen whose teaching significantly shaped my understanding of methodology, to name a few. Dr Sen's teaching impressed me greatly and was one of the reasons I became a anesthetist for cardiac surgery.

We have seen many advances in the Anaesthesiology Department over the years and I remember the time we used to perform experimental surgeries in labs on the dogs on the terrace. Over time, we mastered hypothermia and transitioned to using cardiopulmonary bypass for longer operations. We performed the first heart transplant in 1968, but unfortunately, the patient did not survive, as was the case with similar early attempts of that time. We have seen many advances in technology in particular. Earlier, we used to have to heavily rely on a just the patient's clinical signs but now, the more reliable medical monitors have made the field of clinical anesthesia critical.

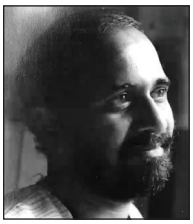
Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities

Dr Y.G. Bhojraj, Honorary Professor

I joined KEM in 1940 and passed out in 1945. I was then sent to England, and in 1953 I became the first Indian to pass the F.A.R.C.S. I was appointed as an Honorary at KEM after I returned and GSMC/KEMH has made me the doctor that I am. Our teachers were such extraordinary people, they were perfect, both morally and ethically.

Since my association with GSMC/KEMH from 1940, I have seen its Silver Jubilee, Golden Jubilee, and I wish to see its Platinum Jubilee year too. I joined KEMH when Dr Jivraj Mehta was the dean. This was considered as one of the best institutions in South Asia and Dr Jivraj Mehta, being a nationalist, had taken up the task of proving how we Indians are in no way inferior to the British.

Platinum Jubilee Souvenir



Dr Dattatraya (Bandu) B. Deval, Professor and Head of Department

As we got to know him, we found a person of many parts—anesthetist and designer of improved ventilators of course; but also littérateur in Marathi; newspaper columnist and contributor; artist (his self-portrait in pencil was just one striking example); expert in woodcraft; wine-maker; inventor, along with Dr Mehendale, of musical instruments; designer of a

home in his beloved Kihim; and someone who loved to impart enthusiasm for invention and originality to youngsters.

He was blessed with an equally versatile and vivacious better half in the form of Mrs. Meena Deval—wife, mother, and author who was on familiar terms with the books she loved, feminist and blessed with the ability to make those around her smile and laugh.

By Sunil Pandya

Suggested Reading

Dr G.S. Ambardekar to ERR is Human-1
http://www.mydoctormyhero.com/story-127.htm
Dr Ganesh Shivram Ambardekar, Marathi chapter by Mr. S. K. Akshikar, brother-in-law of Dr Prakash Ambardekar.

Department of Biochemistry

Dr Sucheta Dandekar
Professor and Head of Department

Teaching is an art and a science; when I first started as a lecturer at KEM in 1989, I used to only teach, but over time I have learned the importance of verbal and non-verbal communication. We were setting up the emergency laboratories at the time and trained the technical staff to ensure quality control which resulted in the certificate course in good clinical laboratory practices, created to ensure that lab technicians and students were up to date. *Shidori* was a mentorship program for first-year students that helped integrate ethics and develop communication skills, among other things. The National Teacher's Training Program helped me immensely. I also did the FAIMER fellowship, and was later awarded the International Fellowship in Medical Education (IFME) which helped me obtain a Masters in Health Profession Education (MHPE), Keele University, U.K.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities

Dr Bhimrao S. Kulkarni, Professor

I joined GS Medical College in 1945 as a Chemist and taught as a Professor in the Pharmacology Department at KEM till 1964. As the Head of Laboratories at KEM Hospital, I made many advancements in Lab 44,

improved tests, and maintained all the instruments in use. During this time, I opened the artificial kidney department along with some other professors, where we treated patients with kidney failure. We also installed the first autoanalyzer in Maharashtra in the department, which has been in use for all this time since then.

The Municipal Corporation had a committee that oversaw the purchase of medicines for hospitals, and the committee consisted of representatives from each hospital. I was part of the committee as Secretary. As Head of Laboratory, I tested the medicines for their effectiveness and ensured that the machines and instruments required for these tests were available to us.

After retirement, I studied the Vedas. Of the four Vedas, the first Veda, i.e. the Rigveda, has been translated and published in five parts in 2008. The Yujurveda translation is yet to be printed, and I am currently working on the Atharvaveda. This work has been widely recognized, and I have also been on TV interviews and published in the newspaper.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities

Dr Geeta Phatarphekar,
Associate Professor

Dr Geeta Phatarphekar did her MSc in Biochemistry from Sion Hospital and has been an aspiring teacher in the Department of Biochemistry at Seth G.S. Medical College and KEM Hospital for many past decades and continues to be a top favorite among students across all years.

When asked about her best moments as a teacher, she recalls, "When I go to any hospital and a student comes up to me and says, "Madam, do you remember me?" I say, "Yes! Yes! I remember you… I have this patient, will you look at him now?" and I am so happy to know that because I was a teacher at GS and they were my student, now my patient can be looked at. That is when I feel my hard work pay off. Even if one student out of a batch of 180 comes up to me and says that I was your student, it makes my day."

Commenting on the changing nature of education at KEM over the years, she says, "There has always been this aura about the students of KEM that only the best and the brightest study here, and we are trying to sustain it. But the fact is that education as a whole has changed. The race for marks was there in our time too, but the competition was definitely less. Mumbai colleges were restricted to Mumbaikars only. There was never the concept of hostilities. Now, students from not only all over Maharashtra but all over India compete for seats in these esteemed institutions."

GOSUMAG Magazine
(Interviewed by: Ashutosh Pai and Safreen Khan)

Department of Cardiology

Dr K.K. Datey

Honorary Professor and Head of Department

After graduating from Seth G.S. Medical College, Dr Datey had his subsequent medical and professional education in Bombay, England, Sweden, and the United States of America. He returned home in 1951, and was appointed to the Honorary staff here.

Dr Datey possesses a striking and magnetic personality owing to his finely chiseled features and immaculate attire. His indomitable spirit, boundless energy, tremendous industry, and unrivaled powers of observation, lucid writings and thronged lectures and speeches, have all been instrumental in making him one of the leading figures in the medical profession today.

His numerous publications, scientific achievements, epoch-making contributions to cardiology, and the several honors conferred on him by the medical profession, bear eloquent testimony to his greatness and have received world-wide recognition. He is the only Indian to have been honored by the British Cardiac Society and the Cardiological Society of Belgium by making him the Honorary Member and the Member of Honor, respectively. He is also the only Indian to have been elected the President of a World Congress of Cardiology (V World Congress of Cardiology 1966).

Golden Jubilee Souvenir,
Padma-Bhushan, Dr K.K. DATEY, A Sketch by Dr C.P. Dalvi

Dr Rustom Jal Vakil

Honorary Professor and Head of Department

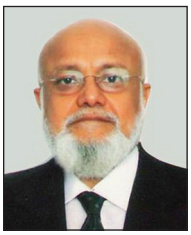
November 8, 1957 was a red letter day for the medical profession in India in general, and for the KEM Hospital in particular, for on the morning of that day the newspapers announced the award of the International Albert Lasker Award to Dr Rustom Jal Vakil of King Edward VII Memorial Hospital, Bombay, the first Asian ever to receive this high honor for "his brilliant and systematic studies on Rauwolfia in hypertension and for effectively bridging the gap between Indian experience and that of Western medicine."

Dr Vakil joined the hospital as an Honorary Physician in 1941. To mention a few of his numerous activities, he was twice delegate at the International Conference in Cardiology, had been a past President of the Cardiological Society of India, was on the International Advisory Panel of the World Health Organisation, Geneva, and Honorary Physician to His Excellency the Governor of Bombay. His publications make a long list and number more than one hundred and seventy. Indeed, no Indian clinician has contributed so much to international literature as Dr Vakil. His most notable contribution was the historical paper on the use of Rauwoifia which appeared in the British Heart Journal in 1949.

Together with his mentee, close friend and colleague, Dr Farokh Erach Udwadia, he co-authored the book "Diagnosis and Management of Medical Emergencies," a testament to his enduring influence on medical education and practice. He was a dedicated teacher and a humble figure. The President's award of Padma Bhushan to Dr Vakil this year has been welcomed in medical and lay circles as a reward of merit.

Golden Jubilee Souvenir,
Rustom Jal Vakil: A Gentle Soul, Medical Pioneer, and Inspiring Teacher

Department of Cardiovascular and Thoracic Surgery (CVTS)



Dr Sudhanshu Bhattacharya
Professor

I've had some of the best times at GSMC/KEMH, apart from the fact that I got married at KEM. The best moments were working hard the whole day, then a death at the end of the day, and then drinking beer towards the end. Dr P.K. Sen was our teacher at that time. We used to get the worst cases. I rose up to the post of Professor very early in my life, then things got very stagnant. When I became a professor, it was just academic work, with a couple of cases thrown in here and there.

I miss the relaxed days I spent at KEM. That is not there in private practice. We are afraid of experimentation, which we could do in KEMH. It is not that we can't do it now, but we were much more relaxed and comfortable earlier. KEM has enormous potential if you find the right person as a teacher in that area. I have been to AIIMS, Vellore and Calcutta, but there is nothing like KEM.

Platinum Jubilee Souvenir,
Interview with Dr Sudhanshu Bhattacharya,
(Taken By: Karamveer Singh, Nipun Puranik and Vaibhav Goyal)

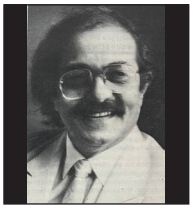
Dr Ratna Magotra
Professor and Head of Department

It's been a long journey for me coming from a small town in Jammu to big cities like Mumbai and Delhi. I had decided very early on during my childhood to become a doctor, inspired partly by a personal loss. One of the first challenges was getting admission into Lady Hardinge Medical College, Delhi as I was underage and then later on, getting PG admission in Surgery in Mumbai. However, my experience working with eminent surgeons in different hospitals enriched my practical knowledge and eventually, I joined KEM and contributed to its Cardiothoracic Surgery Department.

Among my most memorable experiences was the handling of patients during the 1992–93 riots. Another poignant memory involves a young boy from Gadchiroli who died post

surgery. It taught me immense humility and the importance of compassion. Writing the book *Matters of the Heart* was an effort towards sharing my emotional and medical journey with patients. My advice to the younger generation would be to balance technology with compassion and to maintain strong patient bonds.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities



Dr Sharad Panday
Honorary Professor

Speaking about his interest in Cardiac Surgery, Dr Panday says "I think I was a fluke", as he flunked his first MBBS. But he was offered a post under Dr P.K. Sen, who was known to be a very strict and tough teacher, and since he always wanted to become a surgeon, he took the job and became a heart surgeon.

Although initially he opted for a full-time job after graduation, he eventually shifted to private practice. He recounts an incidence where he performed a pace-maker operation on the Governor of Bombay, saying, "I made my decision on one particular day. The governor needed a pace-maker operation, and they thought that I should perform it. But a Governor can't come to KEM, can he? I was given special permission to operate on him in Breach Candy Hospital. I thought that if I wanted to operate on somebody else outside, I wouldn't be permitted. I wanted to treat the rich as well as the poor. I did not want to be restricted. So, I started a private practice, as in those days there was no Honorary system in Cardiac Surgery."

GOSUMAG Magazine,
A Conversation with Dr Sharad Panday

Department of Clinical Pharmacology

Dr Urmila Thatte
Professor and Head of Department

Once I was ill as a child, I had a crush on the pediatrician that inspired me to become a doctor. I chose clinical pharmacology as my husband was going to be a surgeon, and we wanted our careers to complement each other. Dr Dahanukar gave me some very important advice when I was considering leaving my career for my children. She advised me not to leave, saying that children will always be children and you will always be needed but once you leave a job, it is hard to return and that it's better to take a break if needed.

I am thankful to the Municipal Corporation for making me who I am today. I was rated among the top two percent of scientists globally in 2021 and the

rating vindicated my work across a variety of projects, specifically on subjects such as Ayurvedic medicine and ethics. In 1999, I became the Member Secretary of our institution's ethics committee, thanks to Dr Manu Kothari. He encouraged me to become the "Zarina of Ethics". I took this as a challenge and developed SOPs and improved committee operations, including getting the first computer for the ethics committee through independent committee funds.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities

Department of Community Medicine

Dr D.N. Pai

Professor and Head of Department

Dr D.N. Pai's time in prison (due to his involvement in the Quit India Movement) triggered a desire to serve his country through medicine, and thus he graduated from the institution in 1954. In 1959, he became Head of Department of Preventive and Social Medicine.

Mobile health units were placed under his able direction to serve slums and other remote areas around Bombay. Through his innovative approach, he transformed the Family Planning program in Greater Bombay into one which was adjudged the most successful. It was due to his untiring efforts that by the end of 1971, the first ever Family Planning Hospital was founded.

Dr Pai has received many national and international awards and felicitations. He has been appointed consultant in Family Planning by the Government of India; and a temporary consultant to the WHO on many occasions. He has contributed many research papers and has written a book entitled 'War For Survival', a chronological case study in Family Planning. It was due to his contributions in the Department of Family Planning that he won the two most coveted awards: First, the Chief Minister's Gold Medal for leadership in Family Planning in the year 1972, and to top it all, the Padma Shri.

Golden Jubilee Souvenir,
PADMA SHRI Dr D.N. PAI

Dr Parimala S. Subramanian

Professor and Head of Department

I pursued a medical career motivated by my desire to work in a healing profession. My spiritual awakening in 1983 rooted me firmly in spirituality and I aimed to incorporate these values in medical education. Despite initial resistance, I was successful in introducing yoga with the aim of developing a holistic understanding in the students. Integrating wellness concepts, emphasizing mental health, and valuing inner growth and self-actualization alongside technical competence are essential to the holistic approach.

I implemented an adolescent health initiative with UNICEF to empower young girls, which led to the establishment of an Adolescent Health Clinic. I think the department's focus on reproductive health has led to a significant decrease in mortality and increased acceptance of family planning but there's still a need to strengthen primary health care systems and ensure better resource allocation.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities

Department of Dermatology

See under History of Department of Dermatology in Part III Potpourri.

Department of Endocrinology

Dr S.D. Bhandarkar

Honorary Professor and Head of Department

After completing MD Medicine in 1954, Dr Bhandarkar proceeded to England for further education. He met the Dean of Seth G.S. Medical College and expressed his desire to work here. Knowing his keen interest and scholastic abilities, the Dean allowed him to work in the radio-isotope laboratory with Dr R.S. Satoskar, without any official designation. Soon he was selected as an Assistant Honorary Physician in the Department of Medicine. He was also appointed as Associate in Clinical Pharmacology.

With an inquisitive and studious mind, Dr Bhandarkar learnt the technology of Radioimmunoassay (R.I.A.). By starting R.I.A., he improved the endocrine department further. In 1982, he wrote a book on 'Radio-Immuno Assays' along with Dr Pillay from B.A.R.C. and published by B.A.R.C.

The charge of diabetes clinic was handed over to Dr Bhandarkar in the early 1970s or so. Because of Dr Bhandarkar's efforts, Mumbai University started DM Endocrinology as a superspeciality. Along with Endocrinology, he also had a responsibility as a physician. He was Assistant Honorary Physician in Dr A.F. Golwalla's unit, taking good care of general medical patients.

Dr S.D. Bhandarkar was Editor of the Journal of Post-graduate Medicine between 1984 to 1991. One of his brilliant innovations was the creation of a stethoscope where six people could auscultate simultaneously and listen to various sounds within the body like cardiac murmurs or abnormal breath sounds etc., an adaptation which is good for teaching medical students. The 22nd Edition of Textbook of Pharmacology by Drs R.S. Satoskar and S.D. Bhandarkar was published in 2011. Taking note of his pioneering work

in the field of Endocrinology, he was felicitated by the honorable President of India, Mrs. Pratibhatai Patil in 2011.

By Malini Nadkarni
Former Professor and Head of Department, Radiology

Dr Padmavathy S. Menon

Professor and Head of Department

Dr Menon did her MBBS from T.N.M.C and B.Y.L. Nair Hospital. She was influenced by her father in choosing the medical field. She got the opportunity to join Chemical Engineering in UDCT (ICT now); however she opted to continue in Medicine. She further completed her MD Medicine from Nair Hospital and joined as full-time faculty in the Department of Medicine at Nair Hospital. There she got the opportunity to work and learn in the Diabetes Unit with the Late Dr S.D. Mehtalia who had just returned from Joslin's Diabetes Clinic UK. Further she got the opportunity to learn Radio-Immuno Assays for various hormones, and she gradually furthered her interest in Endocrinology. After 10 years of working as a faculty in Medicine, she got transferred to Sion Hospital as Professor in Medicine and became Head Department of Medicine. There she was heading services in Endocrinology under Department of Medicine with gradual interaction with the Endocrine Departments at KEM and Nair Hospital through monthly meetings.

Professor Dr S.D. Bhandarkar, Head, Department of Endocrinology KEM Hospital was about to retire from his services and was actively looking for someone who can take over the department as well as for postgraduate teaching in DM Endocrinology at KEM Hospital. Dr Menon being MD and not DM Endocrinology, had technical difficulties taking over as Head but it was the active pursuance of Dr Bhandarkar who pushed for Dr Menon to be the next Head.

Dr Menon took over as Head of Department of Endocrinology KEM Hospital in 1991. She tried her best to do justice to patient care and postgraduate teaching at KEM Hospital. She has been very humble in learning Endocrinology with the past students of the Department and from Dr Bhandarkar.

She further enhanced patient care in the department by expanding the Hormone Assay tests by Radio-Immuno Assays and further with Chemilumiscence machines. She advocated for publications and presentations at national and international level which increased the credibility of the department. She started Endocrine surgery services with Dr Ravi Bapat HOD, Department of Surgery and Inferior Petrosal Sinus Sampling with Dr Ravi Ramakant, HOD, Department of Radiology.

She has more than 100 publications and 3 textbook chapter contributions. She has delivered orations in the Endocrine Society of India. She has been organizing committees for ESICON and RSSDI in Mumbai.

She received the Fellowship of Indian Thyroid Society in 2024 and Lifetime Achievement Award in ESICON 2024. Dr Menon has been Chairperson of Institutional Ethics Committee of KEM Hospital.

Dr Menon insists on undergraduates and postgraduate students taking rounds around the wards regularly and learning medicine from patients in addition to reading books. A kind person, humble academician, great teacher, and disciplined administrator, Dr Menon turned 80 on 12 April 2025. Best wishes to her!

By Dr Vyankatesh Shivane
A student of Dr Menon, Consultant Endocrinologist

Department of Ear, Nose and Throat Surgery (ENT)

Dr Madhukar V. Ingle
Honorary Professor

When I joined KEM in 1954, it was supposed to be the best in the country. Then, ENT, as a field, was not as evolved. I joined the department as a Registrar under Dr Joe Desa and KEM nurtured a very supportive environment. I remember the staff was always interested in passing on their knowledge without jealousy getting in the way. In fact, it would be a compliment if your student were better than you, and this tradition of passing down knowledge continues. I have had an excellent rapport with Drs Manu Kothari, Ashok Vaidya, and Sharad Vaidya, to name a few.

In terms of the learning experience at KEM, there is continuous hands-on training to build competencies. Every intern or undergraduate was allowed to examine patients and present their findings before others to make them confident in their opinions. During postgraduation, the registrars would encourage us to perform surgeries independently and would even make us repeat surgeries to build skills and confidence in areas where we had initially made errors.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities

Dr Milind V. Kirtane
Honorary Professor

I have been impressed by the enterprise and ability displayed by Milind from the time he was a junior resident in the Department of Ear, Nose and Throat Surgery (ENT) at the King Edward VII Memorial Hospital.

He had an enviable career as an undergraduate and postgraduate student. All his qualifications were embellished by the supplementary '1st Class'. I am not sure of the count of medals, scholarships and awards he acquired before he obtained his Masters Degree in ENT.

As he gained seniority in his department, we were fortunate in having academic discussions with him on patients and mutually relevant topics, in general. We were struck by his study of the mechanisms that caused vertigo in patients and happily referred patients where we found no neurological causes to him for opinion and advice.

Our collaboration gained special impetus as he developed his skills in endoscopic surgery through the nose. Let me explain.

From time to time, we saw patients with leakages of the cerebrospinal fluid (CSF, that circulates around and within the brain) through the nose from time to time. Such CSF leaks into a body cavity where several bacteria make their home was highly hazardous to the patient. Just as CSF could escape from within the skull to the nose, these germs could travel in the reverse direction and cause life-threatening inflammation around the brain (meningitis).

In most patients, such leaks followed accidental injury to the head that fractured the thin bone (cribriform plate) between the roof of the nose and base of the brain. In a few cases a deficiency from birth or a tumor was the cause. At times, we could help nature seal CSF leaks following injury by draining the fluid over 48 hours or more into sterile bags through a tube inserted into the spinal canal. There were times, however, when this failed and the leak continued. Neurosurgeons could detect the exact site of the leak using sophisticated tests and seal it, taking away the risk of meningitis.

Our operation, however, was somewhat complex and involved major surgery. We had to open the front of the skull, elevate the frontal brain, locate and clear the site of leak and seal it using tissue obtained from the soft covering of the skull (pericranium) and a biological adhesive that would keep the patch in place. ENT surgeons developed techniques to seal the leak using endoscopy through the nostril and nose. Milind soon mastered this technique and improved on prevalent methods.

In a short while, we were able to stop our operations and got Milind to treat all our patients with such leaks as his operations were uniformly successful in sealing the defects through which the fluid leaked. The great advantage was the relatively simplicity of his operation with significant reduction of the risks to patients from it as compared to our major surgery. He probably has the largest number of such operations in India to his credit.

He has also achieved renown through his success in enabling hearing in deaf children by inserting a special device into their skulls (cochlear implants). Once he had perfected the technique, he displayed an almost evangelical fervor in enabling scores of ENT surgeons and departments throughout the country into carrying out similar operations. He traveled widely for this purpose. I do not know how many thousands of children all over India have started hearing as a consequence.

Milind is an excellent communicator—with patients, students, resident doctors, and

colleagues. He is a popular speaker at local and national medical, ENT and neurosurgery conferences. He also imparts information through his papers, books and video-recordings of operations. My colleagues and I have watched his progress over the decades with admiration. He has not yet reached the pinnacle of achievements for we feel he has much more to offer and many more patients to help.

We look forwards to learning more from his work and of his further achievements as we wish him godspeed in his continued academic journey.

By Sunil Pandya

Dr Milind Vasant Kirtane was born on 5th November 1946 in Mumbai and his entire education schooling was in Mumbai. His both parents were doctors and he was inspired by them. He got admission in GS Medical College. Since childhood, he was interested in sports, especially cricket and badminton. During his medical education days, he would start his day with a game of badminton. He would come from Naigaon Hostel jogging and then clean the badminton court and play the game.

He is married to Dr Jyotsna Pandit, who is a pediatric surgeon and they got to know each other better during her allied posting in ENT. Incidentally, they were in the same school from 1st to 4th grade; they are blessed with two children Gauri and Gautam.

After joining the ENT Department, his teachers greatly helped shape him, viz. Dr P.P. Karnik, Dr Joe Desa, Dr Rege, Dr K.L. Shah, and gave him wings to fly. Prof Joe Desa handed him an ENG machine and asked him to do his thesis on ENG and that was his entry into the field of vertigo. He had the opportunity to go to Germany to learn from Professor Clausen and trained several ENT surgeons for it. He traveled all over the country to teach MicroEar Surgery by doing live-surgery camps and temporal bone dissection workshops which were started by Senior Professor Karnik.

He worked as a Tutor, Associate Professor, and Professor in the Department of ENT, KEM Hospital. In 1984, he decided to join private sector, and joined the P.D Hinduja Hospital. He continued as Honorary Associate Professor, then as an Honorary Professor, Head of the Unit, and later as Professor Emeritus.

In late 1980's, he had an opportunity to invite Professor Stammberger in the department who demonstrated endoscopic dissection on cadaver and that was the birth of the endoscopic sinus surgery in KEM Hospital. In 1993, he started the endoscopic sinus surgery with hands-on cadaver dissection workshops and trained over thousands of ENT Surgeons in this field.

He served as President of various societies viz. Association of Otolaryngologists of India, Indian Association of Otology, and Association of Neuro-Equilibrium Society. For his dedicated services and contributions in the field of medicine he was felicitated by B.C. Roy Award in the year 2005.

In 1996, Pika Medical approached him for training in Cochlear Implants and he entered the field of Cochlear Implant. Through philanthropic donors, he raised funds for thousands of patients and has given them the gift of hearing and speech. Given his love for teaching, he has mentored more than 100 CI Surgeons all over country. He was awarded the PadmaShree for his contributions in the year 2015.

He is a teacher par excellence, and has capability of making an impact on students. He must have inspired countless people in the field of ENT, microear surgery, vertigo, endoscopic sinus surgery, and lately, in cochlear implant. He is a versatile surgeon and has magic in his hands which helps patients heal. He is an amazing orator and has an unmatched sense of humor. He has the art of getting the work done and an excellent capability of conveying his point of view.

I would call him the Amitabh Bachchan of ENT. There is no one to match his capabilities. And he has a unique organizational ability. He is the greatest influencer in the field of ENT.

He retired from the Honorary Professor post in 2004 and served the BMC as Professor Emeritus. He made himself available for any complicated case needing his expertise and helped in establishing CI Program at KEM, Nair, and Sion hospital. He is very active, even at the age of 79 years, and compassionate about operating and teaching. He loves to spend time with his grandchildren and at his Lonavala holiday home.

By Dr Hetal Marfatia
Professor and Head ENT Department

Dr K.L. Shah

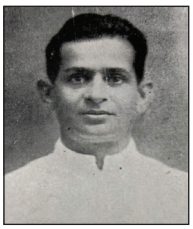
Honorary Professor and Head of Department

I joined in 1949, the first year of the medical college, and passed out in 1954. I did my MS in 1957, became a registrar, and then Assistant Honorary. I was at KEMH till 1988 (except for three years: one year as Registrar at Sion as Registrar and for two years at Nair as Temporary Honorary).

My wife was my classmate, so I am bound to have good memories. Falling in love with my wife has changed my life totally. Today we are more friends than husband and wife. What I am today is because of KEM, selection of my life, selection of wife, and money, etc. everything was given by KEM.

As parting comments, I would say, if you want to enjoy your life don't join medicine as a doctor. Treat your patients as your relatives.

Platinum Jubilee Souvenir,
Interview with Dr K.L. Shah,
(Taken by: Hardik Thakkar and Rajiv Kamat)



Dr T.O. Shah
Honorary Professor

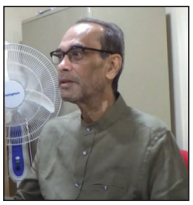
Dr T.O. Shah held the following posts in England: He was Senior House Surgeon to Groves End Hospital; Dudly Hospital Birmingham; Northampton General Hospital, where he was also in charge of the Venereal Department conducted by the local Municipality. He was also Senior House Surgeon to Golden Square Ear, Nose, Throat Hospital and Resident Surgeon of Sea Bathing Hospital for Surgical Tuberculosis at Margret. After his long stay abroad, he came back to India in 1920.

He was one of the pioneers of the "People's Free Hospital" started in 1923 by some of the Physicians and Surgeons of Bombay. He was invited to be a member of the staff of KEM hospital right from its inception in 1925 and continued to be the Honorary Surgeon till June 1943 when he retired. His personal charm endeared him to all who came in contact with him. His sympathies towards the students were unique, and there was not a single cause of students which he did not make his own.

Golden Jubilee Souvenir,
Dr T.O. Shah, FRCS
(M.M. Pandya)

Suggested Reading: Dr P.P. Karnik, Fatal Attraction -I. In, Untold Stories of Doctors and Patients. Editors. M.V. Kamath and Rekha Karmarkar. UBS Publishers, 1993.

Department of Forensic Medicine and Toxicology



Dr Walter Vaz
Professor and Head of Department

I practiced surgery as a House Officer at a charitable hospital in Kolkata and eventually, moved back to Bangalore as Resident House Officer in Neurology. My knowledge of Surgical Anatomy made autopsies easier, and my detailed autopsy reports with legible handwriting and diagrams resulted in comprehensive reports and quick court proceedings. I worked at KEM between 1991 and 2002, and I returned in 2006 after being a Professor and Head of Department at Nair Hospital. One of my significant experiences at KEM was handling the injuries and deaths post the 1993 explosions in Mumbai. My previous experience in Varanasi, dealing with injuries from homemade bombs, proved to be invaluable here.

Some of my contributions towards the department include streamlining systems, fostering interdepartmental cooperation, and contributing to various ethics committees. I have written several chapters in forensic medicine books and worked on practical medicolegal manuals. It has been very rewarding to gain recognition from students who awarded me gold medals in forensic sciences, and the Acknowledgment of my contributions

by my peers gratifies me. Given the future of Forensic Medicine, I think there should be a division between Forensic Medicine and Forensic Pathology, and a need for the development of specialized fields like Forensic Anthropology, Toxicology and Psychiatry.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities

Department of Gastroenterology

Dr Philip Abraham

Professor and Head of Department

It was a dream come true when I joined this institution in 1971. We were students of some of the stalwarts of medicine, people who have made a mark in society and are well respected; it still makes me so proud. The divide between full-time and honorary was coming up when we were on the staff and I think that this stark political divide has marked a change in the history of teaching at this institution. I was posted under Dr Pimparkar in the G.I. Department and I'm so grateful to him for my interest in Gastroenterology. I must put this on record that even today, I fondly remember him as a father figure, he was one of the most wonderful parents you could ever train under.

I am proud of being one of the youngest heads of department. While there were challenges, my colleagues always respected me. Negligence was not tolerated, and I was lucky to have worked in an atmosphere that encouraged learning. I have also had a long-standing association with the Indian Journal of Gastroenterology since its establishment in 1981. I quickly went from Assistant Editor to Editor of the journal from 1996 to 2000. Much of my learning in medicine has come from my patients, students, and the journal. We organized landmark meetings in Gastroenterology that have now become routine due to regular turnout from people around the country.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities

Dr Shobhana Bhatia

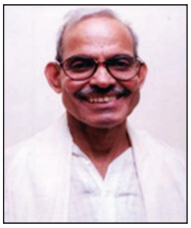
Professor and Head of Department

Under Dr Subhash Naik's suggestion, I focused solely on Gastroenterology at KEM. All departments, like Radiology, Surgery, Pharmacology, and Pathology, etc. got along and it encouraged inter-departmental collaboration. I pursued a fellowship with Dr Donald O Castell at the Mayo Clinic to get

specific training and a clinical perspective on functional GI disorders because these issues were largely ignored. We started the first of its kind Esophagus OPD as I had realized that swallowing disorders and gastroesophageal reflux were often neglected. The first manometry was done here at KEM, and it contributed greatly to patient care and research.

When I returned to KEM the second time, there were certain infrastructural constraints and low resident involvement in treating liver diseases. I established a, now-renowned, liver clinic and procured endoscopy equipment through donations and other efforts to improve the facilities. Through my career, I have come to believe that forming and maintaining a dedicated team for each speciality is essential, and although individuals in the department may move on from time to time—funding, maintaining enthusiasm, and resident involvement are key to a department's growth.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities



Dr S.R. Naik

Professor and Head of Department

Dr B.D. Pimparkar took over the mantle from Professor P. Raghavan and ran Gastroenterology (GE) OPD and indoor (Wards 9 and 4) services till his retirement in the year 1980. Services were continued by Dr Philip Abraham till Dr Subhash R. Naik's arrival in 1982 from the Postgraduate Institute of Medical Education and Research, Chandigarh.

Dr Naik injected new academic services and life into GE at the institute and in the city. He started regular OPD and indoor (Wards 12 and 4A) services and routine and emergency fiberoptic endoscopy services (JMT and Room 53); endoscopy services were shared with Dr Surendra K. Mathur in the Department of Surgery. Dr Naik initiated interdisciplinary meetings with the teams of Professor Ravindra D. Bapat and Dr Mathur (Surgery), Dr Ravi Ramakantan (Radiology), Dr Ila M. Vora (Pathology), and Dr Ajita Mehta (Microbiology). Regular bedside clinics (often with Dr V Santhi Swaroop, Tata Memorial Hospital), journal clubs, and research meetings were held. Research projects and participation in national society meetings were encouraged. The first Professor P. Raghavan Oration was held in the institute. The Division of GE, as part of the Department of Medicine under Professor Vidya N. Acharya, participated actively in the latter's academic activities.

Regular inter-hospital academic meetings were held with sister institutes, such as the Topiwala National Medical College, Lokmanya Tilak Medical College, and Grant Medical College. The first-ever national conference of the Indian Society of Gastroenterology to be held in Bombay (1984) was took place during his tenure, and the proceeds from the conference was used to start the Gastroenterology Research Society. He was also an active Associate Editor of the Indian Journal of Gastroenterology.

The Division was finally recognized by the National Board of Education (NBE) in 1987, and Dr Abraham and Dr Saifee T. Plumber became the first from the institute to obtain the Diplomate of the National Board (DNB) that year. Dr Naik left the institution in 1987 to start the Department of Gastroenterology at the Sanjay Gandhi Institute of Medical Sciences, leaving the reins in the hands of Dr Abraham.

By Dr Philip Abraham
Former Professor and Head of Department, Gastroenterology

Dr B.D. Pimparkar
Honorary Professor

During Dr Pimparkar's Presidency of the ISG in 1981, he held joint sessions of Hepatology, Endoscopy, and Pancreatology societies in Calcutta. He trained under Dr Bockus and was offered a full-time teaching post in the US but preferred to return to India to set up a Department of Gastroenterology at KEM. He regretted that his offer to give up Internal Medicine to develop the speciality was never accepted. Dr Pimparkar laid the groundwork for many initiatives that only came to fruition after his retirement. For example, he had applied for the recognition for Postdoctoral Studies in Gastroenterology, with Bombay University and the National Board of Examinations but it was only granted after his retirement as it was superspeciality department because it was headed by an Honorary.

He also wished to procure an ultrasound machine and other imaging devices he saw while visiting Johns Hopkins University, Baltimore on his return from the World Congresses of Gastroenterology in 1974 and had also obtained purchase quotations for an auto-analyzer for KEM, both of which eventually became available. In spite of such frustrations, he set up research studies with the help of his postgraduates, assistants, statistician, and colleagues, with research grants from pharmaceutical industries. He was also interested in nuclear medicine, and his other projects included nuclear medicine in gastroenterology, trypsin levels, and toxic and essential trace elements in various liver diseases.

"Fading memories and some thoughts, B D Pimparkar"
Indian Journal of Gastroenterology 2007 Vol 26 (Suppl 1) April S25

Department of General Surgery

Annappa Vithal Baliga 1903–1964

Honorary Professor of Surgery

His early education was in his native village Kallianpur, near Udupi in South Canara. In 1920 he joined the Christian High School in Udupi. He heeded Gandhiji's call to students to leave educational institutions run by the British Raj and joined the National School in Udupi which was affiliated to the Gujarat Vidyapeeth, a nationalist institute. He passed the matriculation examination held by the Vidyapeeth and came to Bombay.

Unfortunately, this qualification was not recognized by the University of Bombay. He could not enroll for the MBBS course of the Topiwala National Medical College and was forced to join the course for the LCPS diploma at this college. He met his expenses by giving tuitions.

Inability to join a medical college proved a handicap as he could not apply for residents posts. Fortunately for him, Dr G.V. Deshmukh had kept an eye on his progress and offered him a house officer's post in King Edward VII Memorial Hospital. He also served as an anesthetist in the Casualty Department. Further progress was thwarted. Dr Deshmukh helped him travel to Britain, where he completed the matriculation examination of the University of London and obtained L.R.C. S., M.R.C.S. and finally the F.R.C.S. in 1932. Much of his training was at the North Middlesex Hospital.

On his return, Dr Jivraj Mehta appointed him Honorary Assistant Lecturer in Surgery and Assistant Honorary Surgeon at Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital in 1933.

His passage to and fro Britain and expenses there had been paid by a prosperous businessman on condition that on his return, he would marry his daughter. Redeeming his pledge, he married Kamal Shenoy in 1933. He was 30 years old and she 18. Their affection and companionship ended only in 1964 on his death. Mrs. Baliga was an attractive and warm person and many guests from abroad and within the country enjoyed her hospitality.

Dr Baliga started his own clinic and nursing home – a rarity in those days. Starting in Shivaji Park, he later moved these to Patel Chambers near Opera House. The Baligas stayed on the 3rd floor and the clinic occupied the entire 4th floor. Their residence was later shifted to Al Jabreya Court, 69 Marine Drive.

Dr Y.G. Bhojraj, pioneer of anesthesia in Bombay described his early years in practice:

Dr Baliga had to put up with real hardships in the beginning and it was by sheer hard work and perseverance that he climbed the ladder of professional competence and

success. I have watched him during this phase of his life and I have watched him, too, as he put long hours of work at the K.E.M., seeing patients, operating and looking after them postoperatively. He would often be at K.E.M. teaching students, doing both emergency and elective operations sometimes well into the early hours of the morning. Operating for four, five, six or eight hours on a patient soon became routine for him. All the challenging and complicated cases came to him and his reputation as a surgeon soared and he came to be in the topmost bracket of surgeons. His fame spread far and wide very soon. As I became his anesthetist, I realized that not only were the topmost families in Bombay his patients but that people came to him for surgery from the remotest corners of the country and even from abroad. Governors, Chief Ministers, Ambassadors from different countries and even princely rulers were his patients. He would be operating at times for 14 to 16 hours a day, every day of the week. He seldom looked tired. Surgery was his first love. Even after 7 to 8 hours of a complicated marathon surgery he was ready to start on the next case with a smile.

Dr R.A. Bhalerao pointed out that Dr Baliga excelled in clinical teaching but failed to convert his wisdom and experience into printed text. One of his dictums: 'Think of uncommon manifestations of common ailments rather than common manifestations of uncommon diseases.' When delivering a lecture he would place the 3 or 4 most likely diagnoses and draw a line below this list. Urging concentration on items above the line, he would then add uncommon diseases below the line.

His residents and students at King Edward VII Memorial Hospital testified that he was a calm and unhurried surgeon, meticulous to a fault and never in a hurry to finish the operation. Small wonder that his results were praiseworthy. He lavished the same care on his patients at this hospital as he did on business magnates and nationally reputed persons whom he treated in his nursing home.

Dr Bhojraj provides a vivid example:

Once there was a rich patient admitted in Bombay Hospital. He was to be operated for fistula and piles. Dr Baliga's operations in Bombay Hospital started around 1 p.m. This patient was posted one afternoon for operation along with two other major cases, one of them being cancer of the oesophagus and the other hernia. The latter two patients were poor and had been accommodated in free class. Everybody, including the theater Superintendent, the House Surgeon and others were sure that Dr Baliga would take up the piles case first, as the patient was rich and the other two patients had to be operated for free.

Dr Baliga arrived on time and as he was entering the operation theater, he saw the piles patient being wheeled in. I seldom saw him so angry. He gave a proper dressing down to his assistants. 'How can you take this case first? Don't you realize that this

case, which is infected, cannot have precedence over a clean one? We will take the other two cases which are clean first. Never repeat this mistake with my list!'

The rich patient was wheeled out much to his annoyance. Unfortunately the first two 'clean' cases took a long time and the operation on the rich patient had to be postponed by a day. Predictably, the man complained to Dr Baliga. Dr Baliga, however, was ready with his reply. He calmly but firmly told the man that he would never do an infected case prior to a clean case and no exceptions could be made in the matter. The matter ended there.

Dr P.P. Karnik, later head of the Department of E.N.T. Surgery at King Edward VII Memorial Hospital provided this note:

One day Dr A.V. Baliga was exploring an abdomen for a pancreatic tumor. Other surgeons had given up the case but Dr Baliga went ahead with the surgery which lasted for over 10 hours. I was then assisting him. Halfway through he suggested that I could go out for a quick lunch but he went about his work systematically without any let, until he had finished the job. He then told me that I should call him at his residence around midnight as he was dining out at a friend's home, to apprise him about the condition of the patient. Such was his involvement in public hospital patients.

He repaid with compound interest the help that he had been given as a student and resident doctor.

Dr Bhojraj narrated the following series of events:

After completing my M.B.B.S., I was doing terms for M.D. (Medicine). I had done two posts in Medicine when Dr R.G. Dhayagude, then Dean of K.E.M. requested me to accept the Casualty Officer's post as he could not get any senior man to take on this extremely responsible job. At that time the Casualty Officer had to rotate as an anesthetist in the operation theater. This is how I came to be an anesthetist. After a year as Casualty Officer, I was offered the post of Medical Registrar as had been promised. It was necessary for me to hold this post as I was appearing for MD in Medicine. One day, Dr Baliga called me aside in the operation theater and told me that I should take up Anesthesia as my career and give up Medicine. This, coming from Dr Baliga was almost like a command and I knew that, having given me the advice, Dr Baliga would personally hold himself responsible for the success of my future career. Dr Baliga was known to have molded the destiny of so many deserving students and helped them become successes in their respective fields. I can mention the names of Dr G.S. Ambardekar, my senior in anesthesia, Dr B.N. Sircar, my teacher and Dr L.H. Athle, the renowned radiologist. All of them owed much of their success to Dr Baliga. Even Dr K.T. Dholakia who is today the most renowned orthopedic surgeon and one whose contribution to his speciality has put India on the international map and can be called a living legend, owes his present status to the encouragement

and timely help he received from Dr Baliga. I can name any number of topmost consultants in Bombay who would vie with each other to proclaim their gratitude for the helpful hand of Dr Baliga in moulding their careers… I was Casualty Officer and Resident Anesthetist in K.E.M. for about six years and the salary was Rs 210 p.m. on which I could just about manage to maintain myself and my family. The Nagpur Medical College had just come up and in 1952, they advertised a post of Professor of Anesthesia. I applied. In the interview I had put down as a condition that I should get Rs. 500 p.m. as a basic start. This I was refused. I returned to Bombay. One day, while I was in the operating room, I received a telegram from Nagpur saying that they could at the most give me a couple of promotions but the basic salary could not exceed Rs 450 p.m. With that telegram in my pocket, I rushed down to the Honoraries' Office in K.E.M. and I caught Dr Baliga just as he was getting into his car to leave. I handed the telegram to him. He read it carefully. Then he did something that I can never forget. He got out of his car, put his hand in his trouser pocket and took out a huge wad of one hundred rupee notes and placed that wad in my hand and said: 'Look, here are ten thousand rupees. Forget about Nagpur. Proceed to England. This would suffice for your passage and stay and any examinations you may want to appear for. Come back and report to me. I will have you appointed as a consultant in K.E.M.' Saying that, he got into his car and drove away leaving me speechless! My hands were trembling. I had never seen so much money together in my life!

To cut a long story short, I left for London by ship. The ticket cost all of Rs 750. This was in 1953; the air fare was Rs 1,200 which I could not afford to spend. In London I did as Dr Baliga advised and was back home in six months' time and was appointed a Consultant in K.E.M. as Dr Baliga promised. One word from him and my destiny was molded. How can I ever forget him and how can I ever cease to be grateful to him?

One example of how he inspired faith is worth noting here. Dr C.G. Pandit – a student of the Grant Medical College – rose to eminence by virtue of his researches on a number of tropical diseases. Eventually he was appointed Secretary of the Indian Research Fund Association and, when it was replaced by the Indian Council of Medical Research, as its first director. Dr Pandit developed pain in the abdomen. Tests showed gallstones. Episodes of pain recurred and by 1954 they were frequent. In 1956, he accompanied the Union Minister of Health, Rajkumari Amrit Kaur on her visit to America. Whilst on a visit to America with Rajkumari Amrit Kaur, he had an acute attack of pain. The Rajkumari discussed it with her doctors and asked Dr Pandit to get operated by Dr Richard Catell at the Lahey Clinic during their visit to Boston. Dr Pandit expressed his reluctance. The Rajkumari was adamant. 'Pandit, you know that Boston is widely known internationally as the center for gall bladder surgery. You do know that Sir Anthony Eden had to come to Boston to get treated. As it happens you would be in Boston and the Rockefeller Foundation (their hosts)

would make all the arrangements. Why do you want to miss this opportunity?' 'I am sorry Rajkumariji', replied Dr Pandit, 'but I would prefer to be amongst my own kith and kin for this and I have full confidence in the surgeon, Dr Baliga, who is going to operate.' At her insistence, he went to the clinic in Boston and was assured that urgent surgery was not required. It was safe for him to get the operation done in India. And so it was (Pandit 1982).

Dr R.A. Bhalerao recounted that the day Dr P.K. Sen was appointed Director of Surgery, Dr Baliga retired from King Edward VII Memorial Hospital. Dr Bhalerao recalls Dr Baliga's parting statement, 'Where I was king, I do not wish to be a slave.' It was a subtle criticism on the new trend in developing the department that had been set in motion by the appointment of a Director.

Dr Baliga's loyalty to his place of origin resulted in his developing the Kumta College of Arts and Sciences in North Kanara (now renamed as Dr Baliga college), M.G.M. College in Udupi, Kasturba Medical College in Manipal. He also helped in setting up the Childrens' Orthopedic Hospital near Haji Ali and was a founder member of the Association of Surgeons of India.

He helped cement relations between India and the USSR. When Mr. Khrushchev and Mr. Bulganin visited India, they were his guests for dinner at his residence on Marine Drive. Yuri Gagarin, the Russian cosmonaut, was also a guest at dinner here. On 10th May 1964, he left Bombay for Vienna to attend a surgeons conference. He was to return via London. On 19th May on his way back to his residence after seeing a patient in a hospital, he died of a massive heart attack in London.

Mr. Vijay Merchant, the eminent cricketer and industrialist, inserted a memorial note eulogizing Dr Baliga in *The Times of India* on 19 May for several years.

Sunil K Pandya

Suggested Reading

Anonymous: Baliga, Anappa Vithal (1905? - 1964) Biographical Entry. Plarr's Lives of the Fellows Online.
M.P.M: A. V. Baliga F.R.C.S. Obituary note. BMJ: 20 June 1964;1:1647
Bhojraj Y G: The guru tradition. In Kamath MV, Karmarkar Rekha (Editors): Untold Stories of Doctors and Patients. Mumbai: UBS Publishers Distributors. 1993
Karnik P P: Fatal attraction. In Kamath MV, Karmarkar Rekha (Editors): Untold Stories of Doctors and Patients. Mumbai: UBS Publishers Distributors. 1993
Pandit C G: My world of preventive medicine. New Delhi: Indian Council of Medical Research 1982

Dr Ravindra Dinkar Bapat

Professor and Head of Department

Dr Ravi Bapat is a rare example of a socially committed doctor who has made notable contributions to both Allopathy and Ayurvedic research. Known for his precise diagnosis, ethical practice, and strong patient trust, he remains dedicated to medicine even beyond the age of 80 at KEM Hospital. Alongside his medical career, he has also actively pursued interests in music, literature, and theater.

Dr Bapat changed schools six times and studied in Hindi and subsequently in English, initially, struggling with English until he improved it through watching English films and reading novels, showing his grit in overcoming his initial education in vernacular languages. This early experience instilled in him a resilience and adaptability that would prove invaluable throughout his life and career. A youthful aspiration to serve his country as a member of the Air Force was unexpectedly thwarted by a minor squint, a seemingly small physical detail that redirected his path, leading him to pursue medicine—a respected and rewarding profession at the time.

Medical School: Balancing Rigor and Recreation

His time at Seth G.S. Medical College represented a crucial phase in his development, both professionally and personally. Dr Bapat is not solely defined by his academic pursuits; he actively engaged in extracurricular activities, finding a balance between the demanding medical studies and the enriching experiences of sports and theater. This ability to juggle diverse interests highlights a holistic approach to education, where personal growth and enjoyment should not be sacrificed for academic excellence. While he approached his studies with diligence, he also admits to a tendency for last-minute preparation, a testament to his efficient learning style and perhaps, a hint of the pressures inherent in a rigorous medical curriculum. When the time came to choose a specialization, Surgery appealed to him most due to its dynamic and action-oriented nature. He found less appeal in the more theoretical and memorization-heavy fields of General Medicine and Gynecology, indicating a preference for action and immediate impact.

Advocacy and Reflection on Medical Education

His tenure as a Resident Medical Officer began in 1964 and was characterized by a strong belief in the power of collaborative learning. He deeply valued the culture of peer-to-peer teaching that prevailed at the time, recognizing its crucial role in the development of competent and confident young doctors. This conviction led him to establish BARD, which later evolved into MARD (Maharashtra Association of Resident Doctors), an organization dedicated to championing the rights and welfare of junior medical professionals. His observations of contemporary student life led him to reflect on the changes in medical

education over time. He perceived a shift towards a more rigid and less well-rounded experience for today's students, a departure from the more holistic environment he benefited from. He believes this narrow focus potentially hinders the development of doctors who possess not only technical expertise but also a broader understanding of the human condition.

Dr Bapat held a critical perspective on the prevailing medical education system, expressing concerns about the excessive stress levels, the voluminous syllabus, and the relevance of current evaluation methods. He always visioned a significant restructuring of the MBBS program, suggesting that its primary focus should be on training competent general practitioners. He had always wanted specialization to occur through separate, competitive examinations, allowing for a more focused and rigorous training pathways for those pursuing specific medical fields. His insights stemmed from over 25 years of dedicated service as a teacher, a role he clearly cherished. The invitation to the U.S. by his former students stands as a testament to the lasting impact he had on their professional lives and a source of immense personal satisfaction.

He advocated:

a. Teachers must be broad-minded and reduce academic pressure,
b. MBBS should primarily train general practitioners,
c. Postgraduation should be pursued through competitive exams,
d. Syllabus should be simplified and shortened, and
e. Students should be treated with dignity and not like schoolchildren.

He strongly criticized the system of evaluating candidates for post-graduation based on aggregate marks. He draws an analogy, questioning the logic—"If one wants to be an actor, why should one learn pottery?"—to emphasize the irrelevance of unrelated academic components. This is the new norm now.

Principles and Perspectives on Life

Dr Bapat is critical of the current medical education system's stress, long syllabus, and irrelevant evaluation methods, suggesting that MBBS should train general practitioners and allow specialization through separate competitive exams. Despite the potential for financial gain, he made a conscious decision to forgo private practice, citing concerns about unethical practices that he observed within that sphere. This principled stance underscores his unwavering commitment to his values and his dedication to upholding the integrity of the medical profession. He found fulfillment and contentment in a modest and principled life, prioritizing ethical conduct over material wealth.

Professor Emeritus Dr Ravindra Bapat

Professor Emeritus Dr Ravindra Bapat is a distinguished figure in the field of Surgical

Gastroenterology, holding a long and impactful tenure at Seth G.S. Medical College and KEM Hospital in Mumbai. His research focused on Surgical Jaundice and Pancreatitis, and he has received numerous awards for his contributions. Dr Bapat is also an accomplished author, with publications including *Art of Clinical Presentation in Surgery*, *Companion to Surgical Pathology*, *Ward No.5, KEM* (Marathi & English), *Swasthyavedh* (Marathi & Gujarati), and *Postmortem* (Marathi & Gujarati).

Dr Bapat's influence extended beyond the hospital walls, as evidenced by his former Chairmanship of Haffkine Bio-Pharmaceutical Corporation Ltd., a key institution in pharmaceutical development and public health. His strategic guidance was also sought as a Governing Council member of Tata Memorial Center, a premier cancer research and treatment center in India.

Demonstrating his commitment to academic leadership, Dr Bapat served as Vice Chancellor for not one, but two prominent health sciences universities: Maharashtra University of Health Sciences and Mahatma Gandhi Mission University of Health Sciences. In these roles, he was instrumental in shaping medical education, fostering research initiatives, and guiding the future generation of healthcare professionals. His vision and administrative acumen were crucial in navigating the complexities of higher education in the health sector.

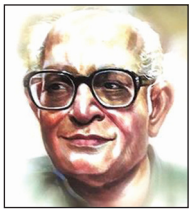
His Guiding Force—

Trust no future however pleasant,
Let the dead past bury its dead,
Act, act in the living present,
Heart within and God overhead.

This broader participation underscores his belief in the importance of community and well-being beyond the confines of his professional endeavors. His multifaceted personality and diverse contributions leaves an indelible mark on KEM and Seth G.S. Medical college, medical fraternity and the wider society. Dr Bapat's journey serves as an inspiring narrative of a life lived with purpose, integrity, and a deep commitment to both his profession and his personal values.

By Rama Malik
Senior Personal Assistant to the Dean;

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities; Interview by GOSUMEC by Ashutosh Barve, Priya Jayadevan, Debajyoti Chowdhury; and Indus Source Books
(https://www.indussource.com)



Dr Rajaram Amrit Bhalerao

Professor and Head of Department

Courtesy: Mumbai Marathi Sahitya Sangh

(I have obtained much of what follows from Dr Bhalerao's autobiographical interview recorded by our Humanities Division.)

Also known as Bal Bhalerao, he was a multifaceted individual - surgeon, professor, and patron of Marathi language theater and Marathi literature in India. He was appointed to several literature and theater committees by the Government of Maharashtra. He was a recipient of the Dr B.C. Roy Award instituted by the Medical Council of India.

Marathi Stage and Literature

He inherited his love for the Marathi stage from his father, Dr A.N. Bhalerao, who founded the Mumbai Marathi Sahitya Sangh in 1935. Dr A.N. Bhalerao was a colleague of Dr A.V. Baliga, both having entered the National Medical College as students at the same time. Both obtained the qualification L.C.P.S. as the college was not recognized by the University of Bombay. The senior Dr Bhalerao passed away in 1955.

The younger Bhalerao started acting on stage in 1942. Years later, he took over as the Chief Secretary of the organisation his father founded and led it for over half a century. The essay on him in *Wikipedia* sums up his contributions to Marathi literature and theater. He and his colleagues staged Marathi plays in Germany, Switzerland, America, Dubai, and Singapore. They revived old Marathi plays and adapted more recent dramas from other languages to produce Marathi translations for modern audiences. In 1964, modeled on *The Old Vic* in London, they created a new auditorium in Kelewadi, Girgaum. Dr Bhalerao later pointed out that they could be so productive because eminent artistes such as Durga Khote levied no charges and performed for the sheer love of the stage.

Medical Career

Here, we concentrate on Dr R.A. Bhalerao's life and work as a medical professional that was to lead him to the post of Professor and Head, Department of Surgery at King Edward VII Memorial Hospital and after 1985, to head the Department of Surgery, and the appointment as Director, Strategy & Medical Planning at Hinduja Hospital.

He had entered Seth G.S. Medical College in 1951, the first batch to come through the Secondary School Certificate route. In the interview recorded by the Humanities Division of our institutions, he modestly stated that he was a very average student in Wilson High School. He attributes his interest in study and consequent excellence to his teacher, Mr. Sathe, who, despite having one paralyzed upper limb due to poliomyelitis, inspired his students. One consequence was the award of a scholarship for students who entered Wilson College through Wilson School. It is of interest that he used the Rs. 50 so obtained

to buy a tea set for his mother. He was not a prominent sportsman but did play cricket. He had always been handicapped by asthma, but he developed the philosophy that chronic disease need not kill you provided you take precautions.

Dr Dhayagude, a respected pathologist, was the Dean when Dr Bhalerao entered Seth G.S. Medical College as one of sixty students. After his father's death, his uncles and father's friends looked after the young medical student. He won the University Gold Medal in Anatomy, and recalled with affection those who helped him develop his skills in dissection. He particularly remembered Dr V.P. Mehta, with his photographic memory and stock of mnemonics. He recalled Professor Koppikar a very jovial person. In contrast, Dr Kurulkar was a grim person but had an excellent understanding of law as applied to medicine. Not many know that Dr Kurulkar drafted the constitution for the GOSUMEC Society. Dr Batliwala and Dr Monteiro taught him physiology. Dr Batliwala's son studied Surgery under Dr Bhalerao, who told him, 'I am repaying my debt to your father.'

Dr Bhalerao obtained his MBBS degree in 1956. He had stayed in the hostel over some months before his examination after his father passed away. One of his colleagues in the hostel who looked after him was Dr A.V. Bavdekar. After graduation, he spent a year in Orthopaedics, with the ward boys as his teachers who taught him how to apply plaster cast, remove it and other practical tasks. He also rephrased a common statement. 'One does not reduce a fracture. We hold a reduced fracture in the plaster cast.'

As an undergraduate, Dr Bhalerao saw just a handful of specialities in the hospital—Ophthalmology, ENT, Orthopaedics and Skin-Venereal diseases. Pediatrics separated out whilst he was a student with Dr Piloo Bharucha as the Head. Dr Rustom Jal Vakil set up the Department of Cardiology. Dr Bhalerao applauded the earlier generalists who had created specialist departments and was sorry that after 1980 generalists almost disappeared and pure specialists gained prominence. He felt that our country, with so many poor, especially away from the big cities, continues to need generalists with special interests.

Since he did not come from a rich family, private practice was not an option. He needed to look after his mother and two sisters. He, therefore, enrolled as one of the early Tutors (later termed Lecturer) in the Department of Surgery. Drs. G.B. Parulkar and T.P. Kulkarni were his seniors. Till he was made Professor, he traveled by train from Charni Road to Elphinstone Road and walked to the hospital.

Dr Bhalerao recalls Dr Sen as being an excellent teacher of General Surgery. (Dr Sen moved to Cardiovascular Surgery in the late 1950s.) There was an admirable set of teachers then: Dr Baliga, Dr Vasant Sheth, Dr Munsif, Dr Arthur DeSa. Dr Baliga excelled in clinical teaching but failed to convert his wisdom and experience into printed text. One of his dictums: 'Think of uncommon manifestations of common ailments rather than common manifestations of uncommon diseases.' When delivering a lecture he would place the three or four most likely diagnoses and draw a line below this list. Urging concentration

on items above the line, he would then add uncommon diseases below the line. Dr Munsif was an excellent artist. He would wear a Gandhi cap when operating and preferred sitting during surgery—unusual at that time. His dictum: 'Never be the first to start a new form of treatment and never be the last to give it up.'

Another dictum was attributed to his colleague Dr S.D. Bhandarkar: 'All deaths are muscle deaths.' Failure of the myocardium is the most common example. If an animal cannot run, it will not be able find food and also falls prey to its predator. The corollary: muscle activity is crucial to wellbeing. This is why a caged tiger keeps pacing up and down even though its food is assured.

Dr Bhalerao recalls the joy when antibiotics gradually but surely invaded the therapeutic field. Starting with penicillin during World War 2, streptomycin in the 1950s, those that followed physicians and surgeons had a powerful umbrella to shield patients with infections. He hastened to point out that even today, a minimal period of hospitalization must be the rule as hospital acquired infections remain a grave threat. In the 1950s blood transfusion services were being developed and donors were few. Many had to purchase blood.

The first resident doctors' strike took place in 1962. Dr Bhalerao and his colleagues tried to impress upon Mr. Pimputkar, Municipal Commissioner, of the needs of resident doctors. Even after five subsequent strikes, the same requests would be made before the administrators as they never fulfilled their promises! Most strikes put forth genuine complaints and originated in JJ Hospital.

A lesson Dr Bhalerao taught was the need for innovation. There will always be a shortage of funds and difficulty in obtaining material available in western countries. Instead of moaning and grumbling, try to innovate. He gave the example of the polythene tube he attached to the needle used for splenoportography so that movements during breathing did not cause a splenic tear. This was soon adopted by others as well. Another example was tying a double condom to a 20F tube to be used as a substitute for the Sengstaken-Blakemore tube. Many lives were saved by this innovation.

An incident he recalled concerned Dr Ajita Mehta who was trying hard to find a space for a laboratory for anaerobic cultures. She ended up in Dr Bhalerao's office, who was able to find her a room on the 3rd floor of the hospital building. She blossomed into an eminent microbiologist. The lesson he learnt from this experience was that you never know the extent of good that will follow from one helpful gesture on your part. So, whenever you get the opportunity, seize it to help others and do good. Dr Bhalerao was also able to help her during her severe illness when she was on a ventilator for a week.

His work in the animal laboratory yielded rich dividends. One example was the creation of a model of small bowel perforation. This series of experiments taught them the cause of high rate of mortality after delayed surgery and closure of the perforation. By then there was overwhelming bacterial growth in the peritoneal cavity.

Speaking of this laboratory reminded him of Nurse Aruna Shanbag. They had just finished an experimental operation and she requested his permission to go home. To her misfortune, she went to the basement where she had placed her clothes in her locker and was strangled by the servant trying to rape her.

Dr Bhalerao's love of teaching attracted students to his classes at odd hours. He recalls that the first batch of such students included his future wife! After passing the 1st MBBS examination, he started Anatomy classes; then Pathology classes and finally classes in Surgery as well. He pointed out that the benefit was mutual. The more he taught, the better was his own understanding of the subject and ability to teach.

On his mother's insistence, he went to Britain in 1961 on a Commonwealth Scholarship. There, for the first time, at the Royal College of Surgeons, he saw how functional anatomy and physiology was taught. He was fortunate in having Dr R.J. Last as one of his teachers. He returned to India in 1964.

At this stage there was a Department of Hygiene in Seth G.S. Medical College. It was only after Dr D.N. Pai came back from America in the late 1960s with a MSc in Preventive and Social Medicine that the department was upgraded.

Dr Bhalerao was later to serve as its head. This was partly because her husband insisted that despite being a mother of two, she obtain the MD in the subject of her choice and serve as a key member of that department. He always advocated for all qualified and trained women to continue their work, contribute to the general good and, in the process, earn an income.

This brought to his mind Dr Suman Kinare, Professor of Cardiovascular Pathology at KEM, whom he greatly admired. She was dogged in her determination to be heard and could not be cowed down by raised male voices.

He narrated the sad experiences with several individuals who were experts in producing X-ray films. They were proud of their efficiency and the quality of portable films they produced. Unfortunately, the discipline regarding the use of protective devices was lax and Dr Bhalerao saw not less than ten of them dying from cancer. One of them was Dr R.V. Sanzgiri, father of Dr Ramesh Sanzgiri, who had taught Pediatrics to Dr Bhalerao. A more recent example was Dr Madhav Kelkar who served as Dr P.K. Sen's radiologist to start with, serving under Dr Sheila Engineer. On his return from England, Dr Bhalerao minimized the use of portable X-rays, preferring to do the studies in the department where all protective devices were in use.

Dr J.C. Patel was a visionary. He started the blood bank, the tetanus unit and other sections. Dr Bhalerao admires his large contributions to King Edward VII Memorial Hospital.

Dr Bhalerao recalled the armed insurrection by some police cadres in Parel. There were clashes between the police and military armed with rifles, machine guns, and armored cars on the one side and angry mobs on the other. The police and military resorted to repeated firing at frequent intervals. Blissfully unaware of this mayhem, Dr Bhalerao was driving to the hospital. At Lalbaug, an inspector stopped him. 'Are you a doctor?' 'Yes, I am going to my hospital for my duties.' 'Please follow my instruction. Enter your hospital from the rear gate.' Dr Bhalerao did so and safely entered the compound. He later learnt that Dr Piloo Bharucha and others who had taken their cars to the front gate saw them being smashed before their eyes by an unruly mob. Babasaheb Bhosale was then the Chief Minister.

Summarising his experiences, Dr Bhalerao felt that when he was a student knowledge was valued over money. This has changed.

Full-time Versus Honoraries

This is the time when the battle between full-timers and honoraries started. Dr Bhalerao recalled with pride that he had been taught by committed honoraries. He gave the example of Dr Baliga who had just returned from Delhi. He came to KEM, completed the clinic and then went home for lunch. Dr G.M. Phadke regularly took his students for picnics where he would organize competitions for singing Marathi songs etc. Dr Munsif too hosted several parties for students and residents. Dr N.D. Patel was a shy person and was a brilliant physician.

The controversy between honorary and full-time systems was foolish. Neither system can, by itself, offer all that is needed. The full-time system has the great handicap of lacking churning and the possibility of development and growth. As in all salaried systems there is promotion along hierarchies. There has to be an overhaul from time to time. Bad blood must be let out, good blood brought in. The army is a good model. If you do not show growth and development, you are compulsorily retired. This disallows stagnation and lack of productivity. To help growth, the administration can offer incentives. In Hinduja Hospital, on appointment, the full-timer was provided a certain income irrespective of whether he earned it. As his patients increased, the sums earned from patients were added to his income with a certain monthly deduction (maximum 30%). The deducted portion still belonged to the consultant and could be used to travel to other centers, conferences etc. If this sum proved short for the intended purpose, the Trustees added an extra amount as interest-free loan.

Dr P.K. Sen had returned from America in 1956, having studied there under the Rockefeller Foundation award. The day Dr Sen took over as Director of Surgery, Dr Baliga retired from King Edward VII Memorial Hospital. Dr Bhalerao recalls Dr Baliga's parting statement, 'Where I was king, I do not wish to be a slave.' It was a subtle criticism on the manner of developing the department by placing a full-time Director at its head.

Narielvala Episode

Dr Narielvala, a bachelor, was appointed Professor and Head of the Department of Medicine. He lived with his mother. He was fond of music and especially enjoyed concerts conducted by his friend, Mr. Zubin Mehta. He was a simple person, polite to a fault. Dr Sen decided to gain control over the Department of Medicine. Dr S.V. Joglekar did nothing to stop Dr Sen though all of us hated what was happening. Dr Narielvala was supported by Dr Vidya Acharya and many resident doctors and students. (Dr Manda Pawaskar, his registrar, eventually married him.) Eventually, Dr Narielwala left King Edward VII Memorial Hospital and emigrated to Australia. Another consequence of this unfortunate experience was the transfer, for the first time ever, of a Dean. Dr S.V. Joglekar was transferred to Sion Hospital from where he retired.

Dr K.G. Nair was appointed in Dr Narielwala's place and was commonly called Jetting Nair as half the time he was in the air, travelling hither and yon.

Move to Hinduja Hospital

In 1984, Dr G.B. Parulkar was appointed Dean at KEM. Dr Bhalerao had looked forward to this post. He contested this appointment but was overruled. He remained depressed for some months despite reassurances from Municipal Commissioner, Sukhthankar and a letter from Dr P.K. Sen (then in America). At this juncture, he had an interesting conversation with Dr C.K. Deshpande who told him of his own experience. 'When I was a lecturer in Pathology, I felt I could achieve more as a professor. As Professor, I felt I could achieve more as a Dean. In fact, nothing mattered as the system is so rigid and you are stuck in it.'

Dr Bhalerao felt there was no place for him in KEM to grow. He was interviewed by the Hinduja family and Dr R.K. Menda (related to the family) and he was appointed to the Hinduja Hospital. Whilst the building was complete, the hospital had not yet been commissioned. Taking courage in his hands, Dr Bhalerao volunteered to start admissions and inpatient treatment. The Hindujas were anxious but were reassured by Dr Bhalerao. Initially two floors were commissioned. As work started without any difficulty, progressively the entire hospital was brought into use. 'I was confident that when we could run the KEM Hospital, we could easily handle the much smaller Hinduja Hospital.'

'I have always been very cautious when dealing with Lakshmi, Menaka, and Saraswati. All three of them will come your way again and again as you practice medicine. Be polite to each of them but keep at least the first two at arm's length.' One poorly-known contribution of Dr Bhalerao to the Hinduja Hospital was the removal of all bolts on the inner surfaces of doors to consultation rooms. No doctor could ever lock a patient within a room. This was to ensure safety of female patients.

Summing up his career at Hinduja Hospital, he said, 'I am still a surgeon, teacher, and generalist. I look after my patients to the best of my abilities and do all I can for their welfare. I teach nurses, DNB candidates, residents and retain my wide interests even as I pursue my own speciality. I continue to learn from my juniors. I have learnt to respect microbes. Despite all our research, they are holding their own. For several years, we have had no new antibiotic. The tubercle organism has learnt to flourish despite the several drugs we have created to destroy them. We must continue to uphold basic principles—hygiene, antisepsis, asepsis in surgery and continued vigilance and care. Dr Ajita Mehta changed our usual manner of greeting when HIV made its inroads. She asked us to join our palms and say *Namaste* instead of shaking hands and passing on micro-organisms to the other person.'

He passed away at the age of 87, having spent more than five decades practicing surgery and specializing in gastrointestinal disease and diseases of the liver. He published more than 60 scientific papers and received several honors and awards.

By Sunil Pandya

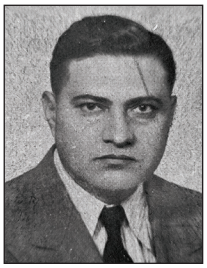
Dr Anil Gvalani

Professor and Head of Department

At the end of my third MBBS and internship at Nair, I had a choice between Obstetrics and Surgery, and I chose Surgery based on my higher score in the latter. I joined as a Lecturer at Sion Hospital and over the years, became a popular teacher there. Each hospital has its unique flavor and strengths: Nair was focused on elective work, Sion was known for its trauma cases, and KEM had become a brand owing to the years of trust and confidence it had earned from the community.

As the Head of Department, there were certain challenges managing human resources, staff, and overcrowding in casualty departments. As an administrator, it is crucial to ensure effective communication between patients and doctors and to have a candid dialogue with the patient's family to manage expectations. My advice would be to address the communication gaps by maintaining a secure and controlled patient-to-relative ratio to facilitate better dialogue and understanding between the two which can also safeguard against the increasing incidents of assaults on doctors. One of my notable contributions has been authoring medical textbooks. Seeing students use my handwritten notes as study material, I formalized them into textbooks while ensuring accuracy and meticulous cross-referencing.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities



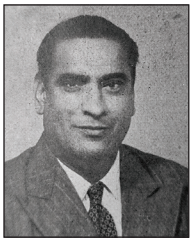
Dr M.M. Pandya
Honorary Professor

Dr Pandya joined the Seth G.S. Medical College as part of the first batch of students admitted in 1924–25. He graduated with flying colors in 1929 and was appointed as a House Surgeon under Dr R.N. Cooper, and later as Gynecologist House Surgeon under Dr N.A. Purandare. After getting his FRCS in 1936, he rejoined as Honorary Assistant Surgeon at KEM in 1937 and was elevated to Honoraryship in 1943.

He is a surgeon who is distinguished by his practical approach towards problems. To him, in every instance, the welfare of the patient comes first. Of all the members of the honorary staff who have retired from these institutions, he has the longest association with the institutions.

All those who have worked with him will always remember his kindness, punctuality, and sympathy. There are a number of doctors who owe everything to him for moulding their careers. I am one of them, I had the good fortune of working under him for thirteen years. All that I am today, I owe entirely to Dr Pandya.

GOSUMAG Magazine
Dr M.M. Pandya-An Appreciation, Dr C.S Worah,



Dr G.M. Phadke
Honorary Professor

Dr G.M. Phadke, who was born in 1901 in Khandesh, India, was a pioneer in the Urology field and one of the main architects of Modern Urology in India. Upon finishing his matriculation, he migrated to the United Kingdom for further studies, graduating from University College Hospital in London and obtaining a Fellowship from the Royal College of Surgeons of England. Dr Phadke's UK experience influenced his medical career and interests alike, such as excelling in sports like golf, skiing, and ballroom dancing.

He came back to India in 1933 and became an assistant surgeon at King Edward Memorial Hospital in Mumbai. He became one of the pioneers in his profession, establishing the Association of Genitourologic (GU) Surgeons, which eventually became the Urological Society of India (USI). He made a huge contribution to Urology, especially in the field of azoospermia and vasectomy, where through his research he broke down common misconceptions about medicine and promoted good family planning.

Dr Phadke was also a dedicated teacher, imparting his knowledge to students at KEM Hospital and Bombay Hospital. His work in the evolution of Urology in India is remembered by the USI, which has instituted a traveling fellowship and an oration in his name. Dr G.M. Phadke died in 1964, leaving behind a legacy of excellence and kindness in the speciality of Urology.

Patel A.: Dr G.M. Phadke
The first president of the Association of Genitourologic Surgeons: Indian J Urol 2008; 24:2-3

Dr R.D. Shirvalkar

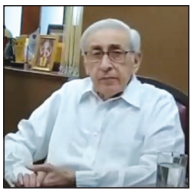
Honorary Professor

Dr Raghunath Dadoba Shirvalkar joined the University College after winning the entrance scholarship. His first two years of studies convinced him that Surgery was to be his final choice. He then appeared for his MS and came out successful and was the first Maharashtrian to secure this degree. While in London he earned for himself the pet name "Daddy" for the fatherly advice he would give to every newcomer to London. He is an emblem for scholars and today, competitive exams are held under his name.

He started the well-known "Charak Clinic" with Dr Cooper and Dr Ratnakar. Dr Shirvalkar was a prominent member of the Bombay Medical Union and fought valiantly for the independent Medical Profession. His heart was always with medical students, and he spared no pains to make himself a useful and impressive teacher. He never rested until he had hammered the thing he wanted to teach into the heads of his students. In him, we have lost a most eminent surgeon, a capable and enthusiastic teacher of his "Boys", a devoted friend of suffering humanity, a patriot, a philosopher, and a guide to all. He had a genius for making friends. He extended his hands of friendship and fellowship with a genial smile that went straight to one's heart.

Golden Jubilee Souvenir,
Dr R D. Shirvalkar

Department of Medicine



Dr F.D. Dastur

Professor and Head of Department

I was born in the UK in 1935 after my parents migrated there from Mumbai. I remember we used to carry gas masks on our backs during junior school, fearing the Germans were going to use gas as part of their war efforts. These memories stick with me. Eventually, I decided to move my practice to India, so after completing my postgraduate in Medicine, I came to India as a pool officer. I joined KEM in 1969 and was part of the team that started dialysis at KEM, making it the first hospital in India to do so. My primary interest was in Tetanus, and I conducted research to develop a single-dose vaccine. Over time, with the advent of ICUs, etc., I have noticed a shift towards compartmentalization in medical practice, and while it is inevitable, it has led to a dilution of the sense of belonging to the institution.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities

Dr Aspi Golwalla

Honorary Professor

Dr Aspi Framroze Golwalla who was born in Karachi in 1920, lived a life of service, empathy, and integrity. Orphaned at the age of one, he was brought up by his mother Meherbai, whose strength became the core of his character. An excellent student, he studied medicine at Seth G.S. Medical College in Bombay and went on to become a world-renowned physician, educator, and author.

Golwalla served at KEM Hospital and continued his private practice well into his 90s. A passionate teacher, he co-authored medical textbooks such as Aspi's Medicine for Students, which remains a staple for aspiring doctors. Beyond his medical contributions, he played a pivotal role in community service—chairing the Bombay Parsi Punchayet, serving the Godrej Foundation, and revitalizing institutions like Masina Hospital.

He played a key role in developing Godrej Baug, promoting practical religious reforms, and fostering Parsi unity. Disciplined, punctual, and humble, Dr Golwalla also treated poor patients gratis and helped students with scholarships.

Even at the end of his life, he rewrote his works and remained mentally alert. Dr Golwalla died in 2020, just after his 100th birthday, leaving behind a legacy based on healing, wisdom, and unstinting commitment.

GOSUMAG 1985, Parsiana, 21 September 2020

Dr Murzban Darashaw Motashaw

Honorary Professor

Dr Murzban Darashaw Motashaw was born in Mumbai in December 1918 and obtained his medical education at the Seth G.S. Medical College and King Edward VII Memorial Hospital. He had a brilliant academic career. After a short stay abroad he was appointed Honorary Assistant Physician at the Gokuldas Tejpal Hospital. He left the same later to join his Alma Mater, the King Edward VII Memorial Hospital as Honorary Assistant Physician, later becoming Honorary Physician and Honorary Professor of Medicine. He was associated with the Parsee General Hospital, the Masina Hospital, and the Life Insurance Corporation of India.

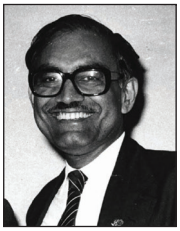
He was an avid reader and a great teacher, a remarkable orator and a distinguished clinician.

He conducted a large practice, his main interest being Cardiology. He was loved dearly by his students, residents, and patients, and was a great patriot who adored his country of birth.

Unfortunately, illness struck him at the height of his career. But he bore this tragedy with equanimity and great fortitude. He was suffering from chronic renal failure and was being treated at London. Death snatched him away while awaiting a transplant in July 1971.

His dream was to set up a Kidney Transplant Unit at the King Edward VII Memorial Hospital so that others struck by the same disease would benefit and add useful years to their lives.

By Dr Sunil Pandya



Dr K.G. Nair

Professor and Head of Medicine

Dr Kappiareth Gopal Nair was a renowned Indian cardiologist, researcher, and teacher who made significant contributions to the development of Cardiology in India. Born in Kollengode, Kerala, he graduated with an MBBS and MD from Seth G.S. Medical College and KEM Hospital, Mumbai, where he subsequently became Professor and Head of Cardiology.

His global training included a Rotary Foundation Fellowship at Massachusetts General Hospital from 1956–57, under Dr Paul Dudley White, and a study with Dr David Littmann, the inventor of the Littmann Stethoscope. He obtained a PhD in Physiology from the University of Chicago, where he conducted novel work on cyclic AMP. His work on cardiac hypertrophy and free radical metabolism in the heart significantly advanced the field.

Dr Nair had distinguished appointments at Breach Candy, Jaslok, and Hinduja Hospitals. He was also a Medical Director at Holy Family Hospital and directed the first DM Cardiology program in Maharashtra. He received many awards, including the Shanti Swarup Bhatnagar Prize, and was highly revered for his teaching, research, and patient care.

His death in 2010 left a legacy in Indian Cardiology that continued to inspire generations of physicians and researchers.

CURRENT SCIENCE, VOL. 98, NO. 9, 10 MAY 2010; and Obituary API (http://www.japi.org/may_2010/obituary.pdf)

Dr Feroze M. Narielvala

Professor and Head and Director of Medicine

Dr Feroze M. Narielvala was a respected doctor and a great teacher whose commitment to patient care and medical education continued to influence his students long after he retired. He began his career at CMC Vellore,

and subsequently moved to Banaras Hindu University (BHU) in 1965 as a Professor of Medicine. Respected for his clinical skills, discipline, and compassion, he was regarded for his quick diagnostic mind and vibrant teaching style.

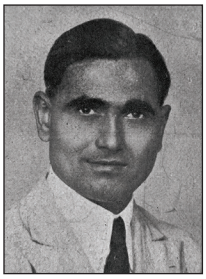
His dedication to patient care was unexcelled—he once smashed a locked cabinet with his fist to retrieve emergency drugs, saving a patient's life. His students respected his encyclopedic knowledge, his capacity to simplify complex ideas, and his insistence on practical learning. Several of his protégés rose to prestigious positions in India, the UK, and the USA.

Dr Narielvala later worked at KEM Hospital, Mumbai, where his term was abruptly terminated due to administrative politics, leading to widespread protests by students. He finally moved to Adelaide, Australia, but remained close to his students and continued guiding them from there.

A shining role model, his excellence, integrity, and commitment to medicine continue to inspire generations of physicians.

Indian J Med Spec 2019; 10:179-83, Where are such teachers? A legend, an icon, and a role model!,

Shridhar Dwivedi,
Department of Cardiology, National Heart Institute, New Delhi, India
Professor F.M. Narielvala: an Icon and Darling of Student



Dr J.C. Patel
Honorary Professor

Dr Patel joined in January 1941 and worked at the hospital for 30 years. He credits Dr Jivraj Mehta for KEM's rigor and competitive spirit. The teaching at KEM was excellent because everyone who joined wanted to bring the institution at par with the I.M.S and Dr Mehta's discipline pushed people to work sincerely.

Citing a memorable incident involving Dr Mehta, Dr Patel talks of a research paper he had published. "A number of fever cases used to come to the hospital and people continued to think that it was either malaria, typhoid or pneumonia. With various investigations, we tried to find out whether the malarial parasite was present or not. When dysentery struck, we started examining stools. The parasite infection rate was about 40% in the stools we had examined. I read my paper before the staff. The Dean, who was then an ex-professor of Pathology, nearly called me a liar. In the KEM Hospital stool examination, they had hardly found 5% and I had said that it was 40%! So, I sat with him with a microscope and examined about 800 stool specimens and found that 36% showed presence of protozoal infection. Then they had to believe us. This stimulated us."

GOSUMAG Magazine

Dr Raghavan
Professor and Director

Dr Raghavan joined Seth G.S. Medical College as an undergraduate student and continued successfully as a postgraduate student, R.M.O., Assistant Honorary Physician, Honorary Physician and finally, Professor-Director of Medicine before he retired.

The subspecialties had not been developed at the time and the physician or surgeon and consequently, the house staff managed everything, which gave them the much-needed clinical experience. Dr Raghavan worked with Drs Erulkar, Bharucha, and Gilder.

GOSUMAG Magazine
Down Memory Lane, Dr Raghavan

Department of Neonatology

Dr Simin F. Irani
Professor and Head of Department

I completed my MD from Seth G.S. Medical College in 1964. Dr Bhagat was an excellent teacher and disciplinarian whose influence led me to my specialization in Neonatology. Dr Bhagat also supported me in pursuing education abroad and I completed a fellowship at the South Bristol Hospital and got further training at Northwestern University. I joined KEM in 1973 as an Assistant Professor. We faced many challenges while establishing the Neonatology Unit due to outdated infrastructure but managed to pull together in the end with support from colleagues.

I continue to work in the field as part of training programs like Navjaat Shishu Suraksha Karyakram (NSSK) and BJ Wadia Nutrition Rehab Center (BGNRC). We have also established numerous nutritional rehabilitation centers with support from UNICEF.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities.

Department of Nephrology

Dr Vidya N. Acharya
Professor and Head of Department

Dr Acharya was fondly known as "Madam" and "Mother of Nephrology" or as the "Iron Lady", by those who knew her closely. She started her career in Medicine at Seth G.S. Medical College and furthered her studies in Nephrology at the University of Leeds. She had many "firsts" to her credits, having established the first Nephrology Department with dialysis

and transplant facilities in Western India at KEM. As the first woman in Nephrology, she entered the field where "angels feared to tread", storming into the male bastion and ensconcing herself at the head of the pack, and retiring as the Head of the Department in 1996.

Dr Acharya was not only a dedicated teacher but also a pioneering researcher and has a number of publications in journals and contributions to chapters in books. She was a president of the Indian Society of Nephrology and the Indian Society of Organ Transplantation; her role was pivotal in their formation and growth. She was a Founder-Member and President of the Hypertension Society of India and an active member of the Education Committee, Hypertension and Kidney Disease Committee of the IFKF.

An able administrator, she also instilled qualities like courage, integrity, punctuality, meticulousness, compassion, humanity and simplicity, and touched the lives of people around her. In recognition of her contributions, she was awarded the Lifetime Achievement Award of the Indian Society of Nephrology and the Pioneer Award of the International Society of Nephrology.

GOSUMAG Magazine,
By Dr Alan Almeida, Alumnus

Department of Neurology

Dr E.P. Bharucha

Honorary Professor and Head of Department

Dr Bharucha cites the creation of Neurology and the Neurosurgery Department at KEM as momentous in his career as it allowed him to become a Neurologist in India. When talking about his personal growth at KEM, Dr Bharucha said that treating and interacting with the large number of patients at the hospital allows one to imbibe humane values for the dignity of patients, which one cannot acquire by treating rich patients only.

"Medicine is service, and we have the privilege to render it. I strongly believe that material joy is not true joy. Money and fame are not the only things in life which will make you happy. After joining medicine if you don't serve people, you have not achieved your purpose. You will be deceiving yourself and people."

Platinum Jubilee Souvenir,
Interview with Dr E.P. Bharucha (Taken by: Aparna Iyer & Dimple Jain

Dr Pravina Shah

Honorary Professor and Head of Department

KEM has been an unforgettable part of my life. I started my journey in 1963 in this place filled with memories. I remember joining with my father beside me; it was a dream come true for us both. Each department has its unique experience but Psychiatry, Chest Medicine and my registrar's post in Neurology were particularly impactful. I was inspired to develop a comprehensive Epilepsy Center at KEM as the Epilepsy Clinic here was already renowned for its quality and work. I also established a Neuro Intensive Care Unit at KEM with donations, as there was a need to treat conditions like GBS, etc. Eventually, I moved to Nair due to my desire to pursue part-time practice and diversify my experience. I joined Nair as Associate Honorary Professor and returned to KEM as the Head of Department of Neurology. I remain immensely proud of my students and the faculty who have carried forward this department's legacy.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities.

Department of Neurosurgery

See under History of Department of Neurosurgery in Part III Potpourri.

Department of Obstetrics and Gynecology

Dr Usha Krishnan

Head of Department and Professor

I worked with Dr B.N. Purandare during my residency—he was passionate about Gynecology and a great administrator with a keen interest in research. It has been very rewarding to contribute to bringing new life and witnessing the mother's joy when she holds her newborn; it's truly an unparalleled experience. I chose obstetrics also because it offered a variety of challenges that eventually led me to work on high-risk pregnancies. During a trip to Europe, I established connections with various departments in Switzerland, which led to a partnership with the WHO.

We brought the first fetal monitor to India and collaborated with international organizations for prostaglandin research and fetal monitoring. My contributions towards social work include establishing various initiatives like the Family Planning Association that extended holistic care beyond medical treatment. My husband and I also started a skill development program that was supported by the central government.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities.

Dr Nargesh D. Motashaw

Honorary Professor

Dr Nargesh D. Motashaw, born on 9th May 1925, in Mumbai, was a renowned and trailblazing Obstetrician and Gynecologist in India. She came from a highly respected family, with a father who was a senior railway official and two brothers who were also highly respected doctors. Inspired by her family tradition, she went on to study medicine and received her MBBS degree in 1948, and later an MD in 1951. In 1953, she was awarded the coveted Fellowship of the Royal College of Surgeons.

Dr Motashaw spent her professional life serving the cause of women's health, serving as a professor and consultant in various prominent hospitals, such as Nowrosjee Wadia Hospital, KEM Hospital, Jaslok Hospital, and Saifee Hospital, among others. She was the first to bring modern laparoscopy to India in 1971 and a staunch proponent of gynecological endoscopy. She was President of the Indian Association of Gynecological Endoscopy and the International Association of Gynecological Endoscopists (IAGE) and contributed her knowledge internationally through lectures and demonstrations.

Beloved by residents and postgraduates alike for her meticulousness and careful surgical skills, Dr Motashaw was also a gentle teacher who insured that residents and postgraduates were as practical as they were knowledgeable in terms of anatomy. Her commitment went beyond that of her occupational responsibilities, as she always had time for those who required it, the underprivileged among them, a testament to her ethical practice and care. The legacy of Dr Motashaw continues through her remarkable contributions to medical education and her lasting impact on the field of gynecology in India.

Dr Motashaw died on March 27, 2024, leaving a legacy of perfection, kindness, and dedication to her work.

ARMIN DUTIA MOTASHAW
A lucky niece, Parsiana, 2014

Dr Madhukar Narvekar

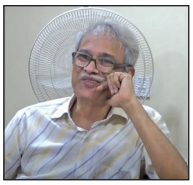
Honorary Professor

I was initially interested in pursuing research at the Royal Institute of Science, and after working there, I considered continuing in research but I ended up doing Medicine as my father and uncle were both doctors. The environment at KEM was much simpler back then, the professors were committed and there was a strong sense of accomplishment among us.

I have had many interactions and collaborations with my peers since.

We have seen the shift from textbook-based learning to a more dynamic and practical approach to learning. One of the primary differences that you see between patients treated at KEM and patients who come in through private practice are their economic backgrounds, needs, and expectations from doctors.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities.

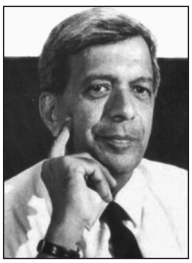


Dr Shashank Parulekar

Head of Department and Professor

I have written many books providing comprehensive information for students regarding medical literature and research. These resources are freely accessible to ensure that everybody can afford them. I have also created educational videos and started a journal for the same. I believe that the upcoming advances in educational technologies should be complementary to the teacher's communication skills and their ability to engage effectively with students. As for the future of the department, I wish to see better interdisciplinary connections between institutes for specialized training. There should also be a finishing school to groom students to improve their communication and professional skills, and placement interviews should be set up for the same.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities.



Dr B.N. Purandare

Honorary Professor and Head of Department

Dr B.N. Purandare was an illustrious son of an illustrious father, Dr N.A. Purandare. A premier vaginal surgeon with excellent skills, he devised the abdominal cervicopexy operation for prolapse which revolutionized the conservative surgeries for prolapsed; and the surgery is named after him.

He pioneered research and was Director of Research, Dean and later, Professor Emeritus of the Nowrosjee Wadia Maternity Hospital, where he devised many of his surgeries and their modifications. He was also Dean of the Medical Faculty of Bombay University and an Honorary Fellow of the Royal College of Obstetricians and Gynecologists. He was Honorary advisor on maternal health to the Ministry of Health, Government of India.

Dr B.N. Purandare was an esteemed member of the Shantilal Shah Committee, which

eventually led to the MTP Act in India. The Government of India awarded him with the Padma Bhushan award in 1972. He was a Founder fellow of the Indian Academy of Sciences. Dr B.N. Purandare was the tenth President of FOGSI in 1967–1968 and the first Indian President of the FIGO from 1973 to 1976. There is an Arts college and high school in Lonavala on his name which shows his commitment to education in rural sector of India.

Indian Contribution to Obstetrics and Gynecology,
C.N. Purandare, M Patel, and Geetha Balsarkar

Dr V.N. Purandare

Honorary Professor and Head of Department

Dr Vithal Nilkanth Purandare was a great name in the history of Obstetrics and Gynecology in India, renowned for his outstanding contributions to medical education and surgery. Born on April 26 1925, in a traditional medical family, with his father and brother both being renowned Gynecologists, Dr Purandare made his own mark through sheer hard work and determination. He did his MBBS in 1948 and his MD in 1951 from Seth G.S. Medical College, Mumbai, before going to the United Kingdom to pursue his FRCS.

Dr Purandare started his glorious career at Nowrosjee Wadia Maternity Hospital and KEM Hospital in Mumbai, where he became the Head of the Department of Obstetrics and Gynecology in 1970. He was an active member of the Federation of Obstetric and Gynecological Societies of India (FOGSI) and became President in 1981. His pioneering work involved the vaginoabdominal hysterectomy and the refined high cerclage operation. Dr Purandare was also a consultant with the WHO for research in maternal and child health. He died in 2013, leaving behind an immense legacy that continues to shape gynecological practices in India and across the globe.

The Journal of Obstetrics and Gynecology of India (July–August 2013) 63(4):216–217,

Indian Contribution to Obstetrics and Gynecology, Purandare C.N., Patel M.A., Balsarkar G.D.

Dr Vinita Salvi

Professor

Dr Salvi is a well-known Professor of Obstetrics and Gynecology. Born to Medico parents, she thought of Parel as her home as her father was on the GSMC Anatomy faculty. She was a great sports person and an impressive debater, orator, and writer. As part of the Platinum Jubilee celebrations, her presentation and involvement during the time remain fresh in our memories.

GOSUMAG Magazine

Dr Shirish Sheth
Honorary Professor

I worked extensively in labor wards until I became the Assistant Honorary at KEM where I taught MD classes. I started my practice in 1964 as teaching became my passion, and became a full Honorary after 19 years in 1983. I climbed the ladder in the Bombay Obstetric Society and became President in 1988. Nationally, I lectured and was very active in FOGSI (The Federation of Obstetric and Gynecological Societies of India) and became its President in 1991. I have also been a member of the Rotary since 1968, engaging in various social activities, including organizing camps for laparoscopic sterilization. My drive comes from the desire to give back to society and my colleagues, who motivate me to share my knowledge to benefit patients.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities.

https://www.youtube.com/watch?v=dAF-CQ9OmHc

Department of Occupational Therapy

Dr Jayashree Kale
Professor and Head of Department

"Occupational Therapy", it's much more than the word connotes. This unique profession has made its way to India in 1950 and since then, it has proliferated in all directions. As an OT-ist, it is important that you explore, expand, and focus. A combination of skills is needed in this profession. I did my Masters in Neurosciences and along with it, I have worked in Cardiac Rehabilitation at CVTC. Gradually, Hemophilia came my way, wherein I had started working with patients way back in the 90s and eventually, OT intervention reached many Hemophiliacs in India and across the sea. It was an honor to receive the WHF Musculoskeletal and Bayers International award. It helped me spread the message about what an OT-ist could do in a growing country with limited sources. It was a written project by me to spread Hemophilia intervention at every doorstep, and so I went to remote places to train doctors, therapists, and parents, etc.

It is very important to have a multi-disciplinary approach as it gives a holistic view towards the patient. The role of each member should be understood, respected, and accepted and work must be done as a unit. It helps appreciate growth and changing roles of all professionals involved in healthcare.

GOSUMAG Magazine

Dr Kamala Nimbkar
Founder

Dr Kamala Nimbkar was the pioneering professional in Occupational Therapy in India, whose role was instrumental in bringing the profession to India and establishing its shape. Hailing from an educational background family, she went on to study occupational therapy at the Philadelphia School of Occupational Therapy, USA. Upon her return to India, she co-founded the first occupational therapy school at King Edward Memorial (KEM) Hospital in Mumbai, in 1950. There, she created a sound curriculum incorporating medical understanding with therapeutic practices, with an emphasis on holistic rehabilitation.

Kamala's style of occupational therapy focused not just on physical recovery but also on mental and emotional health. She was a proponent of a patient-centered philosophy that focused on reintegration into society. Her promotion of occupational therapy resulted in its acceptance in the Indian healthcare system, making it a part of medical education and practice. Kamala also worked on rural development and social work in Maharashtra throughout her life, advocating for education and community health. Kamala Nimbkar died in 2000, but her legacy lives on in inspiring and influencing occupational therapists in India, making her one of the country's most important figures in healthcare evolution.

(http://www.laskerfoundation.org/awards/show/historical-awards/)

Department of Ophthalmology

Dr S.D. Adrianwala
Honorary Professor and Head of Department

Dr S.D. Adrianwala was, until the 20th March 1972, the Assistant Honorary Ophthalmologist at our institution, when he was appointed Honorary Ophthalmologist at the T.N.M.C. & the Nair Hospital, Bombay. He joined our college in 1951, and during his college days, was an all-rounder. He took part in dramatics and was an excellent elocutionist and has won many prizes for the same, including the coveted 'Koppikar Elocution Trophy'. He was a scholar and has bagged a number of prizes and scholarships. He was appointed Assistant Honorary in May 1964. He was an excellent teacher and very witty. He was the best speaker at the Staff Debate held in Feb, 1972. TNMC's gain has been our loss. We wish him all the very best.

By Dr Rumi Jehangir

Dr S.N. Cooper

Honorary Professor

Dr Cooper joined on New Year's Day in 1941 as an Honorary Assistant Ophthalmic Surgeon and in a short span of two years became the Chief of the Unit. He held this appointment until the time he retired.

He was one of the best teachers KEM has had, and the interest which he created in the subject of Ophthalmology was responsible for making several individuals take it as a postgraduate career. Dr Cooper was one of the most brilliant research workers and was awarded the "Adenwalla Oration Gold Medal" for his paper on "Immunology of Lens Proteins", this medal being the highest award for Ophthalmic research in India.

Dr Cooper's behavior towards his residents and postgraduates was so endearing that on the day of his retirement it was a most touching and heartbreaking sight to see several people who had worked under him bitterly sobbing at the thought of being deprived of the association with so lovable a man.

Golden Jubilee Souvenir,
Dr S.N. COOPER, An Appreciation, S. D. ADRIANWALA

Dr B.T. Maskati

Honorary Professor and Head of Department

Dr B.T. Maskati's life is a truly inspirational "rags-to-riches" story. Orphaned at an early age, he completed his schooling in Surat and later Bombay, with the aid of scholarships, often studying in the light of street lamps and many a time, living on one meal a day. He completed his medical education (MBBS) again with free-ships, from GS Medical College and KEM Hospital, Bombay, in 1950. He then took up posts in various departments, besides Ophthalmology, including, General Surgery, ENT and even Dental, to become a truly "complete surgeon", before passing MS (Ophth) at the first attempt, in 1955.

In 1958, he was selected as Honorary Assistant Ophthalmic Surgeon at GSMC-KEMH. From 1958 to 1983, he served as Honorary Ophthalmic Surgeon and later Head, Department of Ophthalmology, at KEM Hospital and GS Medical College. During his tenure at KEMH, the KEM Ophthalmic Department became a referral center for patients from all corners of the country. It was one of the first Departments in the country to acquire a xenon arc photo coagulator, in the early seventies, thus treating Eales' disease, retinoblastomas, and diabetic and hypertensive retinopathies in non-affording patients from far and near. Day care surgery had already started at KEM long before it became the norm all over the country. Dr Maskati was trained under

international giants in Ophthalmology. He was a true 'all-rounder' eye surgeon. Along with the usual cataract camps, which he started in 1962, Dr Maskati pioneered the concept of "squint correction" camps in 1968.

Dr Maskati had a passion for teaching. He was awarded a number of Oration Gold Medals at National and International conferences and he has published over a hundred papers. He represented India at European Congresses and International Congresses.

Dr Maskati contributed Chapters in "Diagnosis & Management of Medical Emergencies" and API Text Book of Medicine. He held important posts in the All India Ophthalmologic Society and received lifetime achievement awards from All India Ophthalmologic Society and Maharashtra Ophthalmological Society. He was Founder Member and Examiner of the National Board of Examination (MNAMS), now called DNB. He was awarded "Outstanding Teachers Award" by National Board of Examination, New Delhi and by his alma mater, GS Medical College and KEM Hospital. He worked as an expert in Ophthalmology at the Indian Council of Medical Research for 20 years.

He was Chairman for Prevention & Control of Blindness, National Association for the Blind from 1989 to 1992 and District Governor of the Rotary International District 314 from 1978–1979. He was awarded Vocational Excellence Awards by several Rotary clubs in the district, including his home club, Rotary Club of Bombay North.

(https://www.maskatieyeclinic.com/about.html)

Department of Orthopaedics

Dr Kandarp T. Dholakia

Honorary Professor

Dr Kandarp T. Dholakia was the first Orthopedic Surgeon in India who made a significant contribution towards the growth of Orthopedic Surgery in India. A native of Rajkot, Gujarat, he underwent medical studies at Seth G.S. Medical College, Mumbai, completing his MBBS (1943) and MS (1945) before being awarded an Indian Government scholarship to pursue studies in England. He acquired MCh Orthopedics (Liverpool) and FRCS (Edinburgh) in 1948.

On return to India, he became associated with KEM Hospital in 1952 and initiated joint

replacement and scoliosis surgery. He was an ardent mentor, guiding the careers of several prominent orthopedic surgeons. He subsequently became associated with Bombay Hospital where he was practicing until his death.

Dr Dholakia was honored with many awards, such as the Padma Shri (1973), Dhanwantari Award (1982), and Orthopedic Surgeon of the Millennium Award. He was the president of elite associations like SICOT and IOA, and he made a valuable contribution to medical literature.

He was renowned for his commanding personality and strictness, and he was a great lover of music, cricket, traveling, and photography. Dr Dholakia died on June 17, 2004, leaving behind an illustrious legacy in Indian Orthopaedics.

(https://www.japi.org/w2e4d4/dr-kt-dholakia-pioneer-of-joint-replacement-surgery-in-india)

Suggested Reading: Dr A.V. Bavdekar, A Patient Is A Living Text Book ! – 1. In, Untold Stories of Doctors and Patients. Editors. M V Kamath and Rekha Karmarkar. UBS Publishers, 1993.

Dr Laxmikant N Vora

Honorary Professor

Dr Vora joined as a student at KEM in 1949 and was appointed as Orthopedic Registrar in 1957. He also studied abroad and passed the FRCS in England in 1957 and completed an MCH course in Orthopedics in 1959. He has held positions as an Orthopedic Registrar and Assistant Honorary at various hospitals like KEM, St. George, and JJ Hospital. He was promoted to full-time Honorary and Professor of Orthopedic Surgery at KEM hospital in 1969 and retired in 1989 as the head of the unit. Dr Vora has made significant academic contributions and helped in research and development in the field of Orthopedics through his publications. He has held numerous positions in academic institutions and societies since 1995 and has been a member of the College of Physicians and Surgeons and President of CPS, among other things.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities.

Department of Pediatrics

Dr Maneck Bhagat

It was 7:30 am sharp in the Pediatrics Ward 2 at the King Edward Memorial (KEM) Hospital, Bombay. In came Dr Maneck Bhagat (pictured), dressed informally in his plain shirt and pants. First stop: the ward toilets. Were they scrubbed clean? If not, there was hell to pay. The orderlies had to appear pronto and scour those bathrooms spotless. Then, one by one, the nurses brought in the newly admitted children for Bhagat to examine with his pediatric residents and medical students gathered around. "The nurses had to be meticulous with the kids' cleanliness. The nails had to be scrubbed clean," said one of Bhagat's former residents, as life-threatening gastrointestinal infections were rampant among the vastly overcrowded slum communities from which the patients in his KEM ward came.

Bhagat was the third pediatrician in Bombay. The art of the thorough, meticulous clinical exam taught by him prepared his residents, from the 1940s through the 1970s, to confidently diagnose and treat ill children throughout their professional lives. As heads of the inner city pediatric units and as researchers in pediatrics now in the United States, many of his former residents have built professional lives that are a living legacy to his excellence, and worthy of celebration in the 100th year of his birth.

Each morning's rounds began with Bhagat asking his residents to tell him the child's story, rather than lab results, including a "thorough history of the child's growth and development, a very careful exam of all systems with an analysis of the findings, and a sound differential diagnosis," explained Inamdar. He "took great pains in demonstrating all the clinical signs," said Dr Mahrukh Joshi, one of his assistant attendants, who went on to create an intensive care unit in Bombay which treated premature low weight babies from all over India. "Besides," she added, "there was little choice: KEM was an overcrowded urban hospital and had few funds for labs and equipment."

Born in 1917, Bhagat grew up in a middle-class family. He went to Seth G.S. Medical College in Bombay and later, earned the highest British honors in both medicine and music: Fellow of the Royal College of Physicians, London, and Fellow of Trinity College, London, in Music Theory and Piano Performance. His training and the London advanced exams were completed in India by the 1940s, as described by Dr Jissa Moos in Bhagat's official Royal College obituary. However, in 1969, Bhagat went to London for his induction as a Fellow of the Royal College of Physicians. Soon after he died, the Maneck Bhagat Gold Medal for the MD Pediatrics examination of Bombay University, and the Maneck Bhagat Honorary Oration were established by his students in his honor.

Thirty-five years after his death, these honors are still being bestowed.

By Dr Patricia Steckler Bhagat,

Parsiana: 07-Mar-2017, Pioneering pediatrician: A tribute to Dr Maneck Bhagat, medical man, mentor and musician, on his 100th birth anniversary.

Dr Mahrukh Joshi
Honorary Professor

I joined the first batch of pediatrics students at KEM when Dr P.E. Bharucha was made the first Honorary Pediatrician. During my time here as an MBBS student, we went through rigorous tests and practicals, and despite the initially horrifying experiences with dissection and washing dead bodies, we ended up having a very enjoyable and enriching time. I was a Houseman with Dr Bharucha who was an excellent mentor. I was also an honorary under Dr Bhagat, he was a strict disciplinarian and an excellent clinician.

Over the years, pediatrics and care systems have greatly evolved with increased involvement in childcare from fathers and increased awareness of parents, but challenges like self-medication and misuse of antibiotics remain. My message to current students and practitioners in the field would be to enter the medical profession with a genuine desire to serve patients. Medical ethics, integrity, and patience must be upheld to maintain respect and trust.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities.

Dr Madhukar Shah
Honorary Professor and Head of Pediatrics

I studied in Nair Hospital and worked as a tutor for two years before joining KEM. I joined KEM in 1964 as an Assistant Honorary in Dr Bharucha's unit and was promoted to Honorary in 1975, leading the unit until my retirement in 1990. It has been a very pleasant and fruitful experience and these were some of the best years of my life. I established the Pediatric Diabetes Clinic and the Pediatric Chest Clinic at KEM. As the Convener and Chairperson of Indian Academy of Pediatrics (IAP), I organized a successful and significant conference in Bombay on reducing mortality from respiratory disorders in children without any pharmaceutical funding.

Some of my hobbies include literature and music—I used to perform during the unit celebration, one of my favorites songs is from the movie *Doctor* called *Chale Pawan Ki Chaal Jag Mein.* My message to current medical students would be to embrace the humanities and dedicate your life to studying medicine in depth to become well-rounded and compassionate doctors.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities.

Department of Pediatrics Surgery

Dr Snehalata Deshmukh

Professor and Head of Department

I had decided right from my childhood that I would become a surgeon, like my father, who was also a graduate of GSMC. I went to Tata Hospital and met the Superintendent, the Dean & the Chief Surgeon. The chief surgeon said that he couldn't give me admission because I was a lady and they had no living quarters for ladies. I finally did take up Surgery, but I felt that from then on that I must encourage women to take up surgery. I felt that I must encourage women to take up these challenges rather than getting depressed and frustrated by them.

I remember several teachers, namely Dr Bhalerao, Dr Dholakia, Professor C.K. Deshpande, and many other others who have made me what I am today. GSMC not only gives you knowledge but also wisdom. Total personality development is very important. As a doctor, you must develop the quality of developing a rapport with your patients; communication skills are a must.

What GSMC does is that it develops your brain, your heart, and your limbs. It makes you a complete human being. When I became the Vice Chancellor and entered GSMC, my heart was filled with pleasure. It has remained the same all these years, without a single grey hair, it has actually turned lush green. It is an institution where we were made. Our relationship with it is like an umbilical cord, we have got all the nutrition from it. Now, we have severed off the cord, but we continue to grow.

Platinum Jubilee Souvenir,
Interview with Dr Snehalata Deshmukh,
(Taken by: Aakansha Prasad and Prachi Chitre)

Department of Pathology

Dr Bhuvaneshwari Kandalkar

Professor and Head of Department

I have worked in three institutions: Nair, Sion, and KEM with excellent heads of department, like Dr S.R. Prabhu at Nair, Dr P.K. Murti, who was my guide (I registered with her in August 1976, Department of Microbiology), and Dr Ranadive at Sion. I was inspired by these three very dedicated women working in Pathology. We instituted an MD in Transfusion that made Blood Banking a separate wing from Pathology, so that the department could grow as a separate wing. We started nine pathology fellowships under the guidance and encouragement of Dr Oak, and I have also conducted a lot of CMEs (Continuing Medical Education) and revived autopsy workshops.

I have grown and become confident working at KEM, so when I was offered a new job to set up the Pathology Department at the Children's Hospital, I knew exactly what to do and how to do it from scratch. I had no hesitations or fear because I had the confidence from working here that *I could handle anything*—from purchasing to recruiting people, what sections to set up, which techniques to set up, how to budget, etc. I could manage it all.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities.

Dr Suman Kinare

Professor and Head of Department

Dr Suman Kinare (1930–2001) was a noted Indian Pathologist who contributed significantly to the growth of Cardiovascular and Pulmonary Pathology in India. Being Professor and Head of Pathology at Seth G.S. Medical College and KEM Hospital, Mumbai, she was responsible for creating a special cardiovascular pathology section. After obtaining an MD in Pathology, she was awarded a Rockefeller Fellowship and underwent training at UIC and Yale University with renowned mentors such as Dr Maurice Lev and Dr Averill Leibow. Despite the opportunities available in the United States, she returned to India and worked with Dr P.K. Sen, one of India's earliest cardiac surgeons.

A strong believer in autopsy-based research, she carefully documented cases from 1957 to the present, offering revolutionary data on heart and lung disease. Dedicated to teaching, her evening classes were extremely popular with students. Outside Pathology, she worked in Gastrointestinal, Renal, and Pediatric Pathology and facilitated the establishment of the National Plasma Fractionation Center. Strictly disciplined but kind-hearted, she was respected for her warm-hearted nature, fondness for literature, and worldliness. Dr Kinare's remarkable work continues to impact medical research and education even today, after her death in 2001.

A Talk by Dr Jaya Deshpande Some of Our Eminent Teachers

Department of Pharmacology and Therapeutics

Dr Sharadini Dahanukar

Professor and Head of Department

Good research comes from a dedicated and determined person working in a supportive environment. The Department of Pharmacology and Therapeutics at Seth G.S. Medical College and KEM Hospital provided such an environment in ample measure, both for experimental and clinical work. Besides training with Professors U.K. Sheth and R.S. Satoskar, Dr Dahanukar had the initiative to train with Vaidya Veni Madhav Shastri Joshi, an eminent Ayurveda teacher and physician from 1971 to 1989. She carved out her own niche and worked independently thereafter from 1989 to 2002.

When asked about her extra-curricular activities, Dr Dahanukar spoke of her interest in literature, gardening, Ayurveda, and cultural events.

Once when on a train ride with P.L. Deshpande, she was encouraged to write a book about trees as he noticed her vast knowledge about them, and she started writing in the Maharashtra Times. Combining her interest, literary ability and botanical and medical knowledge, she produced well-balanced pieces that were well-received. She has since written many books, including a philosophical discussion of her travels in the USA; *Fulwa*, a book about flowers and plants, and *Sage Saangati*, which is based on her experiences at the hospital. She also wrote in periodicals like *Kalanirnay*, on topics of public education, maintenance of health, and creating awareness about the use and misuse of drugs. She started taking formal training in Ayurveda from Vaidya Shastri in a "*guru-shishya parampara*" for ten years that allowed her to bring in an interdisciplinary approach to medicine.

From the Journal of Ayurveda and Integrative Medicine 2.4 (Oct 2011): 205-208
GOSUMAG Magazine

Dr Nirmala Rege

Professor and Head of Department

I take pride in saying that I am a product of the prestigious twin institutions—Seth G.S. Medical College and KEM Hospital—and feel privileged to have served them as a faculty member in Pharmacology & Therapeutics until my superannuation.

I didn't join medicine with a strong will to be a doctor. In fact, I was more inclined towards Occupational Therapy, but good marks and peer pressure led me to medicine. I never considered myself among the brightest students that KEM attracted, but I survived—and even

enjoyed—those challenging MBBS years. The credit goes entirely to my teachers, who were dedicated and deeply invested in shaping students like me, not only in knowledge but in the values needed to practice medicine.

After MBBS, I sought a postgraduate branch with opportunities in teaching, research, and administration, without direct clinical practice. Pathology was my first choice, but I missed the cut. Luckily, a conversation with my aunt in the Pharmacology Department changed my course. Though I hadn't truly appreciated the subject during my second MBBS, I trusted her advice—and have never regretted that decision.

My three years in Pharmacology were filled with hard work, but they were equally rewarding, engaging, and joyful. I absorbed the ethos of my alma mater—pursuit of knowledge, excellence, and tradition. I was fortunate to work closely with teachers from various departments, observing their commitment to students, juniors, and patients. They lived the GSMC-KEMH motto: "Not for Self but for Others." My research journey began under the guidance of Dr Sharadini Dahanukar, Dr S.M. Karandikar, and Dr Ravi Bapat. With strong mentorship, I learned the nuances of research—from brainstorming to publication. Later, I passed on these skills to my juniors, helping build a department known for its research excellence.

With Dr Urmila Thatte, I helped my mentor Dr Sharadini Dahanukar establish the Ayurveda Research Center (ARC)—a pioneering initiative in a modern medical college. We promoted evidence-based validation of Ayurvedic claims, supported patient care through OPDs and IPDs, evaluated marketed products for contamination, and collaborated nationally. This initiative eventually merged into the Multidisciplinary Research Unit (MRU), thanks to the proposal I submitted to the Department of Health Research during the tenure of the then Dean, Dr Sanjay Oak, and received sanction and established during tenures of Drs Shubhangi Parkar and Avinash Supe, respectively.

Another passion of mine was Health Professions Education (HPE), inspired by Dr Joglekar from Physiology. I contributed as MEU Co-coordinator, FAIMER Co-Director, and MCI Nodal Center Convener. From humble beginnings, our MEU earned recognition from MUHS, MCI, and FAIMER USA, while nurturing the next generation of educators.

As Head of Department, I focused on team-building—mentoring young faculty in teaching, research, and leadership. By the time I retired, the department had grown into a cohesive, dynamic unit, achieving academic and research excellence. I could achieve this for the department because the institution offered me opportunities to work on different trusts and committees, where I learned management, discipline, transparency, and networking. I am proud of various activities I participated in because of the position on these bodies that ultimately benefitted students, faculty, patients, and the institution itself. I also pursued my own interests like gardening and promoting activities of Marathi Vangmay Mandal (MVM). In memory of my mentor Dr Dahanukar, I organized annual programmes on Teachers' Day for 10 years that were well-received and cherished.

My message to the readers is, do whatever you undertake wholeheartedly. Take decisions wisely so that you never regret them. Outcomes may vary, but the sincerity behind a decision is never wasted.

By Dr Nirmala Rege

Dr Rajaninath S. Satoskar

Professor and Head of Department

Dr Rajaninath Satoskar was drawn to Pharmacology because of his inherent nature and passion for research. This science was very much underdeveloped in India at the time. As he was academically inclined with an interest in teaching and research, instead of examining patients and prescribing drugs to them, he preferred to examine the drugs themselves. He started to study and investigate these drugs to teach Pharmacology. Dr Satoskar later entered the field of Nuclear Medicine.

In 1955, Dr Satoskar went to Sheffield, England to pursue a PhD in Pharmacology. In 1956, the first nuclear reactor 'Apsara' at Bhabha Atomic Research Center at Chembur was ready for use. As a result, production of radioisotopes began, and this marked the beginning of 'Nuclear Medicine'. Realizing that Dr Satoskar was studying this new science, new rooms were created here in KEM, and the right equipment was commissioned to run the radio-isotope laboratory.

In 1978–79, he was elected Chairman of the Society of Nuclear Medicine in India. Dr R.S. Satoskar was the editor of Journal of Post Graduate Medicine from 1979 to 1984. Given the importance and scope of his work, he was elected President of the Indian Pharmacological Society for the year 1985–86. The 22nd Edition of Textbook of Pharmacology by Drs R.S. Satoskar and S.D. Bhandarkar was published in 2011.

By Malini Nadkarni
Former Professor and Head of Department, Radiology

Dr Uttamchand Khimchand Sheth

Former Professor and Head of Department

Dr Uttamchand Khimchand Sheth (1920–2000) was an Indian Clinical Pharmacologist and erstwhile Director of King Edward Memorial Hospital and Seth Gordhandas Sunderdas Medical College. He was born on 29th October 1920 in Mumbai, and played a pivotal role in developing pharmacological research and medical education in India. He, along with Bimal Kumar Bachhawat and Nilima Arun Kshirsagar, contributed to the establishment of the academic structure for teaching Pharmacology.

He wrote *Selected Topics in Experimental Pharmacology* and contributed significantly to

research in Clinical Pharmacology. He was awarded the Shanti Swarup Bhatnagar Prize (1967), Amrut Mody Award (1971), and B.C. Roy Award (1978), India's highest medical award.

Dr Sheth was a National Academy of Medical Sciences fellow elected to the same and also a pioneer in shaping pharmacological education and research in India. He died on 29th July 2000 at the age of 79, leaving a legacy in medical science.

(https://en.wikipedia.org/wiki/Uttamchand_K._Sheth)

Department of Physiology

Dr Batliwala

Professor

Dr K.C. Batliwala started working as a part-time demonstrator in physiology at the college from 1930. By 1940, he gave up his general practice and pursued postgraduate studies, obtaining an MSc and PhD. During this time, he worked in all the departments, thereby gaining experience which was to stand in good stead in the years to come. He was appointed Professor of Physiology in 1946, and not only continued his teaching but also trained every demonstrator in the department due to lack of staff. After returning from his studies in Cambridge, he drew up plans for the setting up of instruments for experiments and its teaching and did much to bring our physiology curriculum up to date.

GOSUMAG Magazine,
Dr K.C. Batliwala, An Appreciation, By Nalini Menezes and Suresh Moolgavkar

Dr O.P. Bhatnagar

Professor

Dr O.P. Bhatnagar graduated from S.N. Medical College, Agra, and before joining our institution, was teaching Physiology at the Maulana Azad Medical College, New Delhi. Prior to this, he served in the army. He joined our institution on 23rd January 1967, as Professor of Physiology. He is extremely gentle by nature and simply loves to teach. His nature and sense of humor made him very popular amongst both staff and students. His students consider him a very considerate examiner. His keen interest in sports added to his popularity, and we all remember his performance in cricket as well as his enthusiasm for athletics.

Dr O.P. Bhatnagar has a research-oriented mind and his works in Cellular Biology have won him many laurels. He was associated with Dr Inderjeet Singh, one of the leading Physiologists in the country, in doing research on 'Muscle Physiology'. He left our institution on the 28th of September 1971, to take over as Professor-Director of Physiology at the J.I.P.M.E.R., Pondicherry. His all-round interest in his students

is going to keep him green in our memories for a long time to come. We wish him all the best.

GOSUMAG Magazine,
By Dr I.K. Ramchandani

Dr Anjali Joshi
Professor and Head of Department

When I joined KEM, the environment was quite friendly. The Heads of Department were practical and approachable. Although, there were limited teachers, there were also less students and they managed very well. My own experiences in teaching over time led to the realization of the importance of simplifying complex topics for students. I would encourage participatory learning through seminars and quizzes as the main focus was on improving results and making the education system more efficient and it was my aim to ensure better performance and understanding for every student.

I worked to fulfill the requirements for the Medical Council of India (MCI) recognition certificate for the institution. This included upgrading the labs, ensuring adequate resources, and maintaining proper documentation and eventually, we achieved recognition.

My advice to faculty would be to continue to update their teaching methods as per the changing needs of students. For students, I recommend focusing on understanding the basic concepts thoroughly through traditional and digital resources of learning. The department has evolved significantly over the years and there have been many positive changes in teaching and administrative processes. It's heartening to see improvements and the continued legacy of excellence.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities.

Dr S.J. Kashalikar
Professor

Dr Kashalikar was a renowned writer in Marathi and wrote his first book in 1977 titled "Vaidyakiya Vyavsay Vyavhar Aani Dhyey". This was followed by nine books on a variety of topics like his experiences abroad, popular medicine, philosophy, and even medical science fiction! He believed that teaching, being an academic endeavour, lent rationality to his writing and contributed towards organizing his artistic and philosophical ideas with an objective mind.

GOSUMAG Magazine,
Dr Jekyll and Mr. Hyde

Department of Plastic Surgery

See under History of Department of Plastic Surgery in Part III Potpourri.

Department of Psychiatry

Dr Shubhangi Parkar

My father encouraged me to pursue a medical career after an incident of cardiac arrest in the family and although my interests wavered between teaching and medicine, I chose psychiatry. To aspiring psychiatrists, I would urge you to engage with psychiatry in a holistic manner as there are many opportunities to integrate different lifestyle aspects like music, drama, and movies etc that will enrich your work. Personally, courses in Bhagavad Gita aided me greatly in overcoming losses and maintaining professional resilience.

I wanted to make an impact in psychiatry and medical education so when an opportunity to work as a lecturer at GS Medical College opened up, I joined and it ultimately shaped my career. Some of the projects I worked on were geriatric services, suicide counseling clinic, addiction, schizophrenia, and community outreach programs. One of the significant outreach programs I started was the Urban Mental Health Program, based on my experience of the Mumbai riots.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities

Dr N.S. Vahia

In 1933, after passing the Inter-Science examination from Baroda, Dr Vahia joined Seth G.S. Medical College, graduated in 1938 and qualified in General Medicine in 1942. He set up the Department of Psychiatry in June 1947 and led it all the way till he retired from KEM Hospital as Professor and Head of the department of Psychiatry in December 1973.

He was perturbed when he saw the many patients in the out-patient department and in the wards who used to have physical symptoms but no demonstrable physical signs. It was presumed that these patients had exhaustion of nerves and minds and were treated with health tonics. The then Dean, Dr Koppikar, advised him to go and get training in the field of Psychiatry. He worked at the Psychiatric Institute in New York for two years.

In 1947, he was appointed as an Honorary Psychiatrist. Then Dean, Dr Dhayagude, supported him despite a lot of resistance from physicians and surgeons stating that those patients would disturb other general patients. His OPD was set up far away from the rest of the OPDs. The only treatments available were psychotherapy and Carbon Dioxide aberration therapy for neurosis, and ECT and Insulin coma for psychosis. Initially, two patients were allowed to be admitted in the tower beds of the medical wards.

He was awarded the Fellowship of American Psychiatric Association and was honored as a founder fellow of Royal College of Psychiatrists. He was elected as President of the Indian Psychiatrist Society and President of Neurological Society of India.

GOSUMAG Magazine

Department of Pulmonary Medicine & Environmental Pollution Research Center (E.P.R.C)

Dr S.D. Store

Honorary Professor

Dr Store was a tough task master, but his every action was crisp and filled with meaning. One could learn a lot from him during his hour of outpatient clinics, ward rounds or even from remarks he would make during his surprise rounds. He was very disciplined and vigilant regarding patient care and documentation of medical records.

Among his students, Pravina Shah speaks highly of him and regards him as more than a teacher, as a friend and a guide in her personal life. He had a love for movies, art, music, and traditional culture. A visionary, he exemplified how art and science could blend, he was humorous and witty but above all, a gentle human being. He left behind a disciplined Department of Chest Medicine, and his memories and blessings will go a long way in taking it to towering heights from its humble beginnings, with high tech advances in the future.

GOSUMAG Magazine; Memoir, Inspiration to Action, My Journey, 2023,
By Dr Pravina Shah

Department of Radiology

Dr Malini Nadkarni

Professor and Head of Department

I was very lucky to have gotten into Seth G.S. Medical College. We had excellent guidance from teachers who taught us to think critically and beyond the simple answers to questions. Initially, I was unsure about continuing Surgery, but my father's work as a Radiologist in KEM greatly influenced my journey.

Practicing radiology was challenging back then as it was the era before CT, MRI, and ultrasound, and even radiography required a lot of effort in order to get good X-rays. Over the years, we have seen advances in imaging techniques and fields like Interventional Radiology, thanks to people like Dr Dara Kooka. X-ray technicians are very important to our field, and I would spend time

every day training new technicians. Eventually, I created a well-recognized course for radiography technicians at the Karwar Institute of Career Education with contributions from multiple Departments and Heads aimed at giving students hands-on experience and theoretical knowledge which would increase their employability.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities.

Dr Ravi Ramakantan

Professor and Head of Department

With over 33 years of experience, Dr Ramakantan was also Professor and Head of Department, Radiology, KEM Hospital, and Visiting Professor, Brigham's and Women's Hospital, Harvard Medical School. He was the First International Visiting Scholar, Radiological Society of North America and the Founding President of the Indian Society of Neuroradiology. He has received the Best Medical Teacher Award, University of Mumbai and Karmayogi Award, Bombay Medical Aid Foundation. He has published more than 60 research papers in Indexed Journals and has over 20 orations to his credit. (*http://kantanclan.net*)

Department of Urology

Dr Dev Pardanani

Professor and Head of Department

Dr Dev Pardanani was born on 9th August 1933 in Karachi, Sind. He did his initial schooling in Karachi (pre-partition) and Mumbai and took admission for MBBS in Seth G.S. Medical College and KEM Hospital, Parel, Mumbai. He completed his MS in 1962 and after a six-month posting in Plastic Surgery, he joined the Department of Surgery under Dr C.S. Worah and Dr D.K. Karanjawala. This surgical unit was unofficially the Urology Unit in those days.

Dr Pardanani always had a very keen interest in Renal Transplant Surgery and carried out the first three Cadaver Transplants under the guidance of Dr P.K. Sen between 1965–1968. The results were published and presented at the ASI Conference in 1968. He valued logic and intuition when it came to making decisions, and attributes this training to Dr Sen's mentorship. Dr Sen's encouragement also encouraged him to start the kidney transplant program, a key achievement of his career. Dr Pardanani eventually established the first official Department of Urology in KEM Hospital that produced the first MCh Urology Student from the western region of India. He served as Professor and Head of Department of Urology from 1980 to 1991 and today, his students are a galaxy of highly successful urologists in India and abroad.

Apart from being a zealous academician, he also had keen interest in Andrology and established the first Andrology Department in India in mid-1980s. This department was fully equipped with Doppler, Nocturnal Penile Tumescence Monitor, state-of-art Operating Microscope, and a full-fledged lab for semen analysis and testicular biopsies, etc. He also started a Department of Sexual Medicine.

He has over 60 scientific publications to his credit covering the areas of Urology, Andrology, Renal Transplant, Tropical Diseases, and Anaerobic Bacterial Infections, etc. He coauthored two books on The history of Urology at the University of Michigan, USA, with Drs John Konnak, David Bloom, and others. In 2017, he authored a book on the Evolution of Urology at KEM Hospital and GS Medical—My Memoirs, that was published by USI on the occasion of the Golden Jubilee Conference of the Urological Society of India in Mumbai. Dr Pardanani is also fond of Art, Language Studies, and Indian Classical Music and is currently working on translating Sindhi poetry and songs in simple language to make it accessible to more people.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities.

Alumni

Dr Madhav R. Nanasaheb Chaudhary

Dr Chaudhary delivering a pravachan on the Gita

(Much of the material noted below is from his interview recorded by the Humanities Division of our institutions)

Dr Chaudhary studied at Seth G.S. Medical College between 1947 and 1958. His colleagues at the college included Drs S.N. Bhagwati, T.P. Kulkarni, M.V. Divekar, M.R. Narvekar, Sharadini Gajendragadkar (later Jagirdar, Bombay Hospital), Malini Deshmukh (daughter of Dr Jadhav, Assistant Dean), and V.R. Mehta (Skin Specialist, Sion Hospital). Only 8 of the 80 students were girls and 6 of them became general practitioners. All the rest specialized. but Dr Maskati failed the first MBBS, and was a casual in the hostel lobby. Dr Maskati was elected Sports Secretary and gained recognition for the table tennis team in the Metropolitan Table Tennis Association. Dr Chaudhary played against Mr. R.S. Gentle (Hockey Olympic Gold Medalist).

All the Honoraries were fond of teaching and were hardworking, sincere and inspiring. Dr Chaudhary was awarded Shirwalkar 1 and 2 and the K.N. Bahadurji scholarships. Dr N.H. Keswani came to Seth G.S. Medical College after partition, having emigrated from Pakistan.

Another such immigrant was Dr R.N. Chugh who rose to be a personal physician to Prime Ministers and went with Mr. Lal Bahadur Shastri to Tashkent. ‘In 1977, two witnesses, his servant Ram Nath and personal physician, Dr R.N. Chugh, who accompanied Shastri

to Tashkent, were scheduled to appear in front of the parliamentary body, but both died under mysterious circumstances… Dr Chugh and his family were on his way to meet the parliamentary body but were hit by a truck. The accident took the life of Dr Chugh, his wife, and two sons' (*The Guardian* 31 December 2023).

Dr Chaudhary obtained his FRCS (London) and FRCS (Edinburgh) and met Dr Sen in London. Soon after passing his FRCS final examination, Dr Chaudhary went to meet Vijaylakshmi Pandit, the High Commissioner. In the visitor's list he saw the name and address of Dr P.K. Sen, his teacher and tennis partner at Seth G.S. Medical College, in London. He went to meet the surprised Dr Sen and his wife Rosemarie, who invited him to dinner. Dr Sen told him of his teacher in America, Professor Ravdin, the American Cardiac Surgeon who was in London then. He offered to recommend Dr Chaudhary to him. After training with Dr Ravdin, Dr Chaudhary could join Dr Sen's Cardiac Surgery team at KEM. Dr Chaudhary had breakfast at Strand Hotel with Dr Ravdin. Dr Ravdin said, 'When P.K. says you are his student and you are good, get your visa and come to the US.' Unfortunately, this did not materialize.

He settled in Akola as a district Surgeon when Dr Baliga did not select him as an Assistant Honorary, who had instead advised him to go to a relatively remote place to offer his services there. His father, also a physician trained in Bombay, had set up a small hospital with all departments. As he put it, he was a general practitioner in surgery, doing specialist operations in Akola.

He started the first private burns unit in India, inaugurated by Mr. Vijay Merchant, President of the Burns Association in Mumbai. He collected 300 patients with hydatid disease, and this experience enabled him to discuss surgery on this disease present in various organs in prestigious institutions such as Mayo Clinic, Cleveland Clinic and Johns Hopkins Hospital. He was elected District Governor by the Rotary Club.

He was married at the age of 25 whilst doing his registrar's post at KEM. Devyani, his Matriculate wife, was 18 years old from Gujarat but her grandparents were from Karnataka. Tri-state (Central Provinces & Berar, Gujarat and Karnataka) culture regarding food, celebrations, language, and traditions prevailed in their home. Devyani graduated and qualified as a Hospital Management Consultant. They celebrated their 70th wedding anniversary recently. He was fond of dramatics. During the day, he was in the operation theaters and at night, acting on theater stage.

His son, Milind, also a GOSUMEC, is an orthopedic surgeon—India's first expert on the Ilizarov technique for lengthening or straightening legs. His daughter, Ishani (seen in the KEM recording), is the 4th generation GOSUMEC in the family. His daughter-in-law, Poonam, nee Ranade, is also a GOSUMEC.

Retired at the age of 80 years, he is now helping in the management of non-communicative diseases and life-style diseases like obesity. He also talks on Gita – Gnaneshwari and other spiritual matters. He is now the senior most Rotarian and past District Governor. Seth G.S.

Medical College has given ten Governors of the Rotary Club. He survived two attacks of COVID. He has written the Foreword for Dr S.D. Bapat's autobiography.

By Sunil Pandya

Dr Hemant Morparia

Dr Morparia is a practicing radiologist and a famous cartoonist. He made cartoons depicting human nature, human mind, and preferred political themes. In his interview published in the magazine, Dr Morparia speaks at depth about his creative outlets and the importance of nurturing your extra-curriculars:

When asked how he cultivated his various hobbies, he says, "Medicine is not creative. So, if you are a creative person and you're in medicine, you need an outlet. All artists are sufferers, my suffering was KEM (*he laughs*). I continued cultivating my hobbies because of the strong drive, and once you realize its value, you let it hypertrophy. To persist in a hobby, you need to enjoy it; it is not necessary to be very good at it. I feel you should lead a holistic life."

"Creativity is about having an opinion, which you want to convey to others. It is about exploration and play; a form of invention." When asked for his advice to students, he says, "Life is not one-dimensional, keep on doing things. Don't confuse your career with your life. Have a holistic approach, otherwise you'll become very boring. Don't live a dull life, make it interesting and work for it, don't be passive. If you're good, you'll entertain others and yourself. If you're not good, you'll entertain yourself! Don't expect others to like your work. The aim is to explore what you're capable of, and that is something only you can do."

GOSUMAG Magazine

Dr R.B. Patil

After completing his final MBBS from the Seth G.S. Medical College, Dr R.B. Patil worked at KEM Hospital in different Surgical Departments and as a Registrar in General Surgery for three years. He joined the Hubli Co-operative Hospital as Chief Medical Officer after his return from the UK. In view of his strenuous services, the following developments have been made in the Hubli Co-operative Hospital:

a. Increase in Indoor patient strength from 10 to 250;
b. Increase in the number of doctors and staff working at the hospital; and
c. Increase in Major Surgical Operation from 80 to 100 previously, to 2,500 to 3,000.

Dr Patil has conducted 22,000 Surgical Operations during the last 12 years, with another 3000 operations having been done under his guidance. Dr Patil's skill as a Surgeon, his

kind treatment of patients, and his bard-working qualities coupled with his compassion and service mindedness have made him an asset for the entire state, particularly to the people of North Mysore.

Golden Jubilee Souvenir,
Padma-Shri, Dr R.B. PATIL

Lt. Col. B.L. Raina

Dr B.L. Raina graduated in Medicine and Surgery at Seth G.S. Medical College in 1937. He served in the Civil Hospital, Ujjain (1937–40); the Indian Army as regular Officer of the Army Medical Corps (1940–56); the Directorate General of Health Services in the Ministry of Health, Government of India; and as Officer on Special Duty, later designated as Director, Family Planning (1956–65).

He is internationally known in the field of Family Planning and was awarded the Watumall Memorial Award in 1961, and since 1968, he has been appointed member of the WHO Export Advisory Panel on the Biology of Reproduction. He founded "Help our Mothers Society" in Ujjain (1937), providing family planning advice, and has written extensively on the subject since 1939.

He organized the official family planning program in the country when he assumed office of OSD in 1956. Besides the Award of Padma-Shri, he was honored by Bombay University in 1944 with the Hormasji Cama prize. He obtained the United Services Institute of India prize in 1949 and was awarded with the International Watumall Memorial Award for outstanding work in Family Planning in 1961.

Golden Jubilee Souvenir,
Padma-Shri, Lt. Col. B.L. RAINA, An Appreciation by a Gosumec

Dr V.V. Shah

A postgraduate teacher in Nair Hospital for 20 years, Dr V.V. Shah established, developed, and brought the department recognition as a teaching unit for MD Cardiology from the Bombay University.

Dr Shah was the past President of the Cardiological Society of India and the Founder of its Bombay Branch, and is, at present, the Vice President of Asian Pacific Society of Cardiology. He has to his credit many publications in national and international journals. Prevention of cardiac disease is his special interest. He founded the Society of Prevention of Heart Disease and Rehabilitation and later pioneered research in the Cardiovascular Preventive Research Center at Nair Hospital which owes its existence to him.

Among his major publications are such important works as 'Total disappearance

of Q wave in Myocardial Infarction' and 'History of Ischemic Heart disease and 'Electrocardiography in Anemia'.

Golden Jubilee Souvenir,
Padma—Bhushan, Dr V.V. SHAH, A tribute by a Gosumec

Dr Farokh E. Udwadia

My parents have been my greatest influence growing up. I have imbibed my mother's quality of honesty, straightforwardness, and humility, and although my father, a dedicated general practitioner, was a very busy man, he would show great kindness and patience. His talks at the dinner table about his patients and commitment to treating poor patients influenced my decision to pursue medicine. During my years as an undergraduate and registrar, I learned from some remarkable teachers and worked with inspiring medical professionals. At JJ Hospital, I set up a lung function unit with the help of Nani Palkhiwala and conducted significant research on pubic lice and tetanus. One of my significant accomplishments has been reducing the mortality rate of patients with a severe case of tetanus.

My philosophy in medicine is to treat every patient with the same level of care and respect, irrespective of their status, and to always strive to do the right thing. Building a strong doctor-patient relationship based on trust and faith is at the heart of clinical excellence.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities.

Dr Tehemton Udwadia

I was inspired by many teachers at KEM like Drs Nathubhai Patel in Medicine, Arthur DeSa in Surgery and, P.K. Sen, a phenomenal thinker with an exceptional approach to surgery. Dr R.N. Cooper, an emeritus at the college, was also a role model for me and had a significant impact on my journey. I started working on Diagnostic Laparoscopy in 1972 after getting the required instruments from Germany, after I saw Dr Nargesh Motashaw performing a laparoscopy and realized its potential.

I think young students should get a broader education as it fosters a holistic approach in their medical practice. Sports can also play an important role in your life, they teach you about the importance of team spirit and humility and how to overcome challenges and recover from your errors.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities.

Nursing

Durga Mehta

Matron

When I started as a student nurse at KEM in 1954, there were very few trained nurses from England. Eventually, though, Indian nurses started occupying prominent roles and I have held various positions since then, including sister tutor, assistant matron, and matron. Once we were treating a 15-year-old boy with a skin condition who had developed a liking for me and didn't want anyone else to bathe him but me. I wrote to his mother urging her to visit him as he wasn't going to survive, and his passing taught me the importance of personal connections in nursing. Since my retirement in 1991, I continue to provide nursing services at patients' homes. I have also initiated a home nursing course in collaboration with Saurashtra University, and serve as the chairperson of a community women's group.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities.

Medical Social Work

Daksha Javeri

Past Head of Department

Since her appointment in the Blood Bank Unit, Dr Javeri has set a fine example for the staff on how patients and professional blood donors must be respected on humanitarian grounds. She worked in the Cardiovascular Department for twenty years, raising funds for people from lower socioeconomic backgrounds and creating awareness about heart diseases while working with the families through a training cum therapy cum prevention program.

She established the Social Service Department as an independent unit as the Head of Department and published a book highlighting the work of hospital social workers. The department conducted exhibitions and educational programs using dramatics and scripts to train social work students, hospital staff, and patients. Dr Javeri was awarded the Best Social Worker and the Best Head of Department.

Recalling an incident where she was part of counselling a family that wanted to give up their child, she says, "We don't push judgments about what is right and wrong. We work on a humanitarian level and help change attitudes and thinking. That is how the social work department is a change promoter and why I can proudly say that I belong to this department."

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities.

Dr Vijaya Naik
Past Head of Department

I first started working at KEM in 1985 in the Cardiovascular Thoracic Surgery Department, and have been the Head for the past two years; that is 33 years of total service. I also oversee the Department of Cardiology, Pediatric Surgery, and Pediatric Medicine. I was inspired by my grandfather and father to become a social worker, both of whom helped people from all walks of life. The department is overloaded and facing difficulties due to a high volume of patients and insufficient social workers. A centralized location for social workers would improve communication, transparency, and convenience for patients.

Social workers primarily assist in catering to the financial needs and counseling of patients. They provide referrals for family counseling and for charities and adoption centers, and help re-integrate patients into the workforce while ensuring that they are provided with basic amenities like food, etc. They may also act as the link between donors and patients to ensure transparency and proper utilization of funds. Other areas of work include, conducting training sessions on communication, discussing issues like cybercrime and child abuse, and facilitating self-help group sessions for people with addictions, etc.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities.

Office

Rama Malik
Senior Personal Assistant

Unsung Heroes of Public Hospitals: A Secretary's Journey with Deans and Doctors

Dear patients and students,

My journey in hospitals didn't begin by choice—it began by God's will. Years ago, when my mother had surgery, I was awake at midnight, nervous and unfamiliar with the hospital environment. I prayed, telling God, "I don't know anyone here except You." That prayer was answered—not only through the successful surgery performed by compassionate and skilled doctors, but also through the path that led me to serve in hospitals as a Personal Assistant to Deans.

Since then, I've had the privilege of working alongside esteemed Deans and distinguished medical professionals at Nair, Sion, and KEM—three prominent institutions governed by the Municipal Corporation.

The Changing Role of a Secretary

With advancing technologies and rising patient expectations, the role of a Secretary is constantly evolving. Assisting a Dean involves far more than typing letters or organizing files—it requires an understanding of the wide scope of their responsibilities like managing a medical college, overseeing hospital operations, mentoring young doctors, and most importantly, ensuring compassionate care for the most underprivileged patients.

When I first joined, I asked myself simple but profound questions:

- How can I find happiness and purpose in such a demanding role?
- How can I earn the trust of my supervisor, colleagues, and patients alike?
- How can I serve with integrity while offering warmth to those in distress?

Over time, I realized that true job satisfaction doesn't come from money alone. It comes from learning, taking on greater responsibility, making a meaningful contribution, and being appreciated for your efforts. Hospitals—when served with sincerity—are among the noblest places to work. Few other environments offer so many opportunities to help people in their most vulnerable moments.

Doctors as Worshipers of Duty

Over the years, I have seen Deans and doctors who truly treated their work as worship. Many would skip meals, work from early morning until midnight, and dress simply so that patients never felt intimidated or inferior in their presence.

Yet, behind their compassion and tireless effort, lay immense pressures—from public expectations, staff unions, political interference and constant media scrutiny. If something went wrong due to human error, they were blamed instantly. Newspapers seldom highlight their lifelong service, but never fail to make front-page news of a mishap.

It's important for the media to present a balanced view because highlighting the noble work of doctors not only honors them, but also builds public trust and reduces instances of mob violence in hospitals.

Government Hospitals vs. Private Hospitals

Running a government hospital is very different from managing a private one. Municipal hospitals function with limited budgets, driven more by compassion and philanthropy than profit. Yet, Deans here shoulder heavier burdens, accountable to the public, politicians, and multiple authorities—all while treating masses of patients who have nowhere else to go.

The Essence of Secretarial Assistance

An effective secretary is not just the Dean's assistant, but a bridge—supporting colleagues, patients, and even strangers in moments of crisis. The responsibilities go far beyond the written job description. During emergencies or disasters, the role expands into that of a helping hand for everyone involved.

A good Personal Assistant must:

- Write clearly and without ambiguity.
- Listen attentively – not just to the Dean but also to colleagues and patients.
- Stay organized, maintain confidentiality, and act proactively.
- Represent the Dean and institution with both dignity and warmth.

Hospitals face emergencies regularly—bomb blasts, floods, epidemics, mass casualties, and VIP visits. In these situations, the secretary is not merely a clerical staff, but a vital part of the hospital lifeline ensuring communication, coordination, and calm.

Above all, the hospital is a place of *hospitality*. Patients and their families arrive in distress, often overwhelmed. Speaking kindly, listening with patience, and responding with warmth can begin the healing process before the medical treatment begins.

Each task I handled, I did with tremendous interest and full involvement. To some, compiling OPD attendance figures may have seemed like a routine clerical duty. But for me, those numbers spoke of lives—hundreds and sometimes thousands of patients who placed their trust in the hospital each day. Presenting these figures accurately and on time meant ensuring that administrators and doctors could plan manpower, resources, and services better for the patients who depended on us.

On another level, some duties were emotionally demanding. For example, when surgeries had to be postponed—due to emergencies, sudden calamities like shortage of blood, or lack of linen etc.—it was my responsibility to present these reasons before the Dean to shorten patient stay to minimize expenses and also to help out Mumbai patients. It was never easy to look into the eyes of anxious relatives who had prepared themselves for surgery, only to hear that it had to be delayed. The Patient Redressal Forum helped in addressing their grievances. I realized then that my role was not just to submit explanations, but also to communicate with empathy and help families feel heard. Many times, patience and gentle words made a difference, turning anger into understanding.

Over time, I came to believe that no work in a hospital is "small" or "routine." Whether it was preparing statistics or speaking on behalf of the administration, each responsibility was a thread in the larger fabric of trust that binds a hospital to its patients and society.

My Journey with Great Deans

I began my journey in 1973, after working in private firms like *Reader's Digest*. In the private sector, one works under constant scrutiny, which fosters discipline. In contrast, job security in public service can sometimes lead to complacency. But hospitals are different—they are *karmasthans* (sacred workplaces) that naturally instill sincerity and a strong work ethic.

My first boss was **Dr (Mrs.) Pragna Pai**—a name that has remained closely linked with mine. She embodied integrity and discipline. Later, I worked with all time great Deans like **Dr Shirahatti, Dr (Mrs.) Kshirsagar, Dr Sanjay Oak, and Dr Avinash Supe**.

I had the fortune to work with stalwarts like **Dr Arun Samsi, Dr V.R. Joshi, Dr (Mrs.) Dahanukar, Dr R.D. Bapat, Dr Manu Kothari, and Dr Lopa Mehta** when they were Acting Deans.

Each of them had their own unique qualities—discipline, compassion, brilliance and simplicity. I witnessed them skipping meals, sacrificing personal time, and dedicating themselves wholeheartedly to patient care. They truly lived by the motto of GSMC & KEM: **"Not for self, but for all."**

Describing the qualities of each Dean could easily fill an entire book. Every one of them was exceptional—brilliantly qualified, holding multiple degrees, yet equally extraordinary as human beings. They carried immense enthusiasm and a deep commitment to the welfare of patients, staff, and students. Each willingly sacrificed their chosen specialty to shoulder the demanding role of Dean, dedicating their lives to the institution. Working beside them, I became mentally and emotionally invested in many projects. My journey began with Madam Pai at Nair Hospital. Under the Deans' guidance, and with the support of medical social workers, I wrote appeal letters to philanthropic individuals and organizations for initiatives such as the beautification of Nair Hospital, development of the KEM Hospital garden, guidance boards in KEM designed with the help of IIT students, the Medical Intensive Care Unit, Pediatric Ward and ICU, Emergency Medical Services, the hospital's computer network, and many more. Beyond infrastructure, I helped organize yoga classes for nursing staff, established a library, and founded a Sports Club open to employees across all categories. For every project, I followed its progress from proposal to completion, often approaching various authorities to ensure momentum. Even after retirement, my association continued through the Dr Manu Kothari Chair of Medical Humanities, where I contributed by conducting interviews with stalwarts in the medical field.

Once, some journalist friends asked me, *"How do you manage to work with so many strict and workaholic Deans?"* I simply replied, *"Deans are special souls – painstakingly shaped by God. If you work with sincerity and heart, they will always understand and support you."*

To me, these institutions are not just workplaces—they are temples. The doctors and Deans I had the honor to serve were true warriors, living by the spirit of this Marathi verse:

"Shur amhi sardar, amhala kai kunachi bhiti?
Dev, desh ani rugnansathi pran ghetale haati."
(*We are brave leaders, we fear none.*
For God, nation, and patients, we give our very lives.)

Final Reflection

Looking back, my work as a Personal Assistant was never just about handling files, taking meeting minutes, or answering phone calls. It was about being part of a noble mission—healing the sick, supporting the healers, and standing by institutions that serve all, without discrimination.

The Deans and doctors I worked with truly forgot their food, their comfort, even their families—devoting themselves entirely to the wellbeing of patients. To have served alongside such dedicated individuals has been the greatest blessing of my career.

Rama Malik
Senior Personal Assistant
To Deans/Directors
(1986 till 2019)

Office: Past Administrative Officer

Shubhangi Chavan
Officer

I worked at the BMC as a Clerk-cum-Typist and was promoted to the position of Head Clerk within the first two years, after my husband encouraged me to take the exam. At KEM, I joined as the Head Clerk in 1992 in the General and Medical Stores and was moved to the GTR section, where I gained valuable experience in creating posts and promotions, which was later helpful when I became the Office Superintendent and Administrative Officer.

I never hesitated to do any kind of work, as completing the task is what matters. As Head Clerk, I ensured better security by installing locks and hiring security guards. We have been working on the Bindu Namavali since 1997, getting the necessary documents for everyone from peons to retired employees, etc. It helped streamline the process of promotions based on direct recruitment and internal promotions.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities (Translated by Rama Malik, Senior Personal Assistant to the Dean).

Past Office Hawaldar

Maruti Angre
Hawaldar

I met Kothari Saheb in the hostel lodge when he was the college Secretary in 1957–58. One day, he took me to Dr Jadhav, who was the Assistant Dean, to apply to work at KEM. For the first two to three years, I was a substitute worker in all departments, then a vacancy opened up to work in the dean's office in 1968. Later in 1970, I was promoted to peon. Following that, I became a Naik and finally, I worked as Hawaldar with Parulekar Saheb and Pai Madam. I worked with Dr Pai the longest; her work was perfect and she brought in discipline. She changed our uniforms and made it mandatory to wear the dress and cap.

Anavkar Bai insisted that she would pay the fees for my further education, and I continued my studies till the 9th grade here. I felt that I could not discipline others if I couldn't be an example myself. Even though I lived nearby, I would carry my lunch so I wouldn't have to go back. I never came in late, and I didn't take compensation even if I worked late. I was also involved in keeping records, working on the research society with Gokhale Saheb, handling office cash, and depositing the Trust money; there was never a mistake or discrepancy in this work.

Interview conducted under the aegis of Dr Manu V.L. Kothari Chair and Division of Medical Humanities (Translated by Rama Malik, Senior Personal Assistant to the Dean).

Gymkhana

Pradeep Shripad Gole
Head Clerk

I lived with my uncle while working at the canteen at KEM. When I came here in 11th grade, KEM students helped me in my studies; whatever I have learned so far has been thanks to these students. Later, I started working at the Gymkhana and have seen it grow and change for over 20 years. We used to have elections for the post of Gymkhana Secretary earlier but have since transitioned to selection based on reference and merit.

I have always had a great relationship with the students here—I remember I ran into a man once at the canteen who gave me a tight hug and said, "Pradeep, it's been so long". He was a past cultural secretary, and it was touching to know that the boy I remembered has now become a successful doctor.

GOSUMAG Magazine

GS PARTIES

PART III

POTPOURRI

Potpourri, the aptly titled Part 3 of this volume, dives into the wider world built in and around Seth Gordhandas Sunderdas Medical College and King Edward Memorial Hospital. It portrays the distinctive and rich journey of the institute through trailblazing research, evolution of the departments, life within the hostels and Gymkhana, unique anecdotes, ancillary services and national honors affiliated with it. A majority of the text has been taken from previous jubilee volumes, annual reports, and KEM website, and the rest are generous contributions and memories of people connected to the institute.

Image courtesy: Girish Parmar

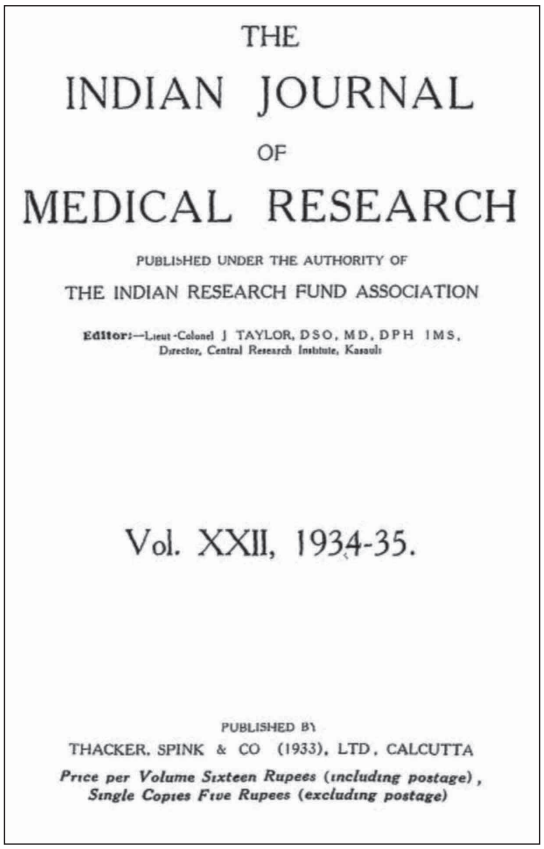
1

Legacy of Knowledge: Research Papers and Speeches

A testament to KEM's commitment to advancing medicine, this section showcases a few pioneering studies and speeches delivered by renowned voices in the community.

The Nutritive Value of Indian Vegetable Food-Stuffs: Part V, The Nutritive Value of Ragi (*Eleusine coracana*)

By S.P. Niyogi, N. Narayan, and B.G. Desai



THE

INDIAN JOURNAL

OF

MEDICAL RESEARCH

PUBLISHED UNDER THE AUTHORITY OF

THE INDIAN RESEARCH FUND ASSOCIATION

Editor:—Lieut-Colonel J TAYLOR, DSO, MD, DPH IMS,
Director, Central Research Institute, Kasauli

Vol. XXII, 1934-35.

PUBLISHED BY
THACKER, SPINK & CO (1933), LTD, CALCUTTA
Price per Volume Sixteen Rupees (including postage),
Single Copies Five Rupees (excluding postage)

No. 2 (October 1934).

NIYOGI, S P, NARAYANA, N, and DESAI, B G The Nutritive Value of Indian Vegetable Food-Stuffs Part V The Nutritive Value of Ragi (*Eleusine coracana*) 373

Ind Jour Med Res, 22, 2 October, 1934

THE NUTRITIVE VALUE OF INDIAN VEGETABLE FOOD-STUFFS

Part V

THE NUTRITIVE VALUE OF RAGI (*ELEUSINE CORACANA*)

BY

S P NIYOGI, M B, M SC,

Professor of Physiology, Seth Gordhandas Sunderdas Medical College, Parel, Bombay,

N NARAYANA, M SC, A I I SC,

AND

B G DESAI, B SC,

Biochemical Research Workers under the Indian Research Fund Association

[Received for publication, July 6, 1934]

THE first four parts of this series dealt with the nutritive value of the proteins of ten of the most common Indian pulses Similar studies have now been extended to some of the Indian millets This part deals with *Eleusine coracana*, a widely grown millet occupying nearly seven million acres and by far the most important food-crop of Mysore State It not only has the advantage that it may be left standing on the fields till a convenient time for harvesting, but also that the grain improves by storing and may be preserved for many years without attack by insects or moulds The millet is known by the following vernacular names Ragi, Rajika, Nachni, Nagli, etc

Narayana and Norris (1928) report the presence of an alcohol-soluble protein in this seed which they have named *Eleusinin* A more complete analysis of this protein is given in this paper This protein, however, represents only a small part of the total, most of which has been found to be inextractable by any of the known

Conclusions

The presence of phosphorus and the low basic nitrogen content are the essential characteristics of *Eleusinin* of ragi In both these respects it resembles the prolamin of fenugreek which is the only other prolamin so far reported as containing phosphorus In its content of cystine, tyrosine and tryptophane it is superior to the gliadin of wheat The amide nitrogen figure shows that there is not much deaminization during long and continued hydrolysis Unlike the globulins of the pulse (*vide* previous parts) there seems to be no relation existing between the free amino nitrogen and the lysine nitrogen of the prolamins

At a 5 per cent level of protein intake, the digestibility and biological value of the total proteins of ragi are 77 5 per cent and 90 5 per cent respectively At the same level of protein intake the biological values of the total proteins of milk are 93 4 per cent, of rice 86 per cent, and of oats 78 6 per cent (Mitchell, 1924) Thus ragi proteins seem to be superior to those of rice and oats in their biological values This is quite in accordance with the fact that the local population consider ragi to be superior to rice in nourishing qualities though less palatable

Experiments were also conducted to prepare ragi malt The diastatic activity of ragi malt was found to be equal to that of barley malt Since ragi contains a high percentage of starch and is very cheap, it can very well be employed as a basis for the manufacture of farinaceous and invalid foods Further investigations are yet to be conducted in this field

Summary

Four per cent NaCl and 70 per cent hot alcohol each removes about 20 per cent of the total nitrogen of ragi (*Eleusine coracana*) The remaining nitrogen is not extracted even by dilute alkalis

The alcohol soluble protein *Eleusinin* of ragi has been isolated and analysed

The biological value and digestibility of the total proteins of this millet have been found to be 90 5 and 77 5 per cent respectively

The authors wish to record their indebtedness to Dr Jivraj N Mehta, Dean, and Dr V R Khanolkar, acting Dean, Seth Gordhandas Sunderdas Medical College, Bombay, for their continued interest and encouragement during the progress of the above work

REFERENCES

Buston and Schryver (1921) *Biochem Jour*, **15**, p 636
Folin and Marenzie (1929) *Jour Biol Chem*, **83**, pp 89, 103
Gortner and Holm (1917) *Jour Amer Chem Soc*, **39**, p 2736
Hoffman and Gortner (1925) *Colloid Symposium Monograph*, **2**, p 209
Mitchell (1924) *Jour Biol Chem*, **58**, pp 873, 905
Mitchell and Carman (1926) *Ibid*, **68**, p 183
Narayana and Norris (1928) *Jour Ind Inst Sci*, **11A**, p 91
Niyogi, Narayana and Desai (1931) *Ind Jour Med Res*, **18**, p 1217
Idem (1931 32) *Ibid*, **19**, pp 475, 859, 1041
Osborne and Leavenworth (1921) *Jour Biol Chem*, **49**, p 63
Osborne and Mendel (1920) *Ibid*, **41**, p 275
Plimmer and Rosedale (1925) *Biochem Jour*, **19**, p 1020
Srinivasarao, Sastry and Narayana (1933) *Jour Ind Inst Sci*, **16A**, p 85

LXXVIII. The Occurrence of a Phytin-Splitting Enzyme in the Intestines of Albino Rats

By V.N. Patwardhan

From the Physiology Department, Seth Gordhandas Sunderdas Medical College, Parel, Bombay, India (Received 22 February 1937)

LXXVIII. THE OCCURRENCE OF A PHYTIN-SPLITTING ENZYME IN THE INTESTINES OF ALBINO RATS[1]

By VINAYAK NARAYAN PATWARDHAN

From the Physiology Department, Seth Gordhandas Sunderdas Medical College, Parel, Bombay, India

(*Received 22 February 1937*)

A LARGE proportion of the total phosphorus of the cereals and other vegetable foodstuffs has been shown to exist in the form of phytin, the calcium magnesium salt of inositolhexaphosphoric acid. McCance & Widdowson [1935] have shown that the amount of phytin-P may vary between 41 and 68 % of the total phosphorus of the cereals. According to Bruce & Callow [1934] the availability of this form of phosphorus to the mammalian organism is very low. A summary of work dealing with this aspect may be found in the paper by McCance & Widdowson. That phytin does not undergo alteration in the digestive tract of animals was first shown by Scofone [1905]. Plimmer [1913] found that extracts of the intestines of the dog, cat, sheep, ox and rabbit failed to hydrolyse the sodium salt of phytic acid. McCollum & Hart [1908], however, found in calf liver a phytin-splitting enzyme. Lowe & Steenbock [1936, 1] failed to notice any hydrolytic action of intestinal extracts of rats and chicks on phytin, even though they observed a certain amount of hydrolysis of phytin in the intestines when it was fed to the rats. They are of the opinion [Lowe & Steenbock, 1936, 2] that any hydrolysis of phytin which takes place in the intestines is due to the activity of the intestinal flora or to the phytase of the vegetable part of the diet.

A search by the author for a phytin-splitting enzyme in the intestines of the albino rats has proved successful and the experimental evidence is presented in the following pages.

EXPERIMENTAL

Preparation of the enzyme. The method of extraction of the enzyme from the intestines was similar to that used by Martland & Robison [1929] for the extraction of phosphatase from bones. Albino rats (4 to 6 at a time) were killed with chloroform, their intestines were removed, slit open and washed carefully in running water to free them of all extraneous matter. They were then ground with 5 to 10 ml. of chloroform and left in contact with about 50 ml. distilled water at room temperature for 4 days. An active extract was thus obtained on filtration, but it contained appreciable quantities of inorganic phosphate. Attempts to remove this by dialysis sometimes resulted in a loss of activity of the enzyme. The addition of five volumes of 95 % alcohol to the extract gave a precipitate which was separated by centrifuging, washed with absolute alcohol and dried *in vacuo* over sulphuric acid. It was then suspended in a small volume of water or in Michaelis's [1931] veronal-acetate-HCl buffer solution of *p*H 7·6, allowed to stand for 2 hours, centrifuged and the centrifugate dialysed in cellophane bags against distilled water or buffer solution of *p*H 7·6 for 4–6 hours. This procedure gave an active enzyme preparation containing only small

[1] Read before a meeting of the Bombay section of the Society of Biological Chemists, India.

A "New" Blood-Group Character Related to the ABO System

Source: The National Medical Journal of India, Vol. 21, No. 5, 2008

A "NEW" BLOOD-GROUP CHARACTER RELATED TO THE ABO SYSTEM

Two examples of blood possessing a hitherto unrecognized blood-group character related to the ABO system were found within the space of a few weeks in the department of pathology and bacteriology of the Seth Gordhandas Sunderdas Medical College, Bombay. Patient X was involved in a railway accident; patient Y was admitted with a stab wound in the abdomen. Both patients needed transfusion and both were apparently group-O, but the serum of each agglutinated the red cells of 35 group-O Indian donors available for the direct compatibility test. Subsequently 80 more Indian group-O red-cell samples were tested with the same result. Plasma and not blood was therefore transfused.

A third example was subsequently found in the blood of a donor, Z, presenting himself for his first donation; this was the result of a deliberate search. None of these three men, all of whom are Indians, had been previously transfused.

The serum from each of these three men was found to contain anti-A, anti-A_1, anti-B, and anti-H, antihodies which account for the agglutination of red cells of all "ordinary" ABO groups. So far the only red cells not agglutinated by these three sera are those of the three men from whom the sera came.

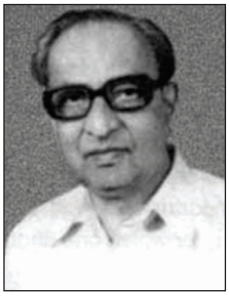
These are by far the most powerful examples of human anti-H so far reported; they are also the first examples to come from persons superficially

(Reprinted with permission from Elsevier (*The Lancet* 1952;1:903-4).)

belonging to group O. It should be said that there are two types of antibody which agglutinate O and A_2 cells preferentially: one of them can be inhibited by secretor saliva and is called anti-H; and the other is not inhibited and is called anti-O.[1] There is considerable evidence, however, that not all sera classified as anti-O are of the same specificity, and it is not known which if any, of these sera react specifically with the product of Bernstein's O gene.

The following evidence for the identity of the anti-H agglutinin relates for simplicity to the serum of patient X, which was the more exhaustively investigated, though all the critical tests were applied also to the serum of Y and to that of Z.

Biography



Dr Y.M. Bhende was born on 27 September 1911. He graduated from Grant Medical College, Mumbai in 1935, and did his MD in General Medicine in 1940. Subsequently, he completed his MD in Pathology from Seth G.S. Medical College and KEM Hospital in 1945. He joined Seth G.S. Medical College as Assistant Professor in the Department of Pathology in 1945 and went to England in 1947 on a Nuffield Research Fellowship.

In 1952, Dr Bhende along with his co-authors published a paper in *The Lancet* proposing a new blood group: the Bombay blood group. This was based on their research work over the previous few months. In December 1951, a patient had been admitted to KEM hospital after a railway accident. He was found to be O-positive but on cross-matching his serum agglutinated all O group cells. Plasma was transfused. Later, the patient was found to be MNO-positive and his serum, when tested against known O group cells, showed that the antibody was independent of the MN and Rh systems. Two weeks later, in January 1952, another patient was found to have a similar grouping reaction. Moreover, cells and sera of these 2 patients were compatible with each other. The similarities between the 2 cases prompted Bhende and his colleagues to work on the problem with collaborators abroad, resulting in the concept of the Bombay blood group.

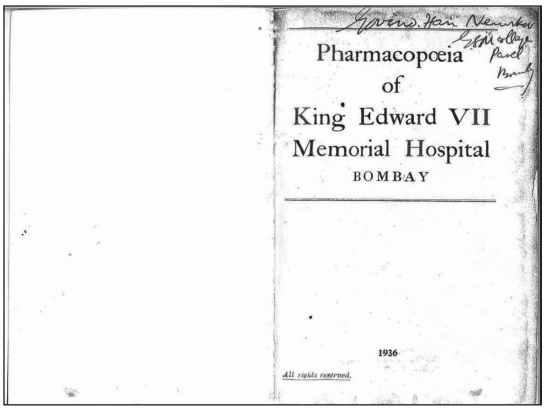
Dr Bhende was transferred to BJ Medical College, Ahmedabad in 1952 as Professor of Pathology. Later, he was transferred to BJ Medical College, Pune as Professor. He was Dean of BJ Medical College and Sassoon General Hospital from 1968 to 1969, when he retired.

His areas of interest included the pathology of anemia, amyloidosis, and blood groups. He wrote, along with Drs S.G. Deodhare and Y.M. Kelkar, a textbook of pathology, which is now in its sixth edition.

Dr Bhende passed away on 2 December 1998.

Pharmacopoeia: 1936

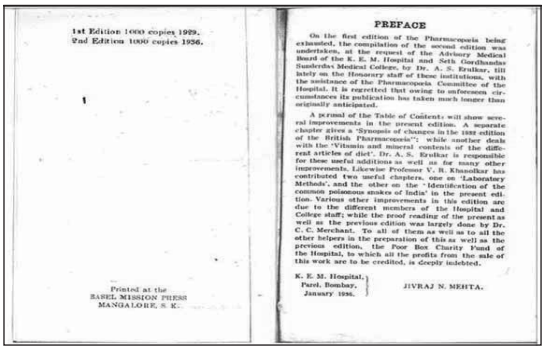
Pharmacopoeia is a fascinating historical treasure which offers an unparalleled opportunity to unravel the medical practices and pharmaceutical knowledge



Pharmacopœia
of
King Edward VII
Memorial Hospital
BOMBAY

1936

All rights reserved.



1st Edition 1000 copies 1929.
2nd Edition 1000 copies 1936.

Printed at the
BASEL MISSION PRESS
MANGALORE, S. K.

PREFACE

On the first edition of the Pharmacopœia being exhausted, the compilation of the second edition was undertaken, at the request of the Advisory Medical Board of the K. E. M. Hospital and Seth Gordhandas Sunderdas Medical College, by Dr. A. S. Erulkar, till lately on the Honorary staff of these institutions, with the assistance of the Pharmacopœia Committee of the Hospital. It is regretted that owing to unforeseen circumstances its publication has taken much longer than originally anticipated.

A perusal of the Table of Contents will show several improvements in the present edition. A separate chapter gives a 'Synopsis of changes in the 1932 edition of the British Pharmacopœia'; while another deals with the 'Vitamin and mineral contents of the different articles of diet'. Dr. A. S. Erulkar is responsible for these useful additions as well as for many other improvements. Likewise Professor V. R. Khanolkar has contributed two useful chapters, one on 'Laboratory Methods', and the other on the 'Identification of the common poisonous snakes of India' in the present edition. Various other improvements in this edition are due to the different members of the Hospital and College staff; while the proof reading of the present as well as the previous edition was largely done by Dr. C. C. Merchant. To all of them as well as to all the other helpers in the preparation of this as well as the previous edition, the Poor Box Charity Fund of the Hospital, to which all the profits from the sale of this work are to be credited, is deeply indebted.

K. E. M. Hospital,
Parel, Bombay,
January 1936.

JIVRAJ N. MEHTA.

of that bygone era, providing invaluable insights into the evolution of healthcare.

Dr Jivraj N. Mehta's Address at the Unveiling of Seth Jamnadas Lalubhai's Bust

Source: https://archive.org/details/sim_journal-of-the-indian-medical-association_1939-03_8_6/page/n39/mode/2up

On the occasion of unveiling the bust of the late Seth Jamnadas Lalubhai, on Saturday, 4th February 1939, the following speech was delivered by Dr Jivraj N. Mehta, Dean

The Hon'ble Dr Gilder, Ladies and Gentlemen, it gives me great pleasure to offer you, Sir, and to you ladies and gentlemen, a very cordial welcome to this evening's function of unveiling the bust of one to whose charities, the Museum Hall of this College owes its existence. The late Seth Jamnadas Lalubhai was one of those pious and philanthropic merchants of Bombay whose charities are responsible in no small measure for the civic progress and cultural advancement of the city. He had happily left his estate in charge of two very cautious and capable gentlemen, the late Seth Maganlal Hargowandas, his uncle, and the late Mr. Jamietram Jivanram, his Solicitor. Though these gentlemen were very conservative in matters, social and religious, they welcomed progressive ideas and it is to the catholicity of their outlook that a portion of the estate came to be utilized in constructing the splendid Museum Hall that we see in front of us, instead of the money being spent in erecting a shrine or in feeding some Brahmins or beggars.

Ladies and gentlemen, it will be of interest to you to know the history of this Museum Hall, how it came to be started, and the role it is expected to play in the advancement of medical science in the city. You all know that the Seth Gordhandas Sunderdas Medical College, which was opened in the year 1925, is the outcome of the princely donation of fourteen lakhs of rupees from the estate of the late Seth Gordhandas Sunderdas of the well-known Moolji Jetha family. Shortly after the opening of the college an urgent need began to be felt for an up-to-date museum attached to the college for teaching purposes. As, however, the corporation had already spent money generously on the construction and equipment of the college and the associated King Edward VII Memorial Hospital and had taken up large liabilities for their maintenance, and as financial stringency began to be experienced as from 1927, I had not the heart at the time to approach that August Body for further extensions of those institutions.

The idea of having a separate museum building for the pathological, public health, medicolegal, and other departments had thus to be held in abeyance. It was in the year 1929 that I came to know through my friend and colleague, Dr Jinabhai L. Desai, Honorary Lecturer in Radiology, that the Trustees of the estate of the late Seth Jamnadas Lalubhai were considering proposals for the utilization of the balance of the estate still left on their hands. I decided to take an opportunity of seeing the Trustees with a view to securing a donation either for the College or the Hospital, and called on the Trustees, Seth Maganlal Hargowandas and Mr. Jamietram Jiwanram, who warmly took up the idea of helping these institutions

if suitable proposals could be submitted for their acceptance. They themselves expressed their desire to utilize the residue of the estate to the extent of about one lakh of rupees for providing Deep X-ray therapy and Radium treatment at the KEM Hospital and asked me to give them a definite scheme in the matter or for any other requirements of these institutions.

Having in view our various needs, I submitted for their consideration five alternative proposals:

1. The provision of facilities for Deep X-ray therapy and radium treatment to patients suffering from cancer, etc.
2. The extension of the eye department of the Hospital.
3. The construction of a Hall for keeping museum specimens.
4. The provision of Research Fellowships, and
5. The construction of quarters for the Resident Medical Staff.

Messrs. Matubhai, Jamietram and Madon, Solicitors, on behalf of the Trustees, later informed me as per their letter dated 6th July 1929 that the Trustees had, subject to the sanction of the High Court, obtained the consent of the Advocate General for giving out of the investment in their hands, Government and other securities of the face value of Rs 1,02,400 to the Municipality for erecting a Hall for a Museum to be attached to the Seth G.S. Medical College and to be named after the late Seth Jamnadas Lalubhai, subject to the condition that the said donation will be made on the Bombay Municipality agreeing to maintain the proposed Museum and the building. It would be worthwhile to mention here that Seth Jamnadas Lalubhai had during his lifetime donated a sum of ₹ 20,000 for the construction of a ward of 3o beds in the small-pox unit at the City Fever Hospitals, Arthur Road, in memory of his daughter Bai Premcoover bai. The cost equipping that ward was met by his wife. His trustees thus helped in continuing the association which Seth Jamnadas Lalubhai had formed in his lifetime with the Public Health and Medical Departments of the Bombay Municipal Corporation.

The Executive Engineer of the Municipality was accordingly requested to prepare plans and estimates for the Museum and the total cost for the construction of the building and equipment was estimated by him at ₹ 1,06,770. In view of the low value of Government paper at the time, the amount of the donation of the face value of ₹ 1,02,400 was found insufficient for the purpose, and I again approached the Trustees with a request to increase the amount, which they readily did by raising the donation to ₹ 1,10,000.

I take this opportunity of expressing my deep gratitude to the late Seth Maganlal Hargowandas and the late Mr. Jamietram Jiwanram, the Trustees of the late Seth Jamnadas Lalubhai Charities, for this munificent donation to meet one of our urgent needs. I would like to add that in all the negotiations to bring this about, Dr Popat Prabhuram, friend of Seth Maganlal Hargowandas, whom, I am glad to find is present here this evening, played a most helpful part, for which I would like to express my warm thanks to him.

I may add, in passing, that for the treatment of Cancer and other diseases by the Deep X-ray therapy apparatus, I

was able to secure a donation of ₹ 35,000 from the Trustees of the NM Wadia Charities in 1931. The other alternative proposals which I had submitted for the consideration of the said Trustees have been also, by now, more than amply met by the generosity of the Municipal Corporation and the Governor's Hospital Fund, which will provide 106 extra beds in the Hospital under the KEM Hospital Extension Scheme, provide radium and other necessary equipment and suitable quarters for the staff. The Corporation have even very generously approved of starting a Research Endowment Fund for the college by agreeing to credit to that Fund the subsidy it receives annually from the CP Government for reserving five seats every year in the college for the CP and Berar students.

It is only a small beginning for a Medical Research Endowment Fund, and it needs the support of the philanthropic citizens of Bombay if this college of which the city is justly proud, is to be a prominent center of medical research in the country. May I, Sir, venture to suggest, without it being considered presumptuous on my part, that the large subsidy, which the Government of Bombay have lately been receiving on account of students from the Indian States admitted to the Grant Medical College, might likewise be utilized to form the nucleus of a Research Fund at that college. Compared to Calcutta, the city of Bombay is woefully backward in scientific research in general, and medical research in particular, and needs to be encouraged by the Government, the public bodies and the philanthropists of the city.

It will be realized that the planning of a museum for housing wet specimens presents special difficulties which require a careful study of the particular conditions of temperature and light intensity obtaining in this city. It has been our endeavour to preserve specimens in natural colors for as long a time as possible. Bright light and summer temperature set up marked changes in the preserving fluids and lead to a rapid deterioration of wet specimens. Prof. Khanolkar during his tour in Europe in 1929 had an opportunity of consulting curators of several museums in the United Kingdom and the continent of Europe regarding these special problems. It will be noticed that the building has been so designed that though it is well lighted during daytime by diffused sunlight, direct sunlight rarely falls on museum specimens.

The work of constructing the Museum Hall was started on 23rd May 1932, and completed on 31st October 1933.

The Museum building lies to the east of the college building and is connected with it by a covered corridor. It consists Seth Jamnadas Lalubhai Museum Hall with surrounding galleries forming second and third storey, the whole having an exhibition area of 11,000 sg. ft. approximately. Nearly 1,500 specimens are at present housed in it. Though a very large number of specimens are from the material available at the KEM Hospital, our warm thanks are due to the Heads of the various institutions in the city and to several Surgeons for their help and co-operation in enriching our Museum.

The total cost of constructing and equipping the Museum amounts to about ₹ 98,140. The amount realized by the sale of the securities of the face value of ₹

1,10,000 came to ₹ 86,110. The rest of the cost was borne by the corporation. Further expenditure to the extent of about ₹ 4,000 has since been incurred in purchasing more shelves for exhibiting the specimens and in preparing the models for the public health section of the Museum and the specimens for the medicolegal and X-ray sections. There is a large and well-equipped dark room on the ground floor and a tissue culture room on the top floor, besides two rooms for mounting specimens and other museum work. The specimens for the new Museum are prepared according to newly developed technique of proper preservation in natural colors. They are thoroughly studied and a system of cards for specimens giving a complete information about each specimen has been introduced with success. The specimens are being grouped in two parts, one for the use of the undergraduate students and for teaching purposes, and the other for demonstration of relatively uncommon pathological conditions which will be of use for postgraduate study.

The pathological exhibits occupy the ground floor as well as the two galleries. A portion of the Museum on the ground floor is being set apart for the exhibition of specimens for the instruction of students in Public Health. The work of preparing the public health section of the Museum which was first taken in hand by Dr J.S. Nerurkar, Honorary Lecturer in Preventive Medicine, shortly before his retirement, is now being looked after by his successor in office, Dr R.K. Mhatre. To them both my best thanks are due for the excellent models in the niches on the west wall of the ground floor of the building. Arrangements are being made to develop a medicolegal section of the Museum, which work was initiated by Dr Jaising P. Modi, Honorary Lecturer in Medical Jurisprudence from 1935 to 1937, to whom also I should like to express my gratitude. His successor in the post, Capt. R.E. Dadachanji, is taking much interest in developing this section. I should like to thank him, as also the Police Commissioner for his help in developing the medicolegal section of the Museum.

Efforts are also made by Prof. Khanolkar to develop the X-ray section, thanks to the co-operation of Dr J.L. Desai, Honorary Radiologist. In the corners of the first gallery will be found a number of diapositives of skiagrams taken at the Hospital and elsewhere illustrative of various pathological conditions. A skin and venereal section has been also provided with the specimens that Dr A.C. Rebello, Honorary Lecturer in Dermatology and Venereology, had got prepared for the College during his visit to Paris about ten years ago. At present, the Museum is being looked after under the able care and direction of Professor Khanolkar, by Dr K. G. Modak, Assistant Professor of Pathology and Bacteriology and two laboratory assistants who have been doing very good work indeed for the development of the Museum. The other staff consists of one museum attendant and two servants.

Credit for the excellent planning of this building for the proper lighting of the Museum as well as for the variety of carefully prepared specimens is entirely due to my worthy colleague, Prof. V.R. Khanolkar, Professor of Pathology and Bacteriology.

The construction of the building was

carried out during the period he officiated as Dean during my absence from duty. The plans and estimates were prepared under the supervision of the then Executive Engineer, Mr. T.K. Roddan, who has now retired from municipal service. The work of construction was carried on under the direct supervision of two Engineers, Mr. B.M. Nariman and Khan Bahadur H.C. Pastakia. I would like to tender my cordial thanks to Professor Khanolkar for the great care he took in the planning and in the construction of the building. I would also like to express my warm thanks to him and to his able assistants for the progress the Museum has shown during the course of the last four years. My grateful thanks are also due to Mr. Roddan, to Khan Bahadur H.C. Pastakia and Mr. B.M. Nariman, who have now all retired from municipal service, for all their help and co-operation in the construct of the building. The contract for the building was entrusted to Messrs. Anna Balwant & Co., to whom also my thanks are due for carrying out as best as they could, various suggestions made to them during the course of construction.

I may add that the construction of the Seth Jamnadas Lalubhai Museum Hall enabled me to transfer the old Pathology Museum Room in the main college building, to the Professor of Anatomy to expand the Anatomy Museum which was much cramped for space. The anatomical specimens are now divided into two sections, which are housed in two separate halls in the main college building. One is meant primarily for students reading for the medical examinations and the other consists mostly of biological specimens, illustrative of Comparative Anatomy and Embryology for students taking Anatomy for the science degrees. The exhibition area in these two sections is approximately 4,750 sq. ft. Prof. R.P. Koppikar, Professor of Anatomy, and his able lieutenants are to be congratulated for the variety and number of very useful specimens that are now exhibited in the Anatomy Museum.

Ladies and gentlemen, I feel impelled at this stage to refer to the place of museums in the cultural life of the country, even at the risk of some digression. Museum activity in India has not received as much attention as it deserves. As the Head of an important educational institution like the Seth Gordhandas Sunderdas Medical College, I cannot overestimate the importance and value of museums from the point of view of education. Museums are a source of direct knowledge, so to speak, a key to the knowledge of the Universe. India occupies not an insignificant place in the world culture. Almost first in population, India occupies the seventh place in area in the world. She is the proud possessor of the world's most ancient civilization which dates back to several thousand years. The recent excavations at Mohenjodaro and Harappa will throw a flood of light upon her ancient culture when systematic research is made to study these findings. As the learned critics are agreed that they lead us to the most ancient period known to us in the world culture. The diversity of climate, vegetation, and people makes the country occupy a prominent place in the world geography. Though the rich civilizations of Greece and Rome, Babylonia and Egypt are no more, the Indian civilization has not only survived the onslaughts of the foreign civilizations for several centuries in the past but has assimilated them without

losing her own vitality. Such a country should surely occupy a prominent place in the museum activities. Yet in the recently published report on the Museums of India, Messrs. S.F. Markham and H. Hargreaves, state that if the presence and efficiency of museums in various countries were to be taken as indications of the cultural level that a country has reached, and if this same criterion be adopted for India, there is not a single province or Indian State that does not compare poorly with the leading countries of Europe, the British Dominions or the USA.

"In fact," they proceed, "with the exception of the most backward countries of the world, there is not an area where museums count for so little, are so meagerly supported, are so few and far between." Whereas a small country like Sweden, with a population of just over six million, has 160 museums, thus having one museum for about 38,000 people on an average, India with her population of about 360 millions now has only 105 museums or one museum for about 3.400,000 people! This is indeed a gloomy picture. I am not here to go into the reasons for this state of affairs in respect of museum activities in India as they exist to-day. This is, Sir, a task for those who are at the helm of affairs.

The Museum movement depends for its excellence upon the quality and vigor of the museum staff. There is no one thing that affects the status and usefulness of a museum so much as the personality, vigor and capability of the curatorial staff. Many experiments have been made in Europe and America for the proper direction of a museum and in almost every case the system that has worked best has been to place the ablest man obtainable in complete charge of the whole institution, and for the governing body to rely upon him to produce that efficiency and progressiveness which are the hallmarks of a first class museum. The museums have great educative value, but for this purpose, the appointment of an efficient and well-read curator is necessary. It is only under the guidance of such a curator that research work can expand.

The report to which I have made reference clearly states that, amongst others, the main defects with the present museum activities in India are the lack of adequate finances and efficient curatorship. Hardly anywhere in India is to be found any equivalent of the privately endowed museum which is such a feature in the USA. India leaves her entire museum services, with few exceptions, to be organized, administered, and financed by the various Governments or States and by a few Municipalities. It is necessary that the public should take more interest in the museum activities. As I said, it is absolutely necessary to have an able curator who will be devoting all his time for the development of this museum. The Professor of Pathology and Bacteriology, Prof. V.R. Khanolkar, is at present looking after the Pathology Museum and Prof. R.P. Koppikar, the Professor of Anatomy, the Anatomy Museum. They have so far ably managed these museums, but it will be too much to saddle them with this responsibility in future without the help of a full-time curator.

It is not only necessary to increase the number of various sources of specimens to improve the teaching value of the Museum, but it is also necessary frequently

to change the specimens to keep up the freshness of their appearance. All this requires money. May I, therefore, appeal to the proverbial generosity of the Bombay public to help us by giving substantial donations for a worthy object like this? Medical science is not static. It has to keep pace with the various research that is being carried out in all parts of the world. Our hospitals and our schools are almost all of them associated with the name of some generous man or woman who has given of the wealth he or she has gained from this city to the benefit of the poor, the sick, and the illiterate among his or her fellow citizens. Here is an opportunity for those of the Bombay's rich sons and daughters who would like to advance the cause of medical science by making this Museum one of the foremost attractions of the city.

The Trustees and I are very happy that you, Sir, agreed to perform the ceremony of unveiling the bust of the late Seth Jamnadas Lalubhai. Your association with this college and hospital goes back not only to 1925 when the college was opened, but to the year 1916 when great battles had to be fought in the Corporation Hall, as well as behind the scenes, to ensure that the scheme of founding this college for which the late Sir Pherozeshah Mehta, immediately prior to his death in 1915, the late Mr. Dinshaw Wacha, the late Sir Narayanrao Chandavarkar, Sir Chimanlal Setalvad and Sir Ibrahim Rahimtulla had played so prominent a part, did not flounder on account of strong opposition to it from certain influential and interested quarters, and that the acceptance of the bequest which Mr. D.N. Bahadurji the then Advocate General, had made on behalf of the Executors of the will of the late Seth Gordhandas Sunderdas on the conditions laid down in his letter to the Corporation in 1916, was made possible. In spite of your exalted position, Sir, you have continued to take interest in these institutions as is evident from the ready response you gave to our invitation to perform the unveiling ceremony notwithstanding your multifarious duties. And for this I would like, Sir, to tender once again our warm thanks to you.

Dr R.N. Cooper's Presidential Address on Medical Education (1944–1945)

The VIth Annual Meeting of the Association of the surgeons was held at the K.E. Medical University, Lahore, on the 30th, 31st December 1944, and 1st January 1945 and was, as usual, a great success. Dr R.N. Cooper of Bombay presided and Rai Bahadur Dr G.D. Kapur was the Local Secretary. The formal inauguration of the conference took place in the Lecture Theater attached to the Patiala Block of the Medial College. Dr G.D. Kapur welcomed the members and Sir Bakahi Tek Chand, MA, LLD, declared the conference open.

Presidential Address

I am deeply thankful to you for granting me the privilege to serve this Association of the Surgeons of India at its Sixth Annual Conference in this historic city of Lahore.

The future of Surgery in India is, at all times, the concern of this Association. Let us therefore make more of this Annual Conference than we have done so far. Let us not just meet once a year and discuss a few subjects of technical interest but also put our heads together and plan for the future. A genius may give a lead in any

field of work, but continued progress depends on two essential requisites—wise planning and a well worked out organisation. If India is to find her legitimate place on the Surgical map of the world and regain its pristine glory, we must plan ahead for the development of the science and practice of Surgery. A wise lead was given by Dr Joshi, our President of the last year, when he stressed the importance of a Central Library.

After the war there is going to be a lot of post war reconstruction. England, America, and other countries have some schemes for planning the future of the medical curriculum. A sort of enquiry was recently started by the (Bhore Commission) Government of India eliciting the views of a few individuals about the planning of a basic curriculum of medical studies extending over four years. The idea behind it is to supply sufficiently trained medical men in sufficiently large numbers to this country. Mass production in industry and education are fundamentally different. The implications of such a plan have to be carefully considered. This question is of fundamental importance, and I feel sure that I am voicing your opinion when I state that a hurried and a lightning tour conducted by a Commission without any systematic plan of eliciting the opinion of the profession was not the best way of going about.

After working as a teacher in Surgery for twenty-two years, I feel that our curriculum of medical studies needs complete overhauling, particularly from the standpoint of Surgery and its allied pre-clinical subjects of Anatomy and Physiology. I also feel that the assessment of a student's knowledge of his subject, as ascertained by our examinations, is hardly satisfactory. It should be judged from day-to-day with regard to his capacity for work, originality, and intelligence by his teachers and a confidential record kept. The accumulated reports should be given sufficient weightage at the final examination. In America, at the Johns Hopkins University, fifty percent weightage is given to such a report at the time of graduation. But I am not unconscious of the fact that there are many more teachers and professors there than can be found in our institutions. I wish, however, to concern myself with the question of studies and not the examinations.

Our present curriculum of medical studies is the result of the labors of those who have preceded us, as also those who are our contemporaries. With the best of intentions, the curriculum was mainly based on that of the London University under the direction of the General Medical Council of Great Britain. The curriculum, as originally conceived, was not perfect but was practical and workable. However, those of our friends who guide our destinies in the Universities and the Medical Council of India have been so enthusiastic "to go one better" than the original London plan, that in course of time a curriculum is produced which defeats its own object.

I admit, that if ten medical men were to meet and discuss the question of the medical curriculum, at least twenty different suggestions would be made. Some would like to shorten the pre-admission course, and others would be prepared to do the opposite and add, for instance, Logic as a subject. Some will be for shortening the preclinical

course and simplifying the course in Anatomy and others will wish to add Comparative Anatomy as a definite test. The case will become still more difficult when the relative values of Medicine, Surgery, Midwifery, Pathology, etc., are discussed. There will be a plethora of suggestions. In fact, the permutations and combinations of the resulting suggestions would be bewildering; and each mover of a suggestion would be so convinced of his arguments that minor war may result. However, having imbibed the principle of nonviolence, compromises are accepted. This principle works out somewhat on these lines. A certain stalwart wishes to augment the existing curriculum in a certain subject. He knows that the only way he can carry his argument through, would be to enlist the support of other members by promising his support to them when they stand up to suggest improvements and additions to their favorite subjects. By some such process a Curriculum has been evolved which is overloaded and impractical. It is my honest conviction that no student of ordinary intelligence can hope to encompass the whole curriculum for the final M.B., B.S. examination within the period of time allotted to it and hope to pass the examination at the first attempt taking into consideration the high standards of examination now prevailing. The present curriculum seems to be evolved for the super-student. Even the poor super-student gains width at the expense of depth. The time has come to cry " Halt." The present curriculum needs over hauling with a distinct emphasis on shortening and simplifying it.

A young medico entering general practice can conveniently afford to forget 90 percent of the Surgery, Midwifery, and Ophthalmology that he has learnt. Is it really necessary to compel him to learn these subjects at such length as he is now made to do and also submit him to a grueling test in the bargain? Now that various postgraduate degrees and diplomas are available, a medico who wishes to embark upon the career of a specialist can afford to undergo a real postgraduates training after his graduation.

I have no wish to inflict on you a detailed curriculum, such as I would favor. I would certainly suggest that the teaching in Anatomy and Physiology should be simplified. All unnecessary details about the minute branches and ramifications of an artery or nerve should be omitted except in so far as they may have a bearing on medicine. The examinations as now conducted are just tests of a student's capacity to remember facts. As soon as the examination is over the student soon forgets almost all that he has learn so that his brain should be ready to store some more facts and figures about his future subjects of study. He has to wade through some thousands of pages of printed matter and is so overburdened with lectures that he has no time to think for himself. He is ever ready to quote "so and so" in support of any statement that he makes, but never stops to think or argue for himself. He fails to apply the critical attitude to any statement that he reads in any periodical or a book. For graduate training, the curriculum in Surgery should be so reduced as to constitute just " Basic Surgery."

For the progress of Surgery, we are not so much concerned with the undergraduate as we are with the postgraduate studies.

It is in this direction that I would like this Association to make itself heard to the powers that be. Here, I would like to strike a warning note against copying or imitating the London pattern. Unless we are prepared to change our plans in keeping with the times, we shall never make real progress. For instance, the heyday of Surgery in Vienna has passed. I shall not enter into the causes of its downfall.

Surgery in England and Scotland has for a long time stood on a high pedestal. But failure to recognize the changing trends and a foolish sense of pride in conservatism will lead to the decline of the prestige of British Surgery. This is, however, the Britisher's problem.

America as a go-ahead country has, to my mind, outstripped England in many branches of Surgery. Some of the American centers of medical education are, in my eyes, the veritable Mecca of Surgery. It is to this country that we will have to turn for inspiration and guidance in our future planning. Such a planning should include the consideration of the following points:

1. The provision of facilities for postgraduate study of Surgery with particular emphasis on Anatomy, Physiology, Pathology, and Research.
2. An extension of period of postgraduate study to a minimum of seven years.
3. The provision of graded appointments in every teaching Hospital.
4. The standardisation of hospitals with particular regard to Case-records and Research.
5. The establishment of Staff Meetings.
6. The selection of suitable recruits to Staff appointments.
7. The establishment of a College of Surgeons, a Library, a Research Laboratory and a Museum.

Facilities for postgraduate study in Surgery are lamentably lacking in almost all our Colleges and Hospitals. In most of the institutions a student after his graduation is left to shift for himself. In Bombay in the KEM Hospital we have now organized a course in postgraduate Surgery. Experience will lead us to modify this attempt so that the postgraduate will not only receive a certain amount of coaching but will also be made to think for himself.

The Presidential Address was delivered at the formal inauguration of the VIth Annual Conference of the Association of the Surgeons of India, held at the lecture theater attached to the Patiala Block the K E Medical College, Lahore, 30th December 1944 to 1st January 1945.

Dr Vasant Sheth's Speech at the Farewell Function

Source: GOSUMAG Magazine

Our popular Dean, my worthy colleagues and friends:

I am sure all what you have said about me I do not deserve. Still however, I am overwhelmed by the sentiments expressed by you. I was already feeling choked with the thought of bidding farewell to my Alma Mater after 40 years of total association and 27 years as a Surgeon.

While talking about my reminiscences the first thought that comes to my mind

is to acknowledge my grateful thanks to all the great Deans, who have worked hard and made great sacrifices to create this eminent giant institution. There is no doubt that Seth G.S. Medical College and KEM Hospital is the premier medical institution of our country.

Next my gratitude is due to my great teachers in surgery. I am indebted to all contemporary surgeons from whom I have learnt, but I would like to make a special mention of Drs T. O. Shah, R.N. Cooper, A.V. Baliga and G.M. Phadke, who were the chief architects of our surgical department. The common traits amongst them were patriotism, magnanimity, sportsmanship and dexterity.

T.O. Shah was very practical, exceptionally graceful and a man with soundest commonsense. In Cooper's words, "Surgery came to Dr Shah naturally and so easily, while rest of us had to toil hard to acquire it". He was handsome and immaculate in his dress. He looked much younger for his age and was extraordinarily courteous to the ladies. At every social gathering he received the title of "Evergreen" or "Ladies' man". I was his last House Surgeon in KEM and though prepared for the worst I had an exceptional deal, as I followed a lady house surgeon, Dr Miss Ketty Gilder, during whose term my boss had forgotten his choicest phrases reserved for his male house-surgeons.

Dr R.N. Cooper was a great scholar and a master teacher with a very subtle sense of humor. His strong point was "Eagle's Eyes". There must have been hardly a clinic or lecture by Daddy Cooper which I failed to attend throughout my training period. His ways were very gentle. If anybody talked silly, Daddy Cooper would say "Sonny, it has not been proved and hence you have a chance to prove it by your research".

Dr A.V. Baliga was my idol. He was the best all-rounder we had in KEM His strong point was "A Lion's heart". He was the father of major surgery in KEM, and he certainly was the milestone, between the old hasty indefinite often incomplete surgery and the new deliberate definite complete surgery. To him I certainly owe "the technique of dissection-operation", "Dauntless execution to completion of a difficult job", and "patience during operation". His oft-repeated advice to juniors was "There is ample room at the top, even in Bombay and hence work hard and get there. There is pleasure in the process and hence develop your name and fame bit by bit".

Dr G.M. Phadke and I were like Father and Son. The memories of my association with him for 8 long years, as his assistant, I will cherish throughout my life. He was 'The Gentleman' of KEM compound, very humane, sincere, tolerant and highly cultured. His strong point was "Lady's hand". He was the source of all that is good in me. Our union was accidental but of good omen for the institution, as jointly we boosted KEM surgical practice to a considerable extent in some fields, viz. Surgery of prostate, Inguinal hernia, oesophagus, portal hypertension, lung, pancreas, etc.

It is a matter of great pride for me that the present surgical department of KEM is studded with my jewels and hence it will not be out of place to express a few words of advice to them. Ladies and

Gentlemen, you have opted out to spend your life entirely in KEM and hence jointly you should work, burying your petty differences, towards improving the teaching, research and patient-care in our institution, so that you may derive much greater job satisfaction, which will be a good compensation for your financial sacrifice. There is no royal road to success and hence work hard and progress at least till the age of 50. Remember that you will really understand surgery after the age of 50, howsoever clever you may be. Our results are better than our forefathers, not because we are more dexterous, but ours is a progressive science.

Next, I would like to thank all my colleagues for their kind co-operation throughout my career, my residents for their love, respect and help and my students who were a great stimulus to keep my surgical knowledge abreast.

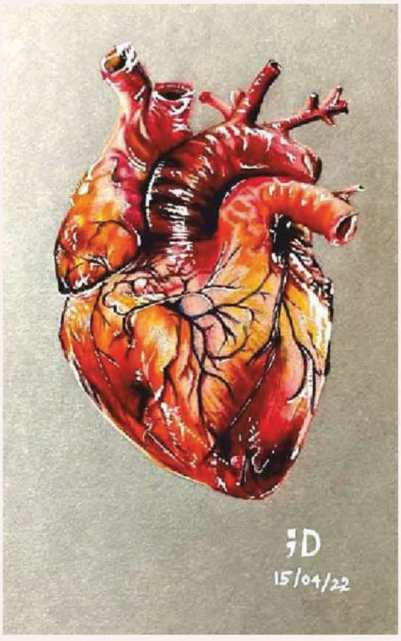
Finally, I would like to thank my wife without whose co-operation and sacrifice I would never have been able to achieve whatever little I have.

With these few words, I would like to wind-up, wishing great glory to my Alma Mater, and good health and happiness to my colleagues and friends.

EXPECTO PATRONUM

Mahira Nawrikar, MBBS-2020

VIBRANT YET DECEPTIVE



Ayanesh Dutta, MBBS-2021

2

Journal Publications

Journal of Post Graduate Medicine

Source: "Fifty years of Journal of Postgraduate Medicine: A journey in time"

By N.J. Gogtay, L. Rajgopal, S.B. Bavdekar, S. Mehta, V.S. Salvi, A. Goel

J Postgrad Med September 2004 Vol 50 Issue 3

The journal itself was truly the brainchild of Dr R.G. Dhayagude, who served as the Dean of the twin institutions from 1945. An academician par excellence, he was not only instrumental in giving the journal its name, but was also responsible for ensuring that the idea did not remain just a concept but actually came into existence. The institutions celebrated their silver jubilee in 1951. Dr Dhayagude helped raise enough money so that a Research Society could be established, which could, in turn, support publishing a quarterly journal. It was, however, unfortunate that Dr Dhayagude, the person who had the vision of an Indian medical college publishing a quality journal and who planned for it and garnered funds for the purpose, was not there to see his dream come true. He died in 1954 and the very first issue of the Journal of Postgraduate Medicine was fittingly dedicated to his memory.

The first issue of the journal was published in the year 1955 with Dr N.M. Purandare, Professor of Pathology, as its Editor. A lot of thought must have gone into the planning of the first issue. It consisted of original research papers, case reports, and reviews. Documentation and illustrations were considered of vital importance. A detailed account of extended abdominovaginal hysterectomy that carried 48 good quality black and white photographs depicting the various steps of the surgical procedure was published in the first volume. It is noteworthy that the subject index and author index were published right from the first volume making referencing easier.

Dissemination of the findings of research carried out in the institutions may have been one of the objectives behind bringing out the journal. However, it was never the journal's policy to exclude other medical writers from the process. Hence, although a majority of articles published in the first few volumes were written by the researchers and staff working in the twin institutions, the doors were open for researchers from other institutions as well. The journal could be credited with another thoughtful feat. Of late, many journals have started the practice of publishing the date of receipt of manuscript to provide an idea to readers about the time lag between submission of manuscript and its ultimate publication. It is noteworthy that this practice, which makes the editing process transparent, was started by the journal within the first few years itself.

Noteworthy features and achievements:

- The first internationally indexed medical journal published by an Indian Medical College
- One of the first few indexed journals published from India
- The first Indian medical journal to have an automated manuscript management system in place
- Appointing an Ombudsman for sorting out disputes: his decisions are binding on the journal
- Over 1500 referees assisting the journal
- Referees provided with links for accessing similar articles in PubMed
- Articles published in JPGM are included in the databases of over 30 indexing agencies and organizations
- Commitment to "Open Access": Full text articles provided free of cost to all through the journal website as well as through Bioline
- International, Canada, and OAI-compliant E-print repository of the University of Toronto
- First journal to provide a CD with each issue (1999)
- All articles published in the journal since 1980 can be viewed on and downloaded from the journal website (www.jpgmonline.com)
- The journal website is constructed as per Open URL, DC Metadata, W3C, and other international standards enabling faster linking, facilitating easier searching and indexing, and allowing uniform browser experience
- The journal website is visited by over 2500 unique visitors every day
- Number of manuscripts received in the year 2003: 438
- Acceptance Rate (2003): 32%
- Mean time from submission to first decision (2003): 26 days
- Mean time period from submission to acceptance (turnaround time, 2003): 62 days
- Mean time period from acceptance to publication (2003): 71 days

As it stands today, the Journal of Postgraduate Medicine [JPGM] (Print ISSN 0022-3859, E-ISSN 0972-2823), is a quarterly peer-reviewed international biomedical journal published under the auspices of the Staff Society of Seth G.S. Medical College and K.E.M. Hospital, Mumbai, India. The journal is published by Wolters Kluwer India Private Limited. The journal does not charge the Authors or Authors' institutions for the submission, processing, and/or publications of manuscripts. JPGM promotes published papers by electronically supplying the records to the National Library of Medicine at the time of online publication, making sure that the citations are retrievable from MEDLINE as early as possible. Similarly, the citations in MEDLINE are cross linked from the official site of MEDLINE to the journal's site, thus the readership of published articles is increased many folds.

The journal is registered with the following abstracting partners: Baidu Scholar, China National Knowledge Infrastructure (CNKI), EBSCO Publishing's Electronic Databases, Ex Libris–Primo Central, Google Scholar, Hinari, Infotrieve, National Science Library, ProQuest, TdNet, and Wanfang Data.

The journal is indexed with, or included in, the following: DOAJ, EMBASE/

Excerpta Medica, Emerging Sources Citation Index, Indian Science Abstracts, IndMed, MEDLINE/Index Medicus, PubMed Central, Scimago Journal Ranking, SCOPUS, Science Citation Index Expanded, and Web of Science.

Currently the journal is in its 70th year of being published. Impact Factor® as reported in the 2022 Journal Citation Reports® (Clarivate Analytics, 2023) has increased to 1.6 (it was 1.566 in 2022 and 1.476 in 2021). Journal of Postgraduate Medicine has an h-index of 62 (it was 59 in 2022), meaning that 62 articles of this journal have more than 62 numbers of citations. The journal's website gets over 25,000 visitors every month. The journal allows open access of its manuscripts (html version) to all viewers. However, access to pdf versions of manuscripts is available only to subscribers.

Indian Journal of Medical Ethics

Source: Appeal to alumni of KEM Hospital and Sethi GS Medical College (KEMH/SGSMC), Mumbai, MH, India" ***by Dr Sunil Pandya***

Dear Friends and Colleagues,

In the last four decades, in addition to many pioneering medical initiatives, the KEMH/SGSMC have also acted as a midwife for an independent and systematic national initiative on medical ethics and bioethics. In 1992, we brought together doctors from KEMH/SGSMC as well as from outside to reflect and make efforts to reform medical profession and its Council. This resulted in the birth of the Indian Journal of Medical Ethics (IJME) in 1993. In its vulnerable infancy and under 5 years stages, IJME was nurtured and nourished by many from the institution. They also helped in the formation of a national professional society of individuals interested in medical ethics and bioethics, Forum for Medical Ethics Society (FMES), which became its publisher. Within a decade it transformed from a small 16-page newsletter type publication to a multi-disciplinary peer-reviewed academic journal of healthcare ethics and humanities. Soon it was indexed in the PubMed, Medline, Scopus, and The Philosophers' Index. At present, it is the only journal of its kind in the South Asia and is well-recognized at the international level.

In the last 31 years of its uninterrupted publishing, the IJME helped create a body of literature (multi-disciplinary research and systematic commentaries/reviews), promoted academic disciplines of bioethics and healthcare humanities, and contributed to the national discussion on ethics. By organizing biannual National Bioethics Conferences (NBCs) since 2005 in different parts of the country, it has also provided a stage for scientific presentations and debates. The IJME has helped in creating a large nucleus of multidisciplinary scholars interested in applied ethics in different institutions across the country.

3

Medical Departments: From Foundation to Future

This section documents the establishment, evolution, and key milestones of the medical departments that shaped the institution through the decades. Every effort has been made to include the available departmental histories. Out of the 44 departments the institution is home to, information regarding their history could only be found for 7. All the departments have a rich history of establishment by the committed founder and have been marching ahead under the leadership of the successors and have been keeping pace with changes in medical science. Each department has progressed in the fields of research and education. All omissions in the record are not deliberate and are regretted.

Department of Dermatology

Source: Excerpts from the official KEM website

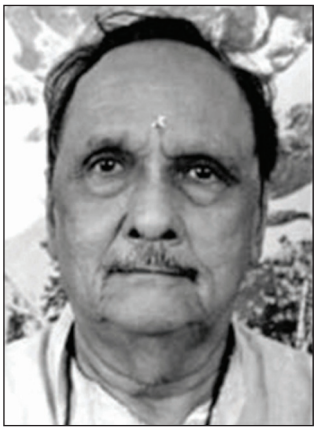
(1939)
Seated in front row from left: Dr George Fernandez, Dr Jospeh Fernandez, Dr A.C. Rebello (4th from left), Dr T.K. Mehta (5th from left).

Establishment and Overview of the Department

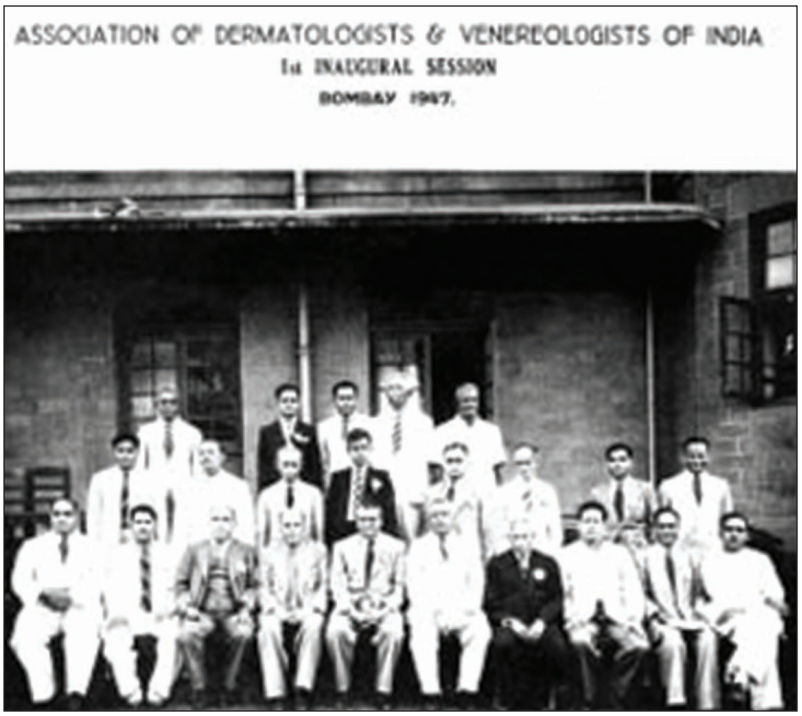
The Department of Dermatology at Seth G.S. Medical College and KEM Hospital was established by Dr A.C. Rebello in 1926, the same year the hospital was founded. Dr Sharat Desai later established first separate Department of Dermatology in KEM hospital. The

Outpatient Department (OPD) is located on the first floor of the main building, directly above the casualty area. The Inpatient Department (IPD), which includes the dermatology wards (Wards 17 and 18), is situated on both, the ground floor and the first floor of the main hospital building.

Since 1926, Seth G.S. Medical College has had positions for an honorary dermatologist and venereologist, as well as an honorary lecturer, with externs assisting in the outpatient department. Due to the increased workload, a resident registrar was appointed in 1930, followed by the appointment of a house physician in 1931. The honorary dermatologist also began delivering lectures and conducting clinical demonstrations during this time. Later, Dr Sharat Desai established the first residency program in Dermatology. He also played a key role in setting up the mycology lab adjacent to the skin OPD, which greatly benefited the department, and initiated dermatopathology at the hospital.



Dr Sharat Desai



On 1st July 1947 Dr U.B. Narayan Rao with Shri Morarji Desai (home and revenue minister) inaugurated Indian Association of Dermatologists, Venereologists and Leprologists (IADVL), Mumbai. Seth G.S. Medical college hosted this inaugural function.

In the 1980s, Dr Rui Fernandez took over as the Head of the Department of Dermatology. He pioneered the initiation of interdepartmental meetings with the Surgery and Medicine departments and introduced specialized dermatology clinics focused on dermatosurgery, vitiligo, pediatric dermatology, acne, and psoriasis to enhance patient care. He was also instrumental in starting hair transplant surgeries within the department.

Dr Rui Fernandez

Dr Pushpa Gupte led the Department of Dermatology from 1996 onwards. She upgraded the mycology lab by introducing laminar airflow for cultures and showed a keen interest in building and maintaining the dermatopathology section. From 1926 to 2002, the department was always headed by an honorary professor.

In 2002, Dr Uday Khopkar joined the department as the first full-time Professor and Head of the Department. He introduced ultraviolet therapy, dermoscopy, and pulse therapy for vesiculobullous disorders, and played a key role in acquiring the department's first laser. Dr Uday Khopkar, along with Dr Vidya Kharkar, founded and guided the Fellowship in Diagnostic Dermatology Course, which began in 2009 and is affiliated with the Maharashtra University of Health Sciences (MUHS), India.

Dr Uday Khopkar

Present Scenario

Dr Vidya Kharkar has been the Head of the Department since 2019. An alumna of the same institute, having completed both her undergraduate and postgraduate studies at Seth G.S. Medical College and KEM Hospital, she is deeply committed to advancing clinical dermatology, particularly in pediatric and geriatric dermatology. Patient education is one of her top priorities, leading her to introduce patient education video series and educational posters. She also initiated non-cultured melanocyte grafting for vitiligo. Additionally, she established the Dr R.J. Fernandez Award for the Best Dermatology Resident, which has been awarded since 2020.

Dr Sunanda Mahajan started revolutionary treatments like Fat Transplant and Intralesional Radiofrequency along with Dr Tejas Vishwanath in 2023. In 2006, Dr Siddhi Chikhalkar started platelet-rich plasma treatment and innovative treatment injectable platelet rich fibrin in 2021.These procedures have shown significant benefits in treating hair loss. She is also a pioneer in starting dedicated special clinics in the field of Cosmetology

and HAIR. Dr Prachi Gole has been instrumental in starting hair transplants in the department.

Department of Neurosurgery

Source:

1. *http://www.neurologyindia.com*
2, *Excerpts from Neurol India 2017; 65: 836-49*

By Pandya S, Goel A.

Neurosurgery Before the Establishment of the Department

Early Neurosurgery Operations in KEM Hospital (1925–1957)

Neurosurgical operations were attempted by some senior surgeons even before the formation of a specialized department and almost from the inception of the hospital in 1925. (Ginde 1954) Drs A.P. Bacha, G.V. Deshmukh, Rustom N. Cooper, A.V. Baliga, and Arthur DeSa had performed surgery upon tumors in the brain and spinal cord but these were sporadic operations. (Ginde 1954, 1998) Dr Rustom Cooper was Dr Ginde's mentor.

Dr Ginde (1954) points out that 'the development of cranial surgery, fascinating as it is, was met with many difficulties. For quite a long time, therefore, it attracted only the stout-hearted members of the staff, viz. the late Dr A.P. Bacha and the veteran Dr G.V. Deshmukh. The late Dr Bacha operated in 1927 and again in 1929 for suspected brain tumors. In the first case, the biopsy proved it to be a glioma which was confirmed at autopsy, and in the second case, a suboccipital decompression was done and a tuberculoma was demonstrated at autopsy. The hospital records show that after an apparent decompression for a suspected brain tumor by Dr Deshmukh in 1930, the patient lived for 16 days and the diagnosis of a meningioma was confirmed at autopsy. Dr Ginde concluded this section of his description by stating, 'Stray attempts have been made from time to time but unfortunately, they all ended alike. Trepanation for depressed fractures, blood clots, etc. were not so disappointing.' Drs Cooper and Ginde had also studied the effects of head injuries on the blood pressure of dogs. (Cooper 1946)

Dr A.V. Baliga successfully treated trigeminal neuralgia surgically in 1940 and inserted the first tantalum plate for cranioplasty in 1950. Dr R.N. Cooper performed the first prefrontal leukotomy in 1945 using the route described by Freeman and Watts.

Dr Bacha successfully removed an intraspinal chondroma from the lower thoracic region of a school teacher in 1935. The localisation having been made by air myelography, Drs Cooper and Ginde removed the first spinal cord tumor in 1940. Drs Cooper and Ginde performed laminectomy for prolapsed lumbar disc at L2-3 in 1945. The disc contents were excised through the transdural approach. Dr Arthur DeSa removed a disc through a hemilaminectomy in 1946. He reported on series of 7 tuberculomas. In the same year, Dr Baliga analyzed 59 proven brain tumors from the hospital records, 16 of them having been accidentally discovered at autopsy. In his personal series of 19 patients, 6 survived surgery. Although he was disappointed by his results, he presented them, emphasizing the need for improved techniques and perseverance (Baliga 1949).

Dr Cooper published papers on head injuries (1946), tumors of spinal cord (1948), and brain (1949). Dr Homi Dastur recalls Dr Cooper's lectures on pathology and surgery, which stood him in good stead when he appeared for his primary examination for the F.R.C.S.

The Times of India (21 May 1964) recalled Dr Baliga's services to poor patients:

'Specializing in thoracic surgery and neurosurgery, he was sought by the highest, but his compassion and generosity were such that he almost became known as the poor man's surgeon…' (Anonymous 1964).

Dr Baliga was responsible for getting Dr Dastur to rejoin his *alma mater*.

Establishment of the Department and its Pioneers

Dr Ram G. Ginde

Full-fledged neurosurgery at the KEM Hospital had to await the return of Dr Ram G. Ginde from Montreal. Dr Ginde made an attempt to set up a Department of Neurosurgery and he was well suited for this task. He had been a student and resident surgeon under such giants as Dr Rustom N. Cooper. He was trained in neurosurgery by Dr Wilder Penfield and Dr William Cone at Montreal Neurological Institute. He was a fine clinician and had returned to his *alma mater* with hopes that were, unfortunately, frustrated.

In his essay (1989), Dr Ginde noted, 'In Bombay, neurosurgical work was started from the beginning of 1951, again as part of general surgery. More than 80% of the allotted 25 beds were occupied by neurosurgical cases within the first 6 months. After a considerable struggle, a separate and independent department of neurology and neurosurgery was opened in the fall of 1953… with… an independent

Front row, fom the left: Dr. Mrs. Pilloo Bharucha, Dr. Ram Ginde, Sir Geoffrey Jefferson, Lady Jefferson, Dr. V. P. Mondkar, Mrs. Ginde, ??
Rear row, from the left: Dr. Eddie P. Bharucha, Dr. Vijay Daftary, ??, ??, Dr. Sheriar J. Irani, Dr. Noshir H. Wadia, Dr. Anil D. Desai

operation theater… In spite of increasing amount of work that was being done under very trying circumstances the Department of Neurosurgery was … closed about the middle of 1956…'

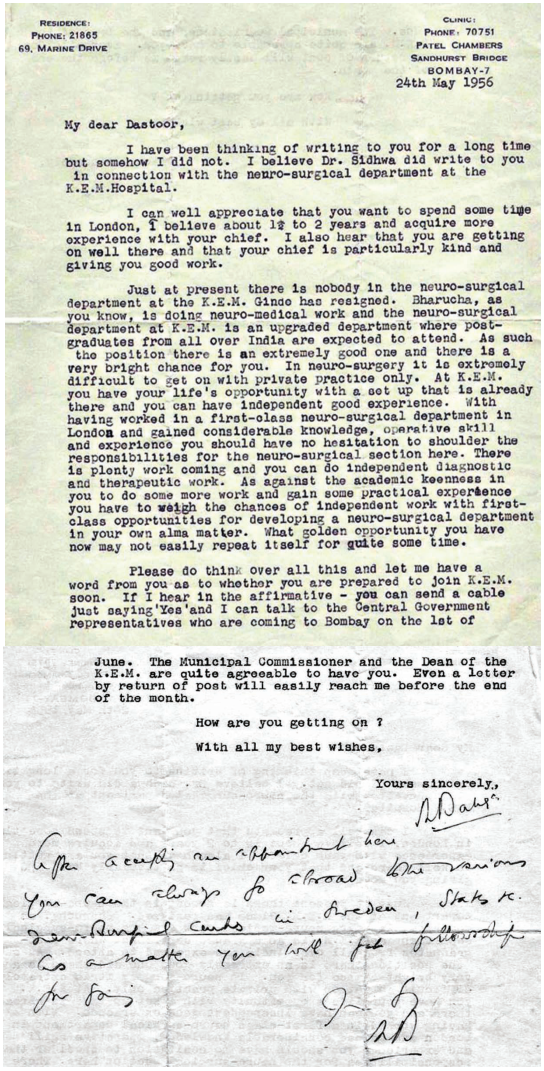
In 1954, Ginde had reported 813 neurosurgery operations between 1926 and 1953, 707 of which were classified as major. 482 of these were cranial, of which 84 were on tumors. In his own series at the KEM Hospital, Dr Ginde had a mortality rate of 13.8% in 132 major procedures.

The Municipal Corporation of Bombay, never famed for its far-sightedness, could not see its way to meeting Dr Ginde's requirements as regards income and he left, eventually setting up the departments of neurosurgery at Breach Candy and Bombay Hospitals.

Dr Ginde also deserves renown as the first historian on the development of neurosciences in Bombay and in India. Among many other honors, Dr Ginde was elected President of the Neurological Society of India. His departure left a void. The department he had tried to establish lay in the doldrums.

Dr Homi M. Dastur

Dr A.V. Baliga used his position as Acting Dean to call upon his pupil, Dr Homi Dastur, then working with Mr. (later Sir) Wylie McKissock at Atkinson Morley's Hospital. His simple plea highlighting the plight of patients needing neurosurgery at the KEM Hospital was effective.



RESIDENCE:
PHONE: 21865
69, MARINE DRIVE

CLINIC:
PHONE: 70751
PATEL CHAMBERS
SANDHURST BRIDGE
BOMBAY-7

24th May 1956

My dear Dastoor,

I have been thinking of writing to you for a long time but somehow I did not. I believe Dr. Sidhwa did write to you in connection with the neuro-surgical department at the K.E.M.Hospital.

I can well appreciate that you want to spend some time in London, I believe about 1½ to 2 years and acquire more experience with your chief. I also hear that you are getting on well there and that your chief is particularly kind and giving you good work.

Just at present there is nobody in the neuro-surgical department at the K.E.M. Ginde has resigned. Bharucha, as you know, is doing neuro-medical work and the neuro-surgical department at K.E.M. is an upgraded department where post-graduates from all over India are expected to attend. As such the position there is an extremely good one and there is a very bright chance for you. In neuro-surgery it is extremely difficult to get on with private practice only. At K.E.M. you have your life's opportunity with a set up that is already there and you can have independent good experience. With having worked in a first-class neuro-surgical department in London and gained considerable knowledge, operative skill and experience you should have no hesitation to shoulder the responsibilities for the neuro-surgical section here. There is plenty work coming and you can do independent diagnostic and therapeutic work. As against the academic keenness in you to do some more work and gain some practical experience you have to weigh the chances of independent work with first-class opportunities for developing a neuro-surgical department in your own alma matter. What golden opportunity you have now may not easily repeat itself for quite some time.

Please do think over all this and let me have a word from you as to whether you are prepared to join K.E.M. soon. If I hear in the affirmative - you can send a cable just saying 'Yes' and I can talk to the Central Government representatives who are coming to Bombay on the 1st of June. The Municipal Commissioner and the Dean of the K.E.M. are quite agreeable to have you. Even a letter by return of post will easily reach me before the end of the month.

How are you getting on ?

With all my best wishes,

Yours sincerely,

Letter sent to Dr Dastur by Dr A. V. Baliga

Dr Dastur joined his *alma mater* as a neurosurgeon in 1957 although Mr. McKissock had offered him a teaching

appointment on his own staff. The Department of Neurosurgery effectively dates to his return and can be deemed to have started in October that year.

In his postscript, Dr Baliga had assured Dr Dastur that he could 'always go abroad to the various neurosurgical centers in Sweden, States etc.' but the next Dean and the Municipal Corporation did not end up honoring this commitment.

Overcoming Early Challenges

Worse, despite a separate theater having been provided to Dr Ginde earlier, Dr Dastur was not provided an operation theater and had to use general theaters *after the surgeons had completed all their operations*. As always, the general surgeons scheduled their septic procedures at the end of their lists. As their operations concluded around 4 p.m., Dr Dastur had to start cleaning and sterilizing the theaters then and could start his own operations only around 6 p.m. every day. He told us of having to perform emergency burr holes to relieve life-threatening intracranial pressure in the corridors outside the operation theaters.

Eventually, he was permitted to share the operation theaters used by the plastic surgeons – a great improvement over those used by general surgeons as asepsis was meticulously observed here all the time.

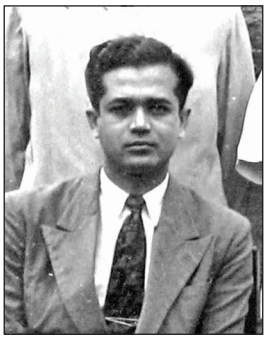
He was granted his own suite of operation theaters only around 1967. He soon developed two inter-connected theaters and equipped them with lights, machines, instruments, and other equipment needed for neurosurgery.

Development of Neuroradiology

The Radiology Department of the hospital was engrossed in its own work and that of departments such as cardiac surgery. Utilizing the expertise he had gained from Mr. McKissock and Dr James Bull, Dr Dastur set up his own Neuroradiology unit, obtaining a 90-90 tilting table for myelography, and a Schoenander skull unit for cranial radiology. To the latter machine, he added the rapid film changer invented by George Schoenander in 1946. As younger readers may be unaware of this unit, I quote from a review: 'The rapid film changer is a box which allowed a series of cassettes to be exposed at a fast rate (the so-called movie rate) of two cassettes per second. The technique was later improved in 1953 to allow the exposure of up to six cassettes per second. This allowed many films to be exposed in quick successions, so it was no longer necessary for physicians to stare directly at X-rays' (Eze et al 2012). Angiography through carotid and vertebral arteries was then performed through percutaneous punctures of these arterial trunks in the neck.

The myelography table had a single X-ray tube, making it necessary to change its position from the anteroposterior to lateral view for each set of exposures. Images were viewed on a fluoroscopy screen before deciding on those to be recorded on film. It was only in 1969 that Pribram et al devised the biplane unit along with an image-intensifier.

Dr Anil D. Desai



The path-breaking appointment of Dr Anil D. Desai as consultant neurologist in the department not only ensured that Dr Desai could help out with the clinical care of patients in the department but also enabled him to embark on his studies on epilepsy and diseases of muscle.

Stereotaxic Surgery

Dr Homi Dastur started stereotaxic surgery in 1959. He used the free-hand technique at the start. Inspired by the efforts of Dr Narabayashi, Dr Desai traveled to Japan in 1962 to learn from the master. On his return he fabricated Dr Narabayashi's apparatus in Bombay. He also developed the technique for making and coating the electrodes needed for deep brain stimulation, collaborating with experts at the Institute of Technology, Bombay, for the purpose. Stereotaxy was now performed using this instrument.

New Equipment

- In 1970, Dr Dastur obtained an echo-encephalography unit for the department as a donation from the Lions Club. Detection of the third ventricular echoes helped determine whether disease lay in the right or left cerebrum.
- The cryosurgery brain probe and associated equipment were also obtained and used in the operation theaters to freeze vascular intracranial tumors before removing them. Both these were used here for the first time in Bombay.
- An ethylene oxide sterilizer was purchased and several items used in the operation theater were sterilized using this dry technique.

Setting New Standards

Dr Dastur broke several traditions. He insisted on having daily sessions in the outpatient department even though this meant increasing his own workload. When administrative protests met this proposal, as all other departments had their outpatient clinics just once a week, he showed how many of his patients traveled long distances, at times hundreds of kilometers, to come to the hospital. When they did reach it, they were often in precarious states with severely raised intracranial pressure or severe compression of the spinal cord. If made to wait till the next weekly outpatient clinic, they would either die or be rendered paraplegic. And so, his request was granted.

He asked for and obtained a steno-typist for the department so that proper records could be maintained. Every doctor referring a patient to the department was sent a detailed reply when the patient was ready to go home, describing the clinical diagnosis, findings on tests and at surgery and recommending further treatment after the patient returned to his doctor. This resulted in a growing band of general practitioners and consultants

in Maharashtra, Gujarat, Goa, Madhya Pradesh, Andhra Pradesh, and Rajasthan referring a steady stream of patients to him.

Medical Records

Drs Dastur and Desai set up a system of medical records unrivaled in the country even today. Using a simple system of indexed annual registers linked to typed case records and X-ray folders, they made it possible for anyone to pull these out within minutes of the patient coming to the department even decades after their first attendance. When you recall that this was in the days when computers were not even a distant dream and that even today this system continues to prove its worth, you will get a sense of this achievement. All case notes, histology, and other reports (and the autopsy notes of inpatients who died in the hospital) were bound together in volumes each year. X-ray folders were arranged by year in separate cupboards.

Innovations

Younger readers may find it of interest that almost up to the 1970s we had no access to much that is taken for granted today.

Pre-sterilized and packaged gloves were extremely expensive and difficult to obtain. As with other departments in the hospital, we used latex gloves that were sterilized in our theater autoclaves. After use, they were carefully washed, powdered, placed in hand-made paper envelopes and re-sterilized. This reuse continued till they gave way. Unfortunately, repeated exposure to heat damaged the rubber and they perished after just a few uses.

In 1974, the Bhabha Atomic Energy Research Center (BARC) in Trombay set up ISOMED, its gamma ray sterilization facility, and offered to help us out. We were quick to seize this opportunity and started off with latex gloves. This increased the life span of these gloves considerably and reduced expenses on their purchase. We then progressed to other items. Gauze pieces were cut, folded and earlier packed in large drums for autoclaving. This meant that once a drum was opened, the unused gauze pieces had to be re-sterilized. We now sealed just the requisite number of gauze pieces for an operation in a plastic pack and sent these packs for gamma irradiation. Still later, we added packets of lyophilized dura. Large cardboard cartons traveled to and fro Trombay each week with items needed in our theaters, easing the burdens on our theater sisters and other workers.

The various hand washes, betadine liquid and other bottled chemicals used in pre-operative preparation of the skin were not even dreamt of in the 1950s and remained unavailable for three more decades. We used toilet soap to scrub up. The operation theater sister would slice each cake of toilet soap into two and place just one half for use as the entire cake was often spirited away by theater servants for use at home!

The skin at the site of surgery was sterilized as follows:

Ether was used to take away the grease and grime. Tincture iodine was then used to paint the skin. All residents were taught that iodine takes time to disinfect the skin. They were asked to await evaporation of the ethanol in which potassium iodide had been dissolved. The end point was

identified by a change from the shiny fluid applied to the skin to a dull coat of powder. Methylated spirit (colored by gentian violet) was then used to wipe the iodine away. The spirit was colored to dissuade theater servants who might otherwise consider drinking it. Sterile drapes were now applied. The rate of infection using these simple, inexpensive substances was no higher than it is with the very expensive materials considered *de riguer* today.

Cerebrospinal fluid shunts to drain fluid away from the ventricles in patients with hydrocephalus were unavailable in the 1950s and 60s. Those manufactured abroad were too expensive for our patients. In February 1970, *Journal of Neurosurgery* carried a technical note on a new shunt manufactured by Denver Biomaterials Inc. in Denver Colorado. Dr Dastur wrote to the company, explaining our plight. We were offered these shunts at a concessional rate. At last, we were able to offer satisfactory treatment to our hydrocephalic patients. Within a few months we noted a problem. Many of our babies were severely under-nourished with very thin scalps over the tense, enlarged skull. The round shunt chamber ulcerated through the temporal scalp. We consulted Dr C.V. Mehendale, our consultant plastic surgeon. He devised a scalp flap under which the chamber was placed. Since the scalp was raised by the chamber, there was a lateral raw area. This was filled in using a split skin graft.

Whilst this solved our problem, we remained dissatisfied. Photographs of the scalp being ulcerated by the shunt were sent to Denver Biomaterials with a request for the manufacture of a shunt chamber with a lower, semicircular profile. They were prompt in acceding to our request and sent us a few shunts with flat-bottomed chambers. These did not cause any ulceration and were then used routinely in our babies.

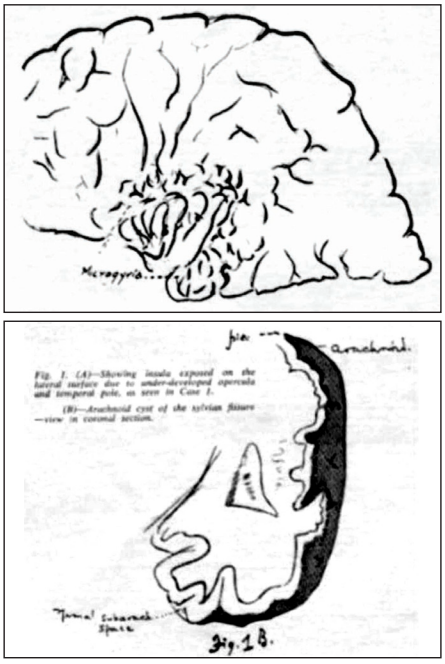
The first Indian shunts were devised and produced in 1969 by Dr Purushottam Upadhyaya, Professor of Pediatric Surgery at the All India Institute of Medical Sciences in New Delhi. Since they were hand-made, the numbers available were small and initially made available only to his parent institute.

Clinical Research

From the inception of his department, Dr Dastur had insisted on making strenuous efforts at obtaining an autopsy on every patient who died in the department. The Coroner's Act of 1871 (modified in 1956) in Bombay helped in this endeavor. It made autopsies mandatory when a death was due to an unnatural cause. Surgery was an unnatural cause. As a consequence, we averaged over 90% autopsies on patients dying in our wards. This was a very important source for learning the natural course of disease and identifying faulty diagnosis or treatment. Our neuropathologists, Dr Ilona Bubelis, Dr D.H. Deshpande, Dr A.P. Desai, and their successors, studied the nervous system in our patients diligently. The brain and, where necessary, the spinal cord, were carefully preserved in formaldehyde. At the weekly 'brain cutting sessions', staff members from our department together with those from the departments of neurology and radiology gathered in the neuropathology office. Clinical features, radiological findings, diagnosis, details of surgery were discussed in detail before

the brain was unveiled and carefully sectioned. The histological findings in the patients studied the previous week were demonstrated the next week.

Dr Dastur's principal contributions to Indian neurosurgery were in the fields of craniovertebral anomalies (1964), apoplexy in pituitary tumors (1971), tuberculomas (1965, 1968, 1972), tuberculous meningitis (1972), and fungal diseases in the brain (1966, 1975). He reported what appears to have been the first case of cystic cerebral tuberculoma (1962). He also described extradural spinal arachnoid cysts (1963), diffuse cerebellar hypertrophy (1966, 1975), spinal epidural hemorrhage (1966), epidermoid tumors of the central nervous system (1968), ectopic pinealoma with diffuse meningeal spread (1968), and primary melanoma of the leptomeninges (1970).



Drawings by Dr Dastur to illustrate paper on arachnoid cysts in the brain (Dastur, Mukherji 1962).

Dr Dastur also initiated what we now term endovascular interventional therapy when he embolized carotico-cavernous fistulae by floating small pieces of muscle through an opening in the cervical carotid artery. Silk thread was tied to the muscle piece before it was inserted into the artery so that it could be rapidly pulled out if an untoward finding was noted. When properly placed with disappearance of the bruit and ocular pulsation, the silk thread was divided and the opening in the carotid artery closed. During the initial procedures he sought the help of Dr Sharad Panday, our cardiovascular surgeon.

Journal: Neurology India

Whilst Dr Anil Desai was editor of *Neurology India,* he often expressed gratitude for the help rendered by Dr Dastur. Each reference quoted in every paper accepted for publication was checked in the library for accuracy of title, authors, year of publication, volume number, and page numbers. In the absence of facilities we now take for granted, such meticulousness meant spending hours each day in the library, hunting for the original publications.

Dr Dastur honored by Dr Madjid Samii, Dr Atul Goel, Dr Trimurti Nadkarni, Dr A.K. Mahapatra, and Dr Deepu Banerji.

Dr Dastur with the team at the KEM Hospital.
Seated from the left: Dr Trimurti Nadkarni, Dr Sunil Pandya, Dr Homi Dastur, Dr Ranjit Nagpal, D. Anil Karapurkar, Dr Atul Goel, and Dr Aadil Chagla.

Dr Dastur headed the department from 1957 to 1974 when growing needs of his family forced him to move to the private sector at Jaslok Hospital. As Emeritus Professor at both Seth G. S. Medical College and Jaslok Hospital, he is now enjoying his richly deserved retirement.

The Department after Dr Dastur's Retirement (1974-Present)

Organisation of the department

Dr Dastur's immediate successors, Drs Ranjit Nagpal, Anil Karapurkar, and Sunil Pandya, were blessed by the inheritance of a department that they were proud of. Patient care of the highest possible standard was the top priority. Next came the training of resident surgeons in the department and elsewhere in the hospital and last, but not the least, was simple, clinico-radiological-pathological research. Everything needed for these three purposes was in place. The outpatients' clinic was next to the neurosurgery office with Ward 10 for male patients, Ward 33 for women and children, the neuroradiology unit and the operation theaters within easy reach. It was a matter of a minute or so for any staff member to move from one section to another when required. The department had its own comprehensive library with journals and volumes on every aspect of the neurosciences from history to the latest developments. This library was later enriched by the addition of books and reprints from Dr Ginde's personal library, gifted by his son, Vijay.

Development of Procedures

Lyophilized dura

Thanks to the courtesy of the late Dr Manohar Keswani, consultant plastic surgeon at the nearby Bai Jerbai Wadia Children's Hospital, we were able to prepare our own lyophilized dura in the late 1970s. We were thus able to use lyophilized dura in our patients at around the same time that Macfarlane and Symon

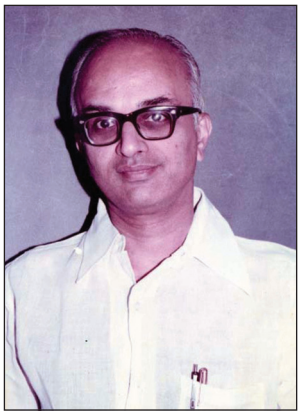
did at Queen Square. They wrote about their experiences in *Journal of Neurology, Neurosurgery and Psychiatry* (1979; 42:854–858).

Sterile bone grafts

Dr Ralph Cloward established his bone bank at the Queen's Hospital, Honolulu, Hawaii in 1946. Dr Gajendra Sinh invited Dr Cloward to demonstrate his spinal operations at Jaslok Hospital and later visited his center in Honolulu. On his return, he set up the first bone bank in Bombay. We obtained bone harvested from the iliac bones at autopsy at KEM Hospital and got it processed in Dr Gajendra Sinh's bank. We thus had access, free of cost, to a variety of sterile bone grafts for use in the skull (to repair bone defects) and in the spine (for fusions).

The Tata Memorial Hospital, in our neighborhood, set up its tissue bank in 1988. We collaborated with it, supplying harvested tissues from our autopsy room and obtaining sterile lyophilized dura and preserved bone from it at no cost.

Dr Sunil Pandya



His neurosurgical training was under the guidance of Dr Gajendra Sinh at their *alma mater* – the JJ Hospital. Wishing to pursue a full-time career in neurosurgery, he then moved to the KEM Hospital, where Dr Homi Dastur took him under his wings.

Dr Dastur facilitated the award of a Commonwealth Scholarship to Dr Pandya. This enabled him to spend a year with Mr. Valentine Logue, Mr. Lindsay Symon, and Dr George Du Boulay at the Institute of Neurology at Queen Square, and Drs Kenneth Till and Norman Grant at the Great Ormond Street Hospital for Sick Children in London. Mr. Logue made it possible for him to visit Mr. John Hankinson, Mr. Laurence P. Lassman and Mr. Robin P. Sengupta at the Newcastle General Hospital; Mr. Bryan Jennett and Mr. Graham Teasdale at the Southern General Hospital in Glasgow and Mr. Huw Griffith at Frenchay Hospital in Bristol.

Steps taken from 1974 to obtain the Neurodiagnost® X-ray unit by Philips bore fruit in 1978. It was a major expense for the Municipal Corporation but the facilities for tomography (during studies on the craniovertebral anomalies, ventriculography, pneumoencephalography, and whilst performing air studies on the spinal cord) were unparalleled. The image intensifier showed us events in real time and we could now take several images per second, if needed. The chair in which the patient was made to sit, at times under anesthesia, could be electrically rotated and tilted to facilitate entry of air into the part of the ventricular system that we wished to study. The unchanging focus of the X-ray beam with reference to the head, regardless of the position of the trunk of the patient and

precision of these movements yielded very useful images. We later used this machine for catheter angiography and interventional radiology, freeing up the 90-90 table for spinal studies.

At the same time, the department acquired OPMI 1 (Zeiss) as a donation by the Consulate of West Germany. Later, with the help of Dr C.K. Deshpande, Dean, Seth G.S. Medical College, OPMI 6 was obtained using funds from the Municipal Corporation of Greater Bombay.

Microneurosurgery in the department received a big boost when, in 1979, Drs H.W. Pia and Ernst Grote of the University of Giessen, Germany, conducted a workshop on microneurosurgery in our department. The surgery of aneurysms, arteriovenous malformations and intracranial tumors admixed with cranial nerves and important blood vessels was now possible with greater accuracy and safety.

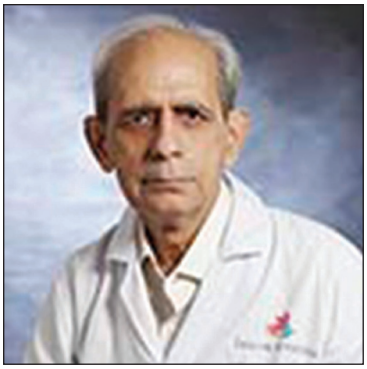
Drs Pandya and Nagpal followed the lead given by Dr Dastur in the use of therapeutic arterial embolization. Dr Anil Karapurkar advanced these early efforts to develop interventional neuroradiology of international standards in India.

Reviews of atlanto-axial dislocations (1972), congenital fourth ventricular blocks (1974) and of intracranial neoplasms in patients between the ages of 0 and 2 years (1989); pleas for conservative treatment of intracranial tuberculomas (1982) and for prolonged treatment of tuberculous meningitis (1987) and the description of an operation on the pons for a tuberculoma that had developed caseative necrosis (1978) may provide some material for future historians in India.

Collaboration with Drs B.K. Bachhawat and Nilima Kshirsagar resulted in the production of indigenous liposomal amphotericin. Dr Kshirsagar and her colleagues in the Clinical Pharmacology Department of the Seth G.S. Medical College developed the formulation under strict aseptic conditions. It has been patented and is now being manufactured in India (Kshirsagar, Pandya 2005).

On his retirement on superannuation, Dr Pandya joined the Jaslok Hospital & Research Center, where he continues to work. The staff members and gallant band of resident doctors in this department served its patients with sincerity and devotion and most have gone on to work wonders under difficult circumstances.

Dr Ranjit Nagpal



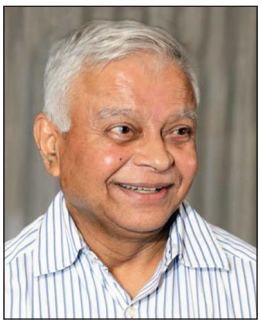
Dr Nagpal trained under Dr Homi Dastur at their *alma mater* and was the first to obtain the M.Ch. in neurosurgery from the University of Bombay. He joined Dr Dastur as Lecturer in Neurosurgery and retired as Professor in 1995. He has, since, worked as Consultant Neurosurgeon in Jaslok Hospital & Research Center.

During his visit to the department, Dr H.W. Pia was impressed by his

competence and his silent, hard work and invited him to spend some time in his department in Giessen, and helped him obtain a grant from the Deutsche Akademischer Austausdienst (DAAD – the German Academic Exchange Service) for the purpose. The months spent in Giessen, Munich, Wurzbirg, and at Queen Square in 1978–1979 enriched his capabilities and enabled him to perform operations such as trans-nasal excision of pituitary tumors and anastomoses between the superficial temporal and middle cerebral arterial branches that were not possible in our department earlier. On his return, he was the first in Bombay to practice such operations successfully. Consequently, Dr Pia invited him to contribute a chapter in his book on spontaneous intracerebral hematomas (Nagpal 1980).

Dr Ranjit Nagpal rapidly gained expertise in surgery on tumors in the pituitary gland and in the cerebellopontine angle and in the management of intracranial venous thrombosis (Nagpal 1983). He also helped in the early stages of the development of therapeutic embolization on intracranial tumors. He also described our experiences with cerebral gumma (1979), surgery on syringomyelia (1982), brainstem tumors (1983), and craniopharyngiomas (1992).

Dr Anil Karapurkar



After training in neurosurgery with Dr Homi Dastur, he joined the department and rose from the post of lecturer to professor. His initial special interest was in craniostenosis and he worked from 1982 onwards with Dr K.S. Goleria, our Honorary Plastic Surgery to help children with severe increase in intraorbital and intracranial pressure. The shift to operations that incorporated the advancement of a low frontal bony bar including the upper orbital rims and roofs was a major advance.

Dr Karapurkar was also drawn to selective angiography and therapeutic embolization. Dr M. Tayabali, consultant radiologist at Breach Candy Hospital, with expertise in selective angiography, provided a boost to our neuroradiology work. He volunteered once a week and taught each of us the technique of femoral arterial catheterization.

Dr Karapurkar developed super-selective catheterization of individual branches of the carotid and basilar arteries. He then studied the intercostal and lumbar arteries to delineate spinal arteriovenous malformations and their components. He introduced balloon catheters and progressively sophisticated forms of embolization of tumor feeders and arterioles feeding the niduses of arteriovenous malformations. The obliteration of intracranial aneurysms through the femoral artery followed.

Progressive involvement in catheter angiography of the brain and spinal cord and training with Dr Luc Picard in France

resulted in his conducting workshops on interventional neuroradiology along with Dr Picard and later, with Dr Jacques Moret, in our department in 1982, 1985, and 1989. His subsequent work on enabling other centers in India to develop this specialty is well-known.

Dr Karapurkar has written on the surgery of craniostenosis and endovascular therapy of aneurysms, arteriovenous malformations, and occlusive arterial disease. He left the department to head the interventional neuroradiology department at Apollo Indraprastha Hospital in New Delhi. Currently, he is back in Mumbai and works principally at the Breach Candy Hospital. He is a respected guest speaker at almost every neurological meeting in India.

Dr Atul Goel

Dr Goel discussing a patient with an overseas student.

Dr Goel joined the department as lecturer and rose to become the Head of the Department in 1998. Even before he was appointed lecturer, he had embarked on studies on craniovertebral anatomy and experimental surgery in collaboration with Dr V.J. Lahiri of the Department of Orthopaedics in B.Y.L. Nair Hospital. These studies blossomed after he became the Head of the department and have resulted in a journal —*Journal of Craniovertebral Junction and Spine,* first published in 2009, and a book (2011).

He travelled to Pittsburgh to work with Dr Peter Janetta and his colleagues, which was the start of his work on surgery on lesions along the base of the skull. His bibliography outstrips that of almost every contemporary Indian neurosurgeon and rivals that of such masters as Drs B. Ramamurthi and Prakash Tandon. His partnership with Dr Manu L. Kothari in the Department of Anatomy resulted in joint editorials and publications on teleology, developmental anatomy, and unconventional ideas on the structure and function of cerebrospinal fluid, meninges and intervertebral disks. They also wrote a paper on ethics in neurosurgery found in the *Journal of Postgraduate Medicine* and *Neurology India*.

Even before he headed the department he had started a microneurosurgery laboratory in a small room in Ward 33 that attracted students from all over India and countries abroad. His encouragement led Dr Aadil Chagla to specialize in the treatment of intracranial aneurysms, Dr Bhatjiwale in stereotaxic surgery, Dr Trimurti Nadkarni in encephalo-myo-synangiogenesis and the treatment of moya moya disease, Dr Muzumdar in the surgery of epilepsy, and Dr Ketan Desai in peripheral nerve repair. Along with Dr Devkumar Sahu, he turned an almost moribund *Journal of Postgraduate Medicine (JPGM)* – the scientific organ of Seth G.S. Medical College and K.E.M. Hospital

– into a nationally and internationally respected publication.

Dr Goel is now on the editorial boards of several prestigious international neurosurgery journals and is a much sought after speaker at international neurosurgery conferences, and an honored guest member of several neurosurgery societies, especially in Japan. Recognition of Dr Goel's abilities by such awards as Dr B.C. Roy award, Mrs. Shakuntala Devi Amirchand Prize, and the award of honor by the Mayor of Mumbai has only spurred him on to greater effort.

Some Vignettes

Staff members in the department have always had excellent colleagues– anesthetists, neuropathologists, residents, nurses, physiotherapists, occupational therapists, social workers, technicians, and other staff.

The wife of a senior and respected lawyer provided an example of the ethos of the department:

A Parsi gentleman had coaxed his wife to attend our hospital for severe sciatic pain and when it was time for the patient to go home, she requested a personal chat. She told us of the high stratum of society in which she lived and her husband worked and her disappointing experience at a large and reputed private hospital. Cherishing her experience at K.E.M., she said, "In K.E.M. Hospital, the consultants and resident doctors have lavished care on me and the nurses have attended to every need. As I leave you I am humbled and am very grateful for all that has been done for me – and that too at no cost!"

Researchers from FMR-FRCH during their study on costs and quality of neurological care in the public sector chose our department as representative of the public sector. Their report was illuminating and is worthy of study. It stands as an outstanding testimony of the standards set up by Drs Dastur and Desai. The gallant band of resident doctors in this department served its patients with sincerity and devotion and most have gone on to work wonders under difficult circumstances. Surat, Nagpur, Poona, Kolhapur, Raipur, Bhopal, Panjim, Ahmedabad, Aurangabad… are just some of the places (apart from Mumbai) where they have kept the flag unfurled by Dr Dastur flying.

Department of Pediatric Sugery

Source: Excerpts from Souvenir published at the time of Golden Jubilee Celebration of the Foundation of the Department (2017)

A child is not a miniature adult —It was this realization and an interest in improving the then dismal outcomes of children undergoing surgery that led to the separation of Pediatric Surgery from General Surgery. At that time, in the 1960s, this was certainly a very challenging job. Creation of an entire department from scratch, and building up a complete floor, with a totally self-sufficient super-specialty, to establishment of an MCI-recognized postgraduate course in pediatric surgery, was no small achievement. For this remarkable feat, we all have Dr R.K. Gandhi and Dr S.S. Deshmukh to thank.

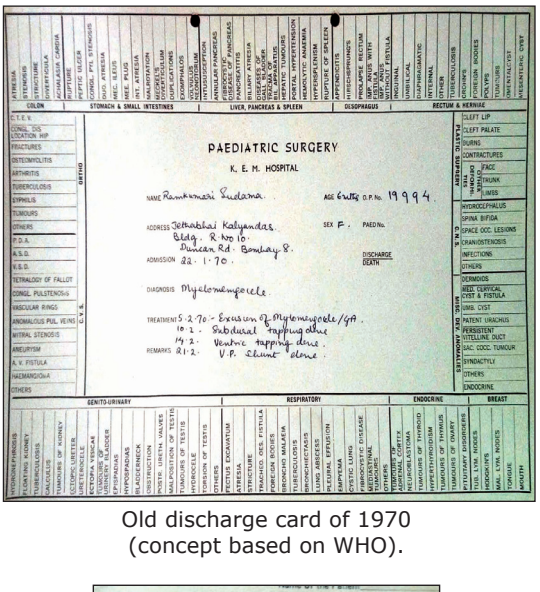
Prior to 1967: Humble Beginnings

Prior to 1962, all children were admitted and operated in the department of General Surgery. There was no separate Pediatric Surgery ward, ICU or OT. Dr R.K. Gandhi (RKG) came back from the UK, having trained in Pediatric Surgery, and joined General Surgery department at Seth G.S. Medical College under Prof. P.K. Sen as a CSIR Pool Officer. He started operating in Dr P.K. Sen's unit, who later went onto establish the Department of Cardiovascular surgery. Dr Sen was keenly interested in thoracic surgery, yet when a neonate with tracheo-oesophageal fistula came, he asked for the "frail gentleman" Dr RKG to operate on the baby. The baby survived and there ushered in the new era of Pediatric surgery.

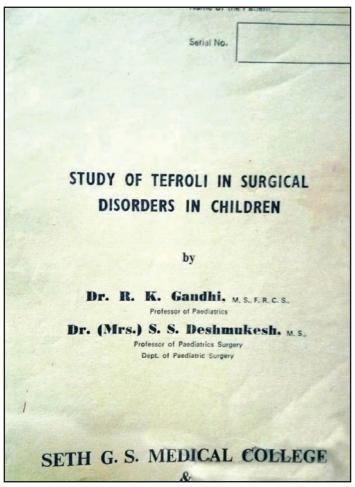
In 1963, a beginning was made in the direction of setting up the specialty, by appointing Dr RKG as Honorary Lecturer in Pediatric Surgery under Prof. Sen. At that time, 5 beds were given to Dr Gandhi in ward 5 (in General Surgery), and he started looking after all the pediatric work. Later, the number of beds was increased, and patients were scattered over different wards. By 1967, these commendable efforts led to Pediatric Surgery becoming firmly entrenched as a separate specialty and a full-fledged department was created by committing all pediatric surgical beds to the care of Dr RKG, who was appointed as Honorary Professor and Head of Pediatric Surgery.

1967: The New Era Begins

Department of Pediatric Surgery was started. Dr RKG was professor and HOD. Dr Snehalata Deshmukh was Lecturer. Pediatric Surgery Ward was located above JMT on the second floor. Later, additional beds were given in Ward No. 2 on the ground floor. From 1970, newly created Ward 3 became the ward for pediatric surgical patients. It was built with great efforts on the 3rd floor terrace of Gynecology wing (also known as N.A. Purandare wing) just above the postnatal ward (14A). Initially, only 12 beds were allotted, which were gradually increased to 18, then 20, then 24 beds. Now, there are 50 beds allotted to ward 3.


PAEDIATRIC SURGERY
K. E. M. HOSPITAL
NAME Ramkumari Sulama. AGE 6 mths O.P.No. 19994.
ADDRESS Jethabhai Kalyandas Bldg. R No 10. Duncan Rd. Bombay 8.
SEX F. PAED No.
ADMISSION 22. 1. 70.
DISCHARGE DEATH
DIAGNOSIS Myelomeningocele.
TREATMENT 5. 2. 70 - Excision of Myelomeningocele/4A.
19. 2. - Subdural tapping done
14. 2. - Ventric tapping done.
REMARKS 21. 2. V.P. shunt done.

Old discharge card of 1970 (concept based on WHO).


Serial No.

STUDY OF TEFROLI IN SURGICAL DISORDERS IN CHILDREN

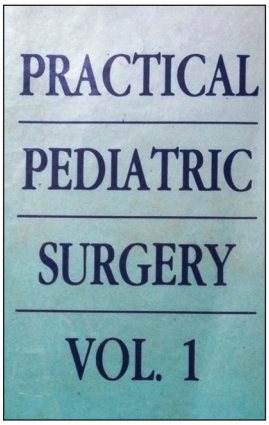
by

Dr. R. K. Gandhi, M. S., F. R. C. S.
Professor of Paediatrics

Dr. (Mrs.) S. S. Deshmukesh, M. S.
Professor of Paediatrics Surgery
Dept. of Paediatric Surgery

SETH G. S. MEDICAL COLLEGE
&

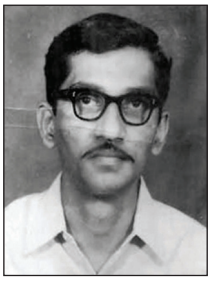
Research Study.



Book: Practical Pediatric Surgery Vol.1.

There was no separate dedicated OT and ICU. A small room at the entry of ward was used as a temporary ICU. JMT OT (General Surgery OT on 1st floor) was used for Pediatric Surgery cases till 1982. There was no lift till Ward 3. It was only up to the second floor. The only access to ward 3 was via a narrow staircase beside the lift. Patients were physically shifted up and down the staircase as no trolley could be pushed till there. Students from General Surgery and Pediatric Medicine were posted in rotation in Pediatric Surgery, some for 6 months, and some for up to 2 years. First residents of the New Unit were Dr S.P. Nadkarni, who retired later as Hon. teacher from Sion Hosp in Gen Surgery, and Dr R.H. Shroff, a practicing Gen Surgeon.

1970–1980



Dr Waingankar

In 1971, efforts to start a separate degree course, i.e. Master of Surgery (MS) in Pediatric Surgery, were started in full swing by Dr RKG. At that time, Calcutta and Chennai were the running super specialization courses. AIIMS under Dr Upadhyay ran a 5-year course, and Dr S.S. Borwankar joined as registrar from general surgery department and later enrolled for MS Pediatric Surgery. The Department got recognized for MS (Pediatric Surgery) in April 1972. Pediatric Surgical and Gen Surgical residents were appointed. Dr Waingankar and Dr Kautilya Mehta joined as the first MS Pediatric Surgery Students. The first MS Pediatric Surgery examination was taken in 1973. Dr Bharti Kulkarni joined as housesurgeon from general surgery department. She later enrolled for MS Pediatric Surgery. Dr Waingankar became the first to receive the MS Pediatric Surgery degree in Bombay.

The 3rd Asian Congress of Pediatric Surgery at Taj in 1976 was inaugurated by Dr Pratibha Patil (Minister of Health).

The year 1980 saw the first batch to enter MCh Pediatric Surgery. Dr Kishore S. Budhwani and Dr Sudhir Deshmukh were the first candidates to be awarded with MCh Degree in 1982. The World Congress

of Pediatric Surgery (1980) inaugurated by Dr Neelam Sanjeeva Reddy (6th President of India).

World Congress of Pediatric Surgery (1980).

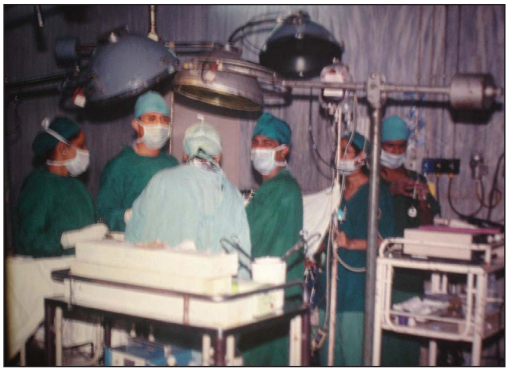
Felicitation of Dr RKG by Bombay Chapter of ASI 1980 with CME.

1980–1990

Pediatric Surgery OT Complex, separate Pediatric Surgery ICU (3ICU) and seminar hall were constructed in 1982 on the terrace beside the existing Ward 3. Mr. Manohar Joshi's (then-Mayor of Mumbai) nephew got admitted in Ward 3 with severe head injury. He was in coma for 40 days and came out of coma due to tireless efforts of entire Pediatric Surgery team. At that time, the only construction on the 3rd floor was the ward. A request was made for the construction of ICU and he sanctioned Rs. 30 lakhs for this development. This is how the ICU was created, and then the entire OT complex.

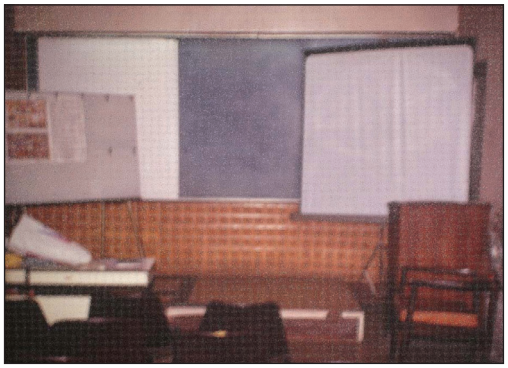
As the area was a terrace, there were concerns about building upon it. The chief engineer of the BMC suggested use of a new light-weight construction material called Seporax. There were three OTs constructed. Two OTs were used daily for cases under anesthesia. The 3rd OT was used for endoscopies and as septic OT. At this time, the lift was extended to come up to Ward 3 on the third floor. The ICU had Omega incubators with trolley.

Luschko and Birds were the first two ventilators in ICU. Luschko was imported from Amsterdam. At that time, Dr Anil Tendolkar, from the Department of Cardiovascular Surgery, taught the residents how to use the Birds' ventilator. Right at that time, there was auto door closure system in the 3ICU so as to reduce the chances of infection. The entire renovated complex provided a complete setup for management of Pediatric surgical conditions.



OT Complex.

ICU and the OT Washing Area.



Seminar room (Inaugurated by Dean Dr C.K. Deshpande).

The year 1986 saw the first test tube baby of Mumbai, delivered by Dr Indira Hinduja in KEM hospital. Ms. Harsha Chawda was kept in this very 3ICU in 1986. She developed rectovestibular fistula which was successfully treated here.

Dr RKG retired in 1987 and was succeeded by Dr Snehalata Deshmukh who became the HOD. Dr S.S. Borwankar became Professor.

Dr Snehalata Deshmukh

Dr S.S. Borwankar

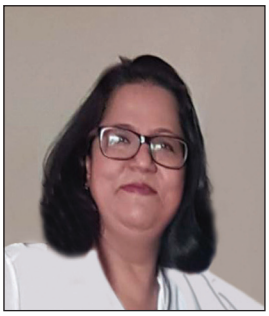
In 1990, Dr S.S. Borwankar became the HOD and Dr B.K. Kulkarni became Professor. Dr S.S. Borwankar retired and continued as HOD on contract basis till 2004 and as Professor till 2007.

2000-Present: Snapshots

The Platinum Jubilee Celebrations of Seth GSMC and KEMH in 2001 and Department Day Celebrations with Dr R.K. Gandhi as Chief Guest.

Platinum Jubilee Celebrations (2001).

Dr Hemanshi Shah became the Administrative in charge from 2003 to 2004.



Dr Hemanshi Shah

The Universal Cystoscope set and the first Single chip Laparoscopy Set was acquired by the Department in 2003 and 2004, respectively. Dr Sandesh Parelkar became the next HOD in 2004.

Dr Sandesh Parelkar

Ward 3 art redecoration by JJ School of Art (2006).

In 2008, Dr Sanjay Oak joined as Director ME/MH and as professor in the department.

Dr Sanjay Oak

There was a Disney-themed renovation of Ward 3 and ICU in 2009.

Opening day after the renovation (2009).

The Ward and ICU were shifted to the 9th floor as part of Endocrinology ward in the MS building in 2009 for renovation of entire Gynecology wing as part of heritage reconstruction of GSMC and KEMH. The OT was run on 2 tables placed in "3rd OT" of Urology OT. The MUHS-recognized yearlong Fellowship in Pediatric Minimal Access Surgery also began in 2009 with Dr Rahulkumar Gupta as its first fellow. Till today, 8 candidates have been awarded fellowship.

Receiving the best OT award (2010).

The Birth Defect Clinic was setup in 2013 and there was another Disney-themed renovation in 2014.

The start of 3D Laparoscopic Surgeries in 2016.

The Modular OT was constructed in 2017.

Visit of Director (ME&MH) to inspect modular OT.

Department of Plastic Surgery

By Singh Goleria K, Rana RE

Source:

1. *The history of the plastic surgery department, K.E.M. Hospital, Mumbai, India. Indian J Plast Surg 2004,37:136-42*
2. *KEM Website: https://www.kem.edu/plastic-surgery*

Beginning

The Plastic Surgery Department at Seth G.S. Medical College and K.E.M. Hospital was inaugurated in December 1961 through the initiatives of Dr C.J.T. Pinto, with the active support of Dr S.V. Joglekar, then Dean. Mr. Eric Peet of Oxford was actively involved during the first three months of its existence and for a month each during

the next two years, thus contributing to the establishment of the department. The emphasis on maintaining departmental records is evident from the operation notes we find in Mr. Peet's handwriting. These notes speak of his dedication and illustrate the importance of records. Dr Anant Puranik, the first Surgical Registrar and Dr Deodutt Bendre, the first House Surgeon put in their very best to firmly establish this tradition.

Our department had an excellent start. We had about 30 dedicated beds in a consolidated unit, no floor beds (a common prevalent practice in those days) and a dedicated operation theater. The last was a gracious gesture of Dr H.M. Dastur, the then Professor and Head of the Department of Neurosurgery. The OT was shared between the two departments at this stage, but as soon as the present new Neurosurgery OT Complex was commissioned, we were vested with the exclusive use of this OT complex.

The OT Complex

Geographically, the OT complex occupies the center of our department and it would not be out of place to say that our growth has been centered on it. The large window occupying its northern wall provides a soothing background of greenery and of birds hopping around. Unfortunately, the same glass window absorbed the rays of the morning sun, making the OT complex unbearably hot. In fact, Mr. Eric Peet during his visits would often operate in shorts - of course with a sterile gown! However, summer or winter, the work went on. Two decades later the theater was renovated and air-conditioned. However, from the very inception, we were well equipped. We had an electric dermatome way back in 1965, we were the first to have a flash sterilizer and an operating microscope and power instruments for craniofacial surgery.

The Building of a Team

In April 1962, less than four months after its inception, Dr K.S. Goleria joined the unit as Honorary Assistant Professor, an appointment welcomed by Dr Pinto and Mr. Eric Peet, who were happy that they had already initiated the process of consolidation. On the same day that Dr Goleria joined our department, Dr Mrs. Divekar, who had experience in Plastic Surgery anesthesia, joined our OT and remained with us as a dedicated anesthesiologist for several years. Sister Solomon, trained abroad in Plastic Surgery, assumed charge of our OT from the very beginning. A few years later Mrs. Sheth, who not only had the skills of a dedicated Speech Therapist but also a special concern for our cleft patients, joined us. Dr C.V. Mehendale, after a long stint in the UK joined our department as a 'Pool Officer' in 1966, and after a short while was absorbed in the faculty. In short, pains had been taken to ensure that a dedicated team was in place.

Departmental Library

The departmental library houses a large number of books and journals pertaining to our specialty. Right at the start we were able to borrow some classics from the Bacha Memorial Library of our Hospital and these are our prized possessions. A number of books autographed by the authors are a valued part of this collection e.g. "The Essentials of Plastic Surgery" by Eric Peet and Tom Patterson.

Growth

Realizing the importance of exposure to

trauma management in the training of a Plastic Surgeon, the management of hand and maxillofacial trauma was brought within the purview of our department in 1965. The year 1965 also brought with it the specter of an Indo-Pakistani war. Mumbai was under threat. We were asked to be prepared to receive up to 25 burn casualties. Things moved fast. The eastern part of our floor (now WD 16 A) was immediately handed over to us. While the threat lasted, we acquired an electric dermatome and a new operation table. Fortunately, the threat was soon gone. It was logical to convert the preparations we had made into a permanent burns facility. The authorities also agreed. Dr Pinto asked Dr Goleria, who had earlier drawn a plan to create such a facility for the Nair Hospital, to draft a proposal expeditiously so that it could be submitted within a week. The plan was ready in the stipulated time. The latter's suggestion, that given a week more, we could have comments on our plans from Mr. Jim Evans who was heading the new burns unit at St. Mary's, London was readily accepted. Mr. Evan's detailed suggestions came within a week. The whole file was duly forwarded but was never seen again!! The burns unit finally came into being, only 15 years later, in 1980.

Individuals, Leadership, and Contributions

Dr Charles J.T. Pinto

Dr Charles J.T. Pinto was a visionary plastic surgeon who was renowned for his dedication, compassion, and fight for justice. He established his department in an impressive fashion with breathtaking speed and efficiency, leaving a lasting imprint in plastic surgery. His input to the management of cleft lip and palate was immense, resulting in the creation of the "Hole-in-One Repair" technique, which brought together lip and palate repair in one operation.

His contribution went beyond his department —the Dr Charles Pinto Center for Cleft Lip and Palate in Trichur, Kerala and an Association of Plastic Surgeons of India CME program, in his name, are some examples. He brought in, with Dr Peet, a popular technique of urethroplasty for hypospadias. Acknowledging the significance of trauma management in plastic surgery training, he included hand and maxillofacial trauma care within the department in 1965.

Dr Pinto's dedication to his profession never wavered until his death on September 9, 1970, at the age 54—appropriately, in the department he founded, just after finishing an operation. His legacy continues to motivate generations of plastic surgeons.

Dr Kuldip Singh Goleria

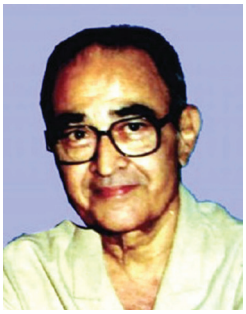
Dr Kuldip Singh Goleria headed the department from 1970 until 1989, after the death of Dr Pinto. He had a long tradition of the "Hole-in-One Repair" of cleft lip and palate, first because of socio-economic demands and later because of anatomical reasons.

In 1980, under his command, half of the plastic surgery ward was redeveloped as a

12-bed Burns Unit for female adult patients with burns up to 50%, with an emphasis on early grafting to avoid deformities. It is still the only plastic surgery department in BMC with an attached Burns Unit.

Dr Goleria was also the key person to initiate craniofacial surgery in the department. Motivated by Dr Tessier's experience, he started this specialty in 1983 with the assistance of Neurosurgery, Anesthesiology, and Pediatric Surgery, one of the first such endeavors in India. His work provided a sound foundation for further development in plastic surgery and burn care.

Dr Chintamani V. Mehendale (1928–2003)



Dr Chintamani V. Mehendale, affectionately referred to as "M" by KEM Hospital and the residents of Mumbai, was a trailblazing plastic surgeon who was known for his discipline, innovation, and respect for patients. A graduate of Seth G.S. Medical College, he earned his MBBS in 1950, MS in 1954, and subsequently, his FRCS in 1961.

He received training in plastic and jaw surgery from Mr. Bodenham at Frenchay Hospital, UK. Dr Mehendale was a disciplinarian with a heart of gold, who inculcated values of integrity, punctuality, and careful patient handling. He insisted on respectfully addressing patients and placing their knowledge and participation first in treatment.

His surgical finesse was exceptional, doing challenging surgeries such as temporomandibular joint ankylosis release under local anesthesia. A creative thinker, he invented surgical devices, such as a pen-retaining needle holder for cleft palate closure and a wire twister. An avid photographer, he once illustrated the potential of photography in cosmetic surgery by modifying pre-op photographs—debunking exaggerated claims of surgery. He practiced what he preached, motivating future surgeons with his curiosity, attention to detail, and unrelenting commitment to patient care.

Dr Suresh R. Tambwekar

Dr Suresh R. Tambwekar is a pioneer in microvascular surgery who introduced replantations and free flaps to Indian surgical practice. His enthusiasm for the specialty created a demand for an operating microscope and organized training program at the Ethicon Institute, which attracted trainees from all over the country.

A trip to China inspired him to work on controlling filarial lymphedema. He revolutionized special heat chambers under his command, taking inspiration from Chinese therapy techniques. His MRI venography research unveiled perivenous fibrosis in certain intractable cases, with subsequent improvements following venolysis.

Dr Tambwekar also worked with

Professor Edwin Turkof of Vienna on intraoperative evoked potential research to determine nerve block levels in leprosy patients, which facilitates accurate nerve decompression. Dr Tambwekar's work has greatly improved microsurgery and lymphedema management, solidifying his place in history as a pioneer in Indian plastic and reconstructive surgery.

Dr Roshani E. Rana

Dr Roshani E. Rana, an alumnus of the college, had joined the department as a postgraduate student in 1976 and subsequently rose to the rank of Lecturer. In 1989, after Dr Goleria's retirement, she took charge as Professor and Head and served until 2006.

Her expertise in vascular malformation was augmented through collaborations with interventional radiology, allowing pre-operative embolization for head and facial malformation near-bloodless surgery. Her work also improved treatment for temporomandibular joint ankylosis with a fiber-optic bronchoscope and fascia lata grafting, allowing pain-free recovery.

During her tenure, the department was established as a referral point for complicated cases, such as Müllerian agenesis and intersexuality, with referrals from all over India. Dr Rana's work greatly improved the surgical methods and patient care of plastic and reconstructive surgery.

Dr Vinita Puri

Dr Vinita Puri, an LTMC and JJ Group of Hospitals alumni, became a member of the Department of Plastic Surgery as a Lecturer in 1996. After Dr R.E. Rana retired in 2006, she, along with Dr Amresh S. Baliarsing, handled the department until she officially became Professor and Head in October 2008.

An excellent surgeon, Dr Puri has developed cleft surgery, hand surgery, vascular malformation, and maxillofacial surgery and made major contributions through indexed papers and conferences. She co-organized the Cadaveric Flap Dissection Course during 2006–2007, which brought in plastic surgeons from all over the country. She also initiated the Aesthetic CME series, conducting workshops on Botox, fillers, and liposuction in 2009.

Committed to patient care, she set up a Hand Clinic in association with occupational and physiotherapists and started a Maxillofacial Follow-Up Clinic to improve outcomes. With her at the helm, the department is being modernized, such as state-of-the-art inpatient wards, an OT complex, and a microvascular animal lab. Sympathetic, innovative, and committed, Dr Puri keeps raising the department to new levels.

Academics

Publications from the department have been few. However, the faculty and the postgraduate students have conducted a

fairly large number of interesting studies.

Dr Goleria had done pioneering work on the surgical treatment of severe trismus in submucous fibrosis by release and skin grafting, and had presented his work at a meeting of the Plastic Surgery Section of the Association of Surgeons of India, 1964. This operation is still in vogue in similar situations.

On an empirical basis he found the use of Perideca (a combination of periactin and dexamethasone) effective in arresting the progress of submucous fibrosis. Under his guidance, a detailed double-blind study carried out by the late Dr Sudhir Karmarkar (1975) confirmed the empirical observations. Dr Satyavati Sirsat of the Tata Cancer Research Center collaborated in this study and noted that the clinical observations were supported by histology findings. A Review article under the title 'A History of the Pedicle Flap', published in the Indian Journal of Surgery, 1968 gave an exhaustive coverage of that subject till then.

With the advent of impedance audiometry, Dr Gopalkrishna (1979) carried out a study of middle ear function in cleft palate with the help of our Speech Therapist, Mr. Ashok Raje. This work formed the basis of his article titled "Middle ear function in cleft palate" published in the British Journal of Plastic Surgery, 1984. In 1979, Dr Savita Chandra studied pneumatization of mastoids in cleft palate patients. Recently, Dr Narender Kaushik has carried out a detailed analytical study of epidemiology based on the data from a series of unoperated cases of cleft lip and palate.

Dr Ajit Rao carried out a study of the melanocyte behavior in the repigmentation of the donor sites in close collaboration with the Department of Anatomy (1976). Dr Venkatesh studied the various applications of cultured keratinocytes in the treatment of burns and giant pigmented naevi in collaboration with Dr Manoj Mozamdar, the Chief Scientist at the National Center of Cell Sciences in Pune, (1993).

In 1994, Dr Jasmine Seth carried out research in collaboration with the late Dr Sharadini Dahanukar and Dr Urmila Thatte of our Ayurveda Research Center, on the efficacy of *Tinospora cordifolia* on serum immunoglobulin levels in burns (this drug was later marketed as *Immumod*). An epidemiological study of burns in adult females was carried out by Dr K. Bhaskara (1999) and was later published in IJPS 2000 and PRS 2003. A study of Electrical Injuries was carried out by Dr Surendra Patil (2001). Dr Manish Deshpande studied firecracker injuries in 2002, revealing a falling incidence of this injury. This study still continues. There were many other studies related to burn contractures and management of donor areas.

The hand received its due attention from our postgraduates, starting with Dr Parvati Ramani who studied Plastic Moulding Machine injuries (1973), and later scholars covered fractures, distraction, external fixators, tendons, and soft tissues.

The facial skeleton received its due share of attention, starting with Jose Tharail who dealt with fractures of the mandible; others dealt with various aspects of facial fractures and TM joints. Compartment syndromes, nerve recovery, and skin cover of extremities also did not escape their attention.

Suffice it to say that these studies covered a wide range of Plastic Surgery topics illustrating the wide span of this horizontal specialty.

Our Alumni

Our alumni are spread out widely across the globe and have done us proud. Dr Deodutt Bendre headed the Department of Plastic Surgery at Harlem Hospital, New York. Dr Vibhakar Baxi has settled in the US, and yet year after year conducts a Plastic surgery Camp at Chitrakoot. Dr Leela Joshi, the first lady Plastic surgeon in Mumbai, has settled in Pune. Many have headed Plastic Surgery Departments in the country: The late Dr Sudhir Karmarkar at St. George Hospital, Dr Tambwekar at Bombay Hospital, Dr Ravin Thatte at LTMG Hospital, Dr Ajit Rao at Cooper Hospital, Dr Hosi Bhathena at Tata Memorial Hospital, Dr Bimal Mody at Hinduja National Hospital, and Dr Sunil Keswani at the National Burns Center at Airoli; all in Mumbai. Outside Mumbai: Dr Norman Guido in Bangalore; Dr Savita Chandra in Jaipur; Dr Shrirang Pandit in Pune; Dr Santosh Raibagkar in Ahmedabad; Dr A. Gopalkrishna in Hyderabad; and Dr Poornima Aiyer in Sri Lanka are all our eminent alumni.

Some of the alumni who transited through our department as a part of their surgical training have risen to great heights. An illustrative and outstanding example is Dr Snehlata Deshmukh who reached the peak of her academic career by becoming the Vice-Chancellor of the University of Mumbai.

Department of Radiology

History of Department of Radiology at KEM Hospital.

By Dr Malini Nadkarni, *Former Professor and Head of Department, Radiology, G.S.M.C & K.E.M.H. Head of Department, B. J. Wadia Hospital for Children*

Nobody would have imagined that the name of this department would change from Department of Radiology and Electrotherapy to Department of Imaging, over a period of 100 years. Along with the discovery of radioactivity and X-rays in late 1800s, their effects on biological cells were studied. Since their potential ability to cause cell death was studied, these radiations were used for therapeutic purposes till their severity and genetic effects were realized after atomic explosions. Also, with the invention of antibiotics in mid 1940s, the use of radiation for therapeutic purposes declined. Their ability to penetrate through tissues and produce an image of internal anatomy helped medical field immensely. So, while narrating the historical aspects of this department, the changing trends become evident.

1925–1935

The Seth G.S. Medical College opened its door on June 1, 1925. The X-ray Department started functioning on 31st May, 1926 Honorary radiologist Dr J.L. Desai was appointed as lecturer in Radiology and Electrotherapy. In the year 1927, first work-load report of the department mentions plain film studies of bones and chest, but in addition also about special investigations like barium studies, intravenous pyelography, and air insufflation studies for Fallopian tubes and pneumoperitoneum. 3 cases of cholangiography are also mentioned. There is also mention of fluoroscopic examination of fracture cases, to save the expenditure on X-ray films. As already mentioned, radiation therapy was a preferred therapeutic modality, it was used for tuberculous cervical lymphadenopathy and thyroid goitre

as a routine. And many skin lesions like keloid, eczema, carcinomata were treated by radiation. Diathermy was used for treatment of Gonorrhoeal complications.

Ultraviolet radiation treatment was very much a part of X-ray department. Need for deep X-ray therapy machine and vertical fluoroscope for casualty work were the immediate requirement in 1927. Vertical fluoroscope was installed in 1928.

In the 1928–29 report, there is mention of injection of contrast in the trachea (attempted bronchography) and spinal canal (attempted myelography). There is also a mention of stereoscopic location of foreign body and of dental X-rays in 1928. For reference, there used to be small dental X-ray films and special dental X-ray equipment. Dental radiography has become an outdated modality now as the dentist is equipped with newer facilities for visualization of dental roots.

In the year 1930–31, the trustees of philanthropic Wadia trust made a generous donation of Rs. 25 thousand for the purchase of Deep X-ray therapy apparatus. The corporation gracefully accepted the same and the Deep therapy department was to be known as 'N.M. Wadia Deep therapy institute.' For purchase of Radium, the hospital was looking for a generous donor. In the next year, serious concern about availability of Radium was expressed as many patients needed Radium therapy, and due to non-availability of Radium, some acute cases were referred to Mission hospital in Miraj and Radium institute at Patna. So, the urgency of procuring Radium at the earliest was felt very badly.

The report of next year i.e. 1932–33, mentions purchase of Deep X-ray apparatus from Siemen's India Ltd. The apparatus had up-to-date features needed and its design and installation were satisfactory. The patient and the operator were protected from receiving electric shock and unnecessary radiation. But Radium was still not available then. Unfortunately, the subsequent municipal records are not available till 1938–39, so it is difficult to know when Radium was actually made available.

1935–1945

In the annual report of 1938–39, there is a mention of additional staff, Dr Z.J. Joseph, who acquired training in Radiology in England and then became a radiologist. In addition to radiological work, treatment with ultraviolet radiation for various presentations of tuberculosis like T.B. abdomen, sinuses, lung abscess, etc was a routine then. Ricketts, osteomyelitis, and lung abscess also received ultraviolet radiation therapy. Deep X-ray therapy for many oral cancers was a routine. Similarly superficial X-ray therapy, ultraviolet therapy, Long and short-wave diathermy were the treatment modalities routinely used.

In 1939, along with the extension of O.P.D., construction of registration hall and a special X-ray and electrotherapy block was approved. Going by the 1940–41 report, the shifting of the department from casualty area to present location took place during this time. Amongst the list of investigations done in X-ray dept., it was interesting to note that Arteriography was done in 5 cases. Neurological investigations like ventriculography and encephalography were carried out in one case each.

In 1941–42 report, the Dean, Dr Jivraj Mehta, expressed his satisfaction in

the following words: "The X-ray and Electrotherapy section has now all its component parts housed in a large and spacious new X-ray block." The records of 1942 to 1952 are missing, with the exception of 1944. But that report does not show any significant change in the working of the department.

1945–1955

In the year 1952, a special grant of Rs. 2,72,000 was provided for modernizing the equipment as the old equipment had become obsolete and inadequate. With this grant, it became a well-equipped department comparable to any other center in the country. Among the new X-ray plants, 4 were for diagnostic and 4 for therapeutic purposes. To accommodate the new equipment, structure of the X-ray block had to be extended. Dr Z.J. Joseph was now the senior radiologist and Dr L.H. Athale, his junior. Though physiotherapy center had started, shortwave diathermy, ultraviolet therapy, Galvanic & amp, and Faradic current treatments were still noted. In year 1953, a visiting team of medical scientists sponsored by W.H.O. visited the hospital and college and participated in discussions and lectures as well as some operative procedures as well. In addition to some cardiac surgeries, there is mention of retrograde aortography and angiocardiography. Again, the records of later 5 years are missing and I feel significant portion of history is not available date wise. But I could partially know some it from our teachers.

1955–1965

In 1958, an additional floor was constructed above the X-ray department. Dr Joseph retired in 1958 and Dr L.H. Athale became the departmental head. Dr M.M. Mehta was promoted as Hon. Radiologist and Dr Waravadekar was Hon. Assistant Radiologist.

In the year 1959, radiological equipment needed for angiocardiography was installed. The records mention that it could take 8 films per second, but in practice, we never exceeded the speed of 4 films per second as the films would get stuck at faster rate. Humidity could be the factor for such mishaps. Radiation therapy work continued as before but contact therapy equipment was not functioning. In this year, angiography set up was installed for investigating cardiovascular diseases. But the special floating table-top of X-ray machine was installed in 1961.

Records from 1960 reveal that angiocardiography equipment was functioning satisfactorily. Suprasternal puncture of aorta was carried out to visualize arch of aorta with its branches. There is also a mention of recording left ventricular pressure.

1961 records mention appointment of Dr Sheila D. Engineer as a radiologist in department of surgery. In 1962, J.B. Kinmonth, professor at University of London and the pioneer of the procedure of lymphangiography, was invited by the institution to deliver a lecture on Lymphatics. In the section of cardiovascular radiology, there was an additional 200mA simple X-ray machine installed in the side room. Here routine radiography work of cardiac surgery and cardiology patients was done. Since we were also getting patients with pulmonary diseases, a Tomography attachment was installed with it. Since

the cardiology and cardiac surgery were making good progress, a new building was being constructed in front of KEM building, a cardiovascular and thoracic center (CVTC), which got completed in 1963. Around the same time, orthopedic department also shifted to what was then known as convalescent home, opposite Tata Memorial Hospital (now known as Orthopedic center). Thus, radiological set ups were developing at different places, as per the needs of the specialties. Deep and superficial therapy patients were treated in the department. This therapy area was at the rear end of the department famously known as No.10.

In 1965, O.P.D.s were started at CVTC for cardiology and cardiac surgery patients. Later, the Chest Medicine department also started there. An area for X-ray department was allotted on ground floor. In 1967, Dr S.D. Bhandarkar had a patient of pituitary adenoma to be treated by implanting radio isotope of Yittrium (Y90) and Hon. Surgeon Dr S.D. Deodhar had done the procedure. Pioneer in the field of Gastroenterology Dr B.D. Pimparkar, used to carry out small bowel mucosal biopsies under fluoroscopy in our department. We used to carry out infusion pyelographies for chronic renal failure patients referred by 'Artificial kidney department (A.K.D.) of yester years.

We had developed an easy technique of doing bronchography by putting a small rubber catheter in trachea under local anesthetic spray. Many anesthetists would admire us for our technique of 'intubation.' Till 1968, we used to get patients for radiotherapy. Before 1940–41, the junior doctor under training, used to work during office hours. Maybe the administration felt the need for a person trained in radiology be available beyond office hours, as the newly developing field of radiology was making its need felt in overall patient management. Also, because of the prevailing world war, the need for readily available medical services could have been felt by the administration. There was a spacious accommodation, full floor in a building next to R.M.O. quarters, allotted to residential medical officer of Radiology department and that R.M.O. was my father, Dr G.H. Nerurkar.

Later Periods

With increase in workload, by 1968–69, technical staff was increased, and they were posted on rotational duties for radiography after 5.00 p.m. and doctors were called for reporting or for carrying out special investigations. There was no recognized postgraduate course in Radiology till 1948, at Bombay University. The Diploma in Medical Radiology and Electrotherapy (D.M.R.E.) was started at Bombay University in 1948–49. My father was from that first batch. The university diploma course of D.M.R.E. had both diagnostic and therapeutic aspects covered along with electrotherapy treatments like short wave diathermy, Galvanic and Faradic currents etc. By 1969–70, D.M.R.E. was replaced by two separate diplomas, for Diagnosis (D.M.R.D.) and Therapy (D.M.R.T.) of two years duration each. University also started MD Radiology, 3 years course, which included both diagnostic and therapeutic radiology. Later, MD course was also bifurcated into Diagnostic and Therapeutic Radiology.

Equipment and Locations

Initially the X-ray area… one can hardly

call it a 'department', was next to the casualty… the casualty was in the original building, at the entrance of the hospital. And by the side of casualty, was the X-ray area. A very primitive X-ray apparatus supplied by Victor X-ray Corporation was installed there. With the equipment in those earlier days, there used to be hanging electrical wires all around. Hence, one had to be extremely careful in carrying out any X-ray examination. This primitive X-ray machine was a multipurpose X-ray apparatus which was used for radiography as well as for 'superficial X-ray therapy.' Skin lesions being superficial, were treated with low energy radiations. The field of Radiation Oncology has expanded tremendously with very high energy radiations and better precision and advance technology. By early 1940s, X-ray department was shifted to the present location on the ground floor of the main building in the very central place and it is still there. It is still known as O.P.D. no. 10. (I find the number is changed recently.) With the shift of the department a new and better X-ray machine was installed in this new area. This equipment was so good, that with some repairs and replacements, it was still in use in 1970s. We used to call it 'Kala Ghoda' because it was black in colour and sturdy as a horse.

Possibly around the same time, equipment for radiotherapy were bought. One machine for 'Deep X-ray therapy' and another for 'Superficial X-ray therapy' and both were installed in the rear end of the department. They were existing there till late 1960s, when I started my radiology residency in 1965–66, I have seen our teachers Dr L.H. Athale and Dr M.S. Waravadekar advising about treatment planning, for calcaneal spur and keloid respectively. As the equipment became old and non-functional and later obsolete, the younger generations of radiology residents remained uninformed about this piece of history of our department.

Along with these installations, two fluoroscopy machines were added in the OPD area around casualty. One machine was next to medical OPD, and the other was next to surgical OPD Fluoroscopy area was known as X-ray screening dept. Here the X-ray image was seen on a fluorescent screen. This technology was very important, especially when a large group of population was to be examined mainly for diagnosis of chest tuberculosis which was very rampant in our country. Such equipment was also available, mounted on a mobile van which could be taken to various locations, in the city or outskirts. But this machine proved very useful for initiation of cardiac catheterization procedure at KEM hospital, around 1960s.

Other Areas

When I was an undergraduate student, the orthopedic department was on ground floor, near the ophthalmic area. Around 1962 or so, it was shifted to its present location, in front of Tata Memorial hospital. Radiological examinations are essential for orthopedic problems and their management. So, a suitable X-ray equipment was installed there. Neurosurgical diagnosis needs radiological evaluation. So, a special radiological set up was installed near the neurosurgery theater.

One important realization for me was that the technical staff needed proper guidance and training which was seriously lacking and Radiology is the

only medical branch where technical staff comes in direct contact with patients. Till late 70s, Radiology was not a preferred branch for post-graduation. For surgery or medicine post graduates, other allied branches were there. But for Ob-gyn postgraduates, Radiology house-post was a good option as these posts were allotted as per the final M.B.B.S. marks. So our department used to have these budding Ob-gyn postgraduates as house officers. Since they were to leave the dept. after 6 months, there was no point teaching them any special investigation like barium meal examinations etc. But having good marks in final M.B.B.S. examination, they were allotted radiology house posts. As a result, their services were not useful for the department. So, there was shortage of helping hands for me.

The present well-respected Radiologist of India, Dr Ravi Ramakantan is one of them whom I preferred over other Ob-Gyn candidates. One of our GSite Dr Dara Kooka, who had migrated to Canada, wanted to return back to India and we were fortunate to have him in our department as assistant professor. He improved our teaching programs by having small meetings with different specialties and discussions etc. So not only our radiology students, but many postgraduates of other departments, were also definitely benefitted.

KEM is the first institute in the country to do interventional radiological procedures. We were doing non-vascular interventions like drainage of obstructed biliary or urinary passages. In 1974–75, I had an opportunity to be at the University hospital at San Diego California, where I could learn the basics of ultrasonography which was a new technology then. So, on coming back to India, I proposed for ultrasonography equipment for our department.

In 2002, Digital Subtraction Angiography was added to the department. A survey conducted by some NGO at that time had rated KEM, a better hospital than any of the private hospitals in Mumbai at that time and in 2003, it was the largest teaching hospital in the country. The department had excellent book library and an exhaustive film and electronic teaching library in India. At that time there was multi-slice volume zoom CT scan equipment, and it was the only department in India to house biplane DSA equipment for peripheral and Neuro applications. The report of 2010 confirms the position of largest teaching department in India, in terms of clinical service and teaching.

The department started conducting one year fellowship courses in various sub-specialties of Radiology affiliated to MUHS and also participated in community care program. In 2020, Covid 19 Pandemic situation was handled excellently by providing portable X-ray facility to all Covid wards with team of resident doctors and technicians. Daily on an average 50 to 60 portable radiographs were done since March 2020. Daily 10 to 15 Covid CT scans were done. Some portable USG and X-ray machines and also viewing boxes were received as donation for Covid work. Every day, team of resident doctors were sent to Covid wards for USG examinations. They also participated in ward duties on rotation basis.

Educational Activities

The department had a long-standing tradition of teaching activities for postgraduate students. Initially, we had excellent teacher late Dr M.M. Mehta,

who would regularly have late evening classes for residents. A well- known neuro radiologist Dr Sidhawa was always our guest teacher. Dr Kooka's appointment proved very beneficial not only for radiology residents, but for those from other specialties as well. In addition, a lot of learning happened in multiple weekly interdepartmental meetings. In the mid-1980s, Dr Ravi took over the responsibility of the education program for residents and conducted a very popular Saturday meeting for all residents in Mumbai. In addition, faculty and junior staff presented papers at conferences mostly in India and a few abroad. Around 1990, Professor Anne Osborn visited the department and conducted multiple teaching sessions that were extremely popular. As an offshoot of her visits Dr Ravi attended the Annual RSNA meeting in 1995 as an international visiting scholar. The tradition of multiple teaching sessions for referents and interdepartmental meetings has continued to this day.

A PubMed search yields is closed 300 publications from the department. Apart from enlisting the quality and quantity of equipment over last 100 years, we have had excellent teachers, post graduate students and energetic technical, nursing, office staff, and the maintenance people who have made this department one of the important pillar of this institution.

Department of Transfusion Medicine

***By Dr Jayashree Sharma**, Professor and Head of Department, Transfusion Medicine, Seth G.S. Medical College & KEM Hospital & Dy Director In-charge National Plasma Fractionation Center, KEM Hospital*

History of Blood Transfusion Services

The history of blood transfusion services in this institute dates back to the year 1928 when the first transfusion was given to a patient in KEM hospital by Prof. V.R. Khanolkar, the then Head of the Department of Pathology and pioneer in the field of pathology and laboratory services in India. It was done by improvised apparatus using a conical flask funnel and cannulae, venesection of donor as well as the recipient. Grouping sera were not available at that time in India and the matching of prospective donors and recipients sample was done directly.

In the mid-thirties, commercially prepared glucose and saline solution became available for intravenous transfusion and these bottles were also utilized for blood collection and transfusion. The storing of blood or blood centering as such started in 1944 in one room in Central Clinical Laboratory with the availability of one refrigerator by Dr Dhayagude.

The Blood Center came into its own when large numbers of wounded patients were admitted to the hospital following naval mutiny of 1945. The staff members and students donated blood for the injured. This also impressed upon the concerned authorities, the need of a properly planned Blood Center with a cold room, which was achieved in 1951.

Due to the fast-increasing demand of blood with the development of various specialties and superspecialties, efforts were directed towards increasing the number of voluntary donors. But the gap between supply and demand remained. One of the ways of bridging this gap was to use blood components instead

of whole blood. The offer of Central Government (Directorate General of Health Services, New Delhi) to establish a plasma Fractionation plant donated by SIDA (Swedish International Development Agency) came as bonanza as well as challenge to us, and Dr Vijayalakshmi Ray, on behalf of the hospital, accepted this challenge and thus component preparation started in KEM in the year 1988.

Setting Up of the Department

After the retirement of Dr Ray in 1997, Professor of Pathology and In-Charge of Blood Bank at Seth G.S. Medical College and KEM Hospital, Dr Jayashree Sharma who was an Associate Professor in Pathology took charge of the Blood Center as Associate Professor Pathology and Blood Bank In-Charge. She worked under the then Professor and Head of Pathology, Dr A.P. Desai.

The need to start a new Department of Transfusion Medicine was felt as the workload was increasing tremendously, and various new technologies were developing in the Field of Transfusion Medicine. Moreover, a Post Graduate Course in Transfusion Medicine was deemed essential in the light of the above developments. Hence, proposals were initiated by Dr Jayashree Sharma to separate the Department of Transfusion Medicine from the Department of Pathology. Hence, in 2003, Dr Sharma, under the esteemed leadership of Dr Nilima Kshirsagar and Dr Ajita A. Pandit, put up a proposal to the Municipal Commissioner for starting a new Department of Transfusion Medicine which will be separate from Pathology Department and administrative sanction was requested.

An application for starting Post Graduate Course – MD in Immunohematology and Blood Transfusion was sent to MUHS (Maharashtra University of Health Sciences) by Dr Sharma and Dr Kshirsagar in 2006. A proposal was put up to Additional Municipal Commissioner Mr. Kishore Gajibhiye for creating and sanctioning separate posts of Professor, Associate Professor, and Assistant Professor for the Department of Transfusion, which got sanctioned in 2008 by the Standing Committee of Brihanmumbai Municipal Corporation.

Thus, the Department of Transfusion Medicine was officially separated from the Department of Pathology. Seth G.S. Medical College is the first Medical College in Mumbai to start a separate academic Department of Transfusion Medicine. In December 2008, Dr Sanjay Oak promoted and appointed Dr Jayashree Sharma as the Professor & Head of the Department of Transfusion Medicine under Dr B.M. Kandalkar, who was the then Professor and Head of Pathology. Dr Charusmita Modi was appointed as Associate Professor and Dr Swarupa Bhagwat as Assistant Professor in the Department.

And thus, the Department of Transfusion Medicine was formed on the 1st of January 2009 by Dr Sanjay Oak.

MD Immunohematology and Blood Transfusion

DMER Inspection was conducted in February 2009 for obtaining Essentiality Certificate to start a postgraduate course–MD Immunohematology and Blood

Transfusion (IHBT) at the Seth G.S. Medical College & KEM Hospital with an annual intake of two students per year. The Consent of Affiliation was obtained from Maharashtra University of Health Sciences (MUHS), Nashik and an application was submitted to the Secretary, Ministry of Health & Family Welfare, Government of India, New Delhi for starting the course in June of the same year.

Dr Girija Rao was appointed as Tutor in the Department of Transfusion Medicine on 4th November 2009. In 2010, Dr Julie Jose and Dr Shashikant Patil were the first to join the three-year postgraduate course through Maharashtra CET, making KEM the first public hospital in Maharashtra to start the above course. Students who completed the course successfully joined as Bonded Assistant Professors (till 2019) and after that from 2020, as Senior Residents in the Department. An MCI inspection for MD IHBT course is conducted every 5 years for continuation of recognition of MD IHBT course.

Dr Jayashree Sharma took the initiative to get NABH Accreditation of the Blood Center done in the year 2012 that is being continued every 3 years. Dr Darshan Adulkar joined as Assistant Professor in the Department in December 2016.

As of April 2025, the Department consists of the following faculty: Dr Jayashree Sharma as Professor & Head, Dr Charusmita Modi and Dr Swarupa Bhagwat as Associate Professors, and Dr Darshan Adulkar and Dr Priti Patil as Assistant Professors. Apart from faculty, the Department has 6 Resident Doctors pursuing MD Immunohematology and Blood Transfusion and 2 Bonded Senior Resident Doctors.

The Department of Transfusion Medicine functions as an academic as well as service department, thus providing medical education as well as patient care.

Objectives and Functions of the Transfusion Medicine Department

The main aim of the Department is to provide quality medical care to patients by dispensing safe and good quality blood, and to discharge its responsibility to the voluntary blood donors who provide blood. The other aim is to teach and train resident doctors who have joined MD IHBT Course and other resident doctors and medical officers posted for training, Blood Transfusion Officers, technical students pursuing DMLT Courses, Blood Bank counselors, paramedical staff, and other technical and nursing staff.

Main Functions of the Department

1. To ensure proper blood collection facilities by proper donor selection; encouraging voluntary blood donation; enabling safe bleeding procedures of donors and motivating them to return for donation; maintaining confidentiality of the donor record; providing information to donors; and providing pre-donation and post-donation counselling to donors.
2. To perform various Apheresis procedures like Plateletpheresis, Peripheral Blood Stem Cell Pheresis, Granulocytapheresis, and Therapeutic Plasmapheresis, and provide the required component to the patients.
3. Conservation and proper utilization of blood by providing proper cross-matched blood to the hospital patients; proper maintenance and confidentiality of patients' records; ensuring

availability of all blood components like Red Cells, Fresh Frozen Plasma Plasma, and Cryoprecipitate round the clock; and providing stored (Recovered Plasma) and unused Plasma for Fractionation to Plasma Fractionation Center for preparation of Blood Products like Albumin and Immunoglobulin.

4. The staff is responsible for the continuation of education and training programmes and the delegation of responsibilities to efficient personnel.
5. The aim of the MD course in Immunohematology and Blood Transfusion is to teach & train resident doctors, and for the students to carry out dissertations under faculty as PG guide approved as PG teachers by MUHS.

Blood Center and Disaster Management

Our Blood Center is one of the largest blood centers in Maharashtra, with an annual collection of around 36000 units. Up to 200 camps are conducted in a year, of which 95% are voluntary and 5% are replacement. All units are screened for Transfusion Transmitted Infections like HIV, Hepatitis B, Hepatitis C, Syphilis, and Malaria. Blood Grouping is done by a semi-automated Blood Grouping Machine. We receive requisitions for 150–200 units daily and strive to fulfill this demand. We have 350 Thalassemia children registered in the hospital and perform Coombs Crossmatch by Gel Technology for them. 95% of the collected units are separated into components.

Role of the Blood Center During Disasters

Blood Center (i.e. Department of Transfusion Medicine) plays a very active role in various disasters. Effective inventory management is a must during disasters as blood and platelets, etc. should be provided on an urgent and priority basis for disaster victims. Any delay in providing blood or platelets can be fatal. Hence, the Blood Center should be well equipped to handle any disaster like bomb blasts, terrorist attacks or outbreak of monsoon-related febrile illnesses like Leptospirosis, Dengue, and Malaria.

Handling of the COVID-19 Pandemic

1. Collected convalescent plasma from 250 COVID-recovered patients and provided it to Covid patients
2. Participated in two clinical trials on convalescent plasma Transfusion:
   a. PLACID trial conducted by ICMR for moderate Covid disease
   b. PLATINA Trial conducted by Government of Maharashtra, MEDD, and DMER
3. PG students did Covid ward duties in rotation during the pandemic

Department of Urology

Source: Excerpts from a memoir written ***by Dr Dev Pardanani****, First Head of the Department of Urology, GSMC KEMH*

My Momentous Academic 'Encounter with Dr RN Cooper and My First Introduction to the Idea of Renal Transplant

I got my MS degree in General Surgery in 1962. At this examination, I not only got my MS degree but I went through a 'miraculous' experience that altogether changed my outlook to my professional life! Dr R.N. (Daddy) Cooper was one of the examiners. Even as I was preparing to

present my long case, Dr Cooper looked at me sort of 'intently' and asked a question, "Did you write your essay on Kidney Transplantation?" I meekly said "Yes." I don't remember exactly what words he said then but the words seemed to imply that he liked it or something to that effect. I was on cloud nine! I nervously mumbled, "Sir, have you already read it?" Obviously, Dr Cooper had already read all the theory papers and assiduously too! In the last essay paper, there were two options and one of these was Kidney Transplantation. I wrote my essay on that.

Is it not uncanny that within a short period of three years after this momentous 'meeting' with Dr RN Cooper, I was to become the lead member of the team that went on in May 1965 to do the historic first human kidney transplantation in India?!

We did two more renal transplants and, on Prof. Dr P.K. Sen's directions I went on, in 1968, to present our groundbreaking experience of human kidney transplantation in front of an assembly of more than a thousand delegates that included many senior surgeons and teachers from all over India at the Annual Conference of the Association of Surgeons of India (ASI) in Madras. Dr Sen insisted I present the paper since, as he said. it was essentially my program. At that time, I was only a lecturer, and I can share with you the fact that presenting that paper at that grand gathering was not easy! We got loads of compliments from many and several 'critical' comments from others!'

I plunged head on in the kidney transplantation program. Although, we began with cadaveric kidney donor program, in the subsequent years we moved on to live donor program and, by the time I retired, I had performed hundreds of successful live donor renal transplant operations. After we performed our initial transplants in KEM Hospital and GS Medical College, the renal transplant became a regular program in many medical centers all over India. We did our first cases using cadaveric donor kidneys entirely for ethical reasons and not for any technological reasons.

The uniqueness of our pioneering program of renal transplantation at the KEM Hospital and GS Medical College was that from the very beginning, the program was based entirely on indigenous endeavor, effort, and knowhow. No external or overseas aid, expertise or training in any form was ever asked or received. None of our surgeons went abroad to learn the various kidney transplant techniques and procedures and nor did we any surgeons from abroad to launch our kidney transplant program. We proved that "if others can do it, so can we!" Remember: The very foundation of GS MEDICAL COLLEGE & K.E.M. HOSPITAL was laid on two basic premises- Indigenous Effort and Indigenous Finance. We remained true to those traditions of our academic forefathers!

Early Years of Urology

From today's standards, urological technology three to four decades ago may be labelled as 'Primitive.' Open urology surgical technology was adequately developed, but diagnostic and operative endoscopy was still in its embryonic stage. We were routinely doing open surgical procedures for various congenital and acquired urological diseases including neoplasms, for large staghorn renal calculi

(extended pyelolithotomy), different types of pyloplasties and other types of reconstructive procedures, urethroplasties, various types of operative techniques for treatment of male infertility (vas-epididymostomy, etc.), and different types of open prostatectomy for BPH viz. Freyer's and Millin's prostatectomies.

We launched the pioneering first in India Kidney Transplant Program in 1965. Today's young generation of urologists would not believe it if we describe the size and the variety of renal and vesical calculi that we saw and removed those days. I recall we showed different types of urinary calculi to a foreign urologist who was visiting us. He was awestruck!

Examples of Basic Studies That Were Done in the Field of Urology

1. Millin's Prostatectomy (Open Surgery for Bph): Defining The Vascular 'Pedicle' of The Prostate
2. Re-Defining The 'Segmental' Blood Supply of the Human Ureter

An Attempt at Developing the Intra-Vas Contraceptive Device (1967)

In the earlier years, around 1967, we carried out some interesting research studies that aimed at producing a 'reversible' vas deferens lumen blockage as an option to 'conventional' vasectomy. These studies were carried out at the instance of and with cooperation of Dr M.L. Kothari, Professor and Head, Department of Anatomy. We called the device *Intra-Vas Contraceptive Device* (IVCD or "male loop"). After initial experimental studies in dogs, the procedure was performed in some human subjects.

Attempts were made to block the lumen of each vas deferens with 'optimum' sized Silastic tubings. The tubings were left inside the scrotum and, when required, were easily pulled out after making a small incision on either side of the scrotum. Since Silastic has been shown to be well tolerated inside the human tissues, it produced no pain or discomfort after its successful insertion. However, post-operative studies in these cases showed that we were not able to produce 'total' blockage of the vas lumen and that the patient's semen continued to show presence of some (curiously, highly motile) sperm, although the tubings were in place and were well tolerated.

After some more trials, the study was terminated. (Similar studies that attempted to produce luminal blockage of the vasa deferentia using occlusive intraluminal plugs and extraluminal clips were also reported by other workers. We also carried out some studies using clips to produce 'reversible' vas luminal blockage but, as in the studies elsewhere, we were not able to produce consistent results). Although this 'male loop' did not go on to become a success story, the technique, in its run up, helped Dr Pardanani devise a new, highly successful technique of vas re-anastomosis using the Silastic tubing as a temporary, removable stent across the anastomosis. This technique was commented upon and reported in many international journals and a synopsis of the technique was published in the Yearbook of Obstetrics and Gynecology. Subsequently, this procedure was superseded by more sophisticated and more successful technique of microsurgical vas re-anastomosis (and vas epididymostomy) in our department. For his pioneering

work in this field Dr Pardanani was appointed on the Reviewing Board of Population Reports published by the George Washington University Medical Center, Washington, D.C., USA.

1980–1991: The Department After Accreditation

The Department of Urology was founded after its recognition by the University of Mumbai in 1980. Dr Dev Pardanani was appointed as one of the first professors for the degree of MCh Urology at the University of Mumbai. The first student who got the degree of MCh Urology from the University of Mumbai was from our department.

During the earlier decades, we had some 'archaic' models of Cystoscopes with a forward 0-degree, a 30-degree fore-oblique, and a 90-degree lateral view telescope. The scopes had an incandescent bulb at the tip that was connected by an electrical cable to the ordinary light source. The light barely revealed the inside of the urethra and the bladder. The lamp, not infrequently, 'blew a fuse' and we had to replace it in the middle of the procedure. In the accessories we had grasping forceps, biopsy forceps, some stone crushing forceps, etc.

In the early years, we hardly did any TURPS (Transurethral resection of the prostate). As a now-recognized department, we got special budgetary provision to buy the latest, state-of-the-art endoscopic equipment with fiber optic light and even a xenon light source, among other things. We did all types of endoscopic procedures on the bladder, prostate, and urethra. We kept abreast with the latest advances in urology by adding the latest technological advances that happened anywhere in the world. We moved to the new Multistorey Building of the hospital where the entire 8th floor was given for our Urology Department.

The pride of the department was our state-of-the-art Operation Theater. It was a 3-room complex that was 'insulated' from the outside environment by a 'barrier' corridor. In addition, there was an outpatient diagnostic endoscopy room. One room housed the C-arm Radiology machine for percutaneous surgery, etc. while the remaining two rooms had all the equipment and facilities for open-, endoscopic-, endo-urological, microsurgical, and renal transplantation surgeries, etc.

Inauguration of Department of Urology (1980) by Dr C.K.. Deshpande, Dean.

In due course of time, we added Percutaneous Renal Surgical Procedures (PCNL) after acquiring a Japanese (Shimatzu) C-arm and all types of disposable and non-disposable surgical tools required for these procedures. We also added the various endo-urological procedures to the list of procedures that we offered at our center. We got the necessary sanctions from the Municipal Corporation to fund the purchase of a shock-wave lithotripsy machine. During this period, we also added all the equipment that was required for microsurgery, like the Carl Zeiss Operating Microscope, and a variety of microsurgical instruments.

As far as I can recollect, the Urology Department at that time was possibly the only full-time department of Urology in this part of the country. It was a center where continuous, non-stop, dedicated, high-quality, and full-time urological education and teaching at postgraduate (MCh) level was given with all facilities and provisions that encouraged research and hands-on experience.

Innovations were urged and applauded as also were academic participation and presentations at medical meetings and conferences. Writing scientific papers in medical journals was governed by the well-known dictum "Publish or Perish." There was no bar to academic inquiry and investigations. The residents and the junior staff were given the freedom to learn and to do all valid procedures, surgical and non-surgical, to further their knowledge and technical skills.

Areas Under Clinical and Academic Urology

General Urology

Open urological surgical procedures included surgical treatment of all types of congenital, acquired, and neoplastic diseases and disorders. Regular weekly Uroradiology and once-a-month Uronephrology departmental meetings were held where the post-graduate students presented interesting X-rays and clinical cases for joint discussions.

Endoscopic Urology

It included most types of urological diagnostic and therapeutic procedures of the lower urinary tract like Cystourethroscopy, TURP, biopsies, treatment of urethral strictures, treatment of bladder stones, tumors, etc.

Percutaneous Renal Surgical Procedures (PCNL)

The state-of-art Japanese Shimatzu C-Arm radiology equipment was imported and installed in the OT, and all necessary tools and devices acquired including the ultrasonic lithotripters, etc. required for this type of advanced treatment. We organized our first workshop on PCNL on 20th May 20–21, 1985, with live audiovisual demonstration of various techniques related to this procedure. The workshop was organized with the active participation of two German urologists, Dr Rudolph Gumpinger and Dr Kurt Miller from Katherinen Hospital, Stuttgart, West Germany.

Live PCNL Audio-Visual Workshop (From left): Dr Arun Shah, Dr B.G. Parulkar, Dr Rudolph Gumpiger, Dr Sulabha Punekar, Prof. Dev Pardanani, Resident, Dr Kurt Miller, Dr Sanjay Purohit, Dr Sharad Shah, Dr Rupin Shah.

Endourology

Newer endo-urological technologies like the uretero-renoscopy, etc. These "minimal invasive surgery" skills of yesteryears have matured today into the modern laparoscopic and robot-assisted surgeries in urology.

Renal Transplantation

Renal Transplantation continued to be our prime program. Starting as the pioneering cadaveric donor kidney transplant program in 1965, we moved on to the live donor kidney transplant program and performed hundreds of successful live donor kidney transplants in our department. We also inserted the Scribner shunts and later created arterial-venous fistulas for vascular access for chronic dialysis in patients who came for renal transplantation surgery.

Andrology (Male Reproductive System)

Andrology services provided the latest investigative and therapeutic options (both surgical and non-surgical) for the management of infertility in males. New techniques of vasectomy and microsurgical techniques for vas-epididymal anastomosis and vas re-anastomosis (for cases of vasectomy) were routinely offered. All these procedures helped in training the young urologists in this generally neglected area of patient care. For all these projects, especially those related to population regulation, the Department received, for several years, handsome research grants from the Indian Council of Medical Research (ICMR), New Delhi. This Department was one of the first in India to offer Andrology as a distinct super specialty within the specialty of Urology.

Sexual Medicine: Management of Impotence and Other Sexual and Sexual Dysfunctions in Men

Continuing our pioneering efforts in the fields of Uroandrology, our department offered, for the first time in India, several latest investigative modalities like Nocturnal Penile Tumescence Monitor (NPT), Penile Plethysmography,

Ultrasonic Doppler, and Electromyographic studies to optimize the diagnosis and treatment of impotence in men. In 1989, we also reported our experience with the intra-cavernosal injection of Papverine and phentolamine, and the role these drugs play in the evaluation and therapy of male erectile dysfunction. (Atul M. Shah, B.G. Parulkar and D.S. Pardanani, Ind. J. Urol. 5(2): 64–67, 1989). These above-mentioned tests and techniques helped in differentiating organic (vasculogenic and neurogenic) impotence from psychogenic impotence, enabling the clinician to offer more rational and focused treatment. Furthermore, surgically implantable semi-rigid silastic penile prostheses were offered to suitable patients of organic impotence in the Department of Urology at that time. This operation was not a commonly performed surgery in India in those times. Professor Pardanani was, for several years, the Vice President of the Indian Association of Sex Educators, Counselors and Therapists (IASECT). Dr Prakash Kothari who was the pioneer in the field of Sexual Medicine in India was the President of this association. We had close academic contacts with Dr Prakash Kothari and did a number of projects together, and we organized a number of national and international conferences in India. Dr Kothari was appointed as Professor of Sexual Medicine at KEM Hospital and conducted a Sexual Medicine Outpatient Clinic in the hospital for over a period of 30 years.

Prof. Dev Pardanani addressing the 5th National Conference of Sexology, New Delhi, 1989 organized by the IASECT. (Dr Prakash Kothari is seated second from left).

Inclusion of Hands-on Experience of Ultrasound Diagnostic Technology in the Postgraduate University Teaching Program in Urology

The department made available in the in-patient ward a mobile/portable ultrasound machine which allowed the Urology residents and postgraduate students obtain real-time experience in the diagnosis of certain urological diseases soon after the patient's admission to the urology in-patient service. The regular use of this diagnostic tool

helped the staff and residents get practical experience in using this advanced ultrasound technology for early diagnosis even as the patient was being processed to go through a regular investigative protocol for his/her urological problems. The equipment had both the abdominal probe and the rectal probe which allowed ultrasonic evaluation of the prostate, the bladder and the upper urinary tract (the kidneys and the ureters). The ready availability of this type of advanced, portable imaging technology in the teaching program of the residents has not been cited or alluded to by other clinical urological services or other urology departments in the country.

Histopathology Lab Facilities for Staff and Postgraduate Students

A small pathology lab was set up in the department where semen analysis was performed, and testicular biopsy tissues were processed for micro-pathological studies. Staff and students were encouraged to use this resource to learn and to interpret semen analysis findings and the histological changes that were commonly encountered in the testes of patients who had infertility. This facility was also used, wherever necessary, for research in the field of vasectomy, particularly in patients who reported to the urology department for the restoration of their fertility.

Establishment of Advanced Photographic/Documentation Services

In the field of documentation, the department had the latest technology in clinical photography, microphotography and video photography of some important and rare surgical procedures for teaching, research, presentation in conferences, and archiving some pioneering and interesting activities of the department. For example, the department had in its possession the state-of-the-art Nikon system for medical (clinical) photography, the Carl Zeiss system for microphotography and microscopic surgery, and the latest Umatic movie/video photography equipment used for recording operations like the surgical removal of large stag-horn calculi from the kidneys, pyeloplasty procedures for hydronephrosis, retropubic prostatectomy, various types of vasectomy and vas re-anastomosis including the techniques of microsurgical vas re-anastomosis, kidney transplantation, and many more. An important aspect of this program was that most of these photographic tasks, including the video recordings, were generally performed by the staff, residents, and the postgraduate students in Urology. The inclusion of this unique, self-sufficient amenity for documentation helped in making the postgraduate teaching and training program in the Department of Urology at KEM Hospital more comprehensive and complete.

4

Institutional Bodies

Academic Committee

The Academic Committee was started in the new millennium and is aimed at establishing norms pertaining to Academics—teaching, learning methodology, implementation of syllabus as per University and Central controlling Authority, conducting examinations. It handles any issues with respect to undergraduate and postgraduate students. It is headed by the Dean and has professors and lecturers across departments as its members. It has established the UMASS-KEM for the past 20 years and the UCLA-KEM undergraduate student exchange program this year with its first batch of students exchange for UCLA-KEM scheduled for the first quarter of 2025.

Department of Medical Education (DOME)

The Medical Education Technology Cell established in the year 1993 has now expanded into the Department of Medical Education (DOME). The rapid expansion of medical sciences and pedagogy has necessitated the need for training medical teachers. It was with this aim that the MET ell of Seth G.S. Medical College and KEM Hospital was established in 1993 in line with the recommendation of Medical Council of India to oversee, improve, and improvise teaching methods, and to train teachers to impart quality education to the students. It was upgraded to Advanced Center for Medical Education & Research (ACMER) in October 2014. It was further upgraded to the Department of Medical Education in October 2015. The office of the Medical Education Unit was originally located in the Department of Anatomy, second floor, college building and then shifted to second floor, hospital building. The infrastructure and staff were shared between the Departments of Anatomy and Pharmacology. Since 2009, the office has been located on the terrace of the college building.

Objectives

- To create awareness amongst teachers regarding the principles of medical education technology.
- To initiate teachers to evolve educational strategies so that the lacunae existing in the present system could be minimized.
- To disseminate knowledge and allow diffusion of activities to other institutes.
- To target both teachers and students, as they are the most important constituents of the educational process.
- Promote educational research.
- Facilitate this learning process to other similar professionals.

DOME has been recognized by the National Medical Council (NMC) as the GSMC-KEMH-NMC Nodal Center to conduct the Revised Basic and Advance Courses in MET. It is also recognized by

FAIMER, Philadelphia as a Center for its Regional Institute (GSMC-FAIMER Regional Institute). It is a collaborative Educational Leadership Development Program for the South-Asia Region for Advancement of International Medical Education and Research. Foundation for advancement of International Medical Education and Research (FAIMER) is a sister organization of the Education Commission for Foreign Medical Graduates (ECFMG), USA and has been successfully running faculty development fellowships since 2001. In June 2005, the Seth G.S. Medical College was the first to start a regional institute in the world.

Dr Manu VL Kothari Chair and Division of Medical Humanities

Source: Excerpts from Annual Reports of Dr Manu VL Kothari Chair and Division of Medical Humanities

***By Dr Swarupa Bhagwat**, Associate Professor, Transfusion Medicine*

Journey of Dr Manu VL Kothari Chair and Division of Medical Humanities

Dr Manu VL Kothari, former Professor and Head of the Department of Anatomy had been a learned scholar and committed academician, one of the most loved and respected teachers, a medical philosopher, and an author of many papers and books on topics like cancer, death, environment, and medical philosophy. He was associated with the institution from the day he joined as a student till his passing away at the age of 79 on 16th October 2014.

During the remembrance event held in respect of Dr Kothari on 18th October 2014, teachers and others touched by him expressed a desire and urge to establish a Chair of Medical Humanities in his name at Seth G.S. Medical College and KEM Hospital. The objective was to help bring about a positive transformation in the current medical scenario by instilling and fostering a humane and ethical approach to the practice of medical science. The then Dean Dr Avinash Supe enthusiastically supported this idea.

The Chair was officially established on 23rd January 2016 under the aegis of the Gosumec Alumni Association. Renowned physician, Dr Farokh Udwadia graced the occasion as the Chief Guest. He discussed the history of medicine as the foundation of cultivating medical humanities. Dr Sunil K Pandya took over as the first Chairperson. Dr MVLK Chair and Division of Medical Humanities aims at inculcating in undergraduate and postgraduate students humanity, ethics, love for philosophy, and the art, thus helping them treat patients with empathy and kindness. The Foundation Day of the Division is celebrated every year on 23rd January and the Manusmriti event is organized on 16th October in the memory of Dr Kothari on his death anniversary.

Since then, the work of the Chair and the division is being looked after by the core committee, with Dr Padmaja Samant as the coordinator. Dr Swarupa Bhagwat has shouldered responsibility of looking after the Archives and published the annual report and the annual volume titled Reflections since 2019. There are student secretaries every year who work enthusiastically under the guidance of core committee members. Dr Lopa Mehta and Dr Ravi Ramakantan are two advisors whose guidance encourages the committee members to continue to work towards the goal.

A series of lectures, screening of films and documentaries, and skills and palliative care workshops were conducted in 2016, i.e. the year of establishment. Photography, essay writing, and film making competitions were organized for the students and since then, there was no looking back. The Chair and Division has been organizing lectures, lecture series, workshops, orientation programs, interactive sessions, and interviews of former teachers, book reviews, etc. History of medicine, philosophy, interpersonal relationships, ethics and art… all facets of Medical Humanities have been included through these different programs. History of Medicine, Tribal Health, Narrative Appreciation and Reflective Writing, and Gender and Health were organized as short, online certificate programs for students and faculty only recently. The plan of establishing a year-long basic course in Medical Humanities is also underway. As we look forward to the centenary celebrations of our institute, the humanities Chair and Division has been organizing virtual reunions of present and former undergraduate batches in collaboration with the Gosumec Alumni Association.

'Ascension', a step above, is the annual conference of the Chair and Division where students from our institute and other medical colleges actively participate, and there is a new theme for the conference every year.

'Reflections' is our annual publication and we have published four issues till now, based on different aspects of Medical Humanities (History of Medicine, Interpersonal Relationships in Healthcare, Covid-19: The Human Angle, Literature and Medicine). The Archives of our institutes (photographs, instruments, books, etc.) are also maintained in the 'Janus' section under the Division of Medical Humanities.

Our recent collaboration with the GOSUMEC Foundation USA will help us tremendously in enhancing the activities of our Chair and Division. With strong support and encouragement from our deans we have been conducting our activities smoothly and successfully. Dr Avinash Supe is the present Chairperson of the Chair and Division of Medical Humanities who took over the reins from Dr Sunil Pandya in April 2024. Dr Pandya passed away on 17th December 2024.

GSMC-MUHS International Chair in Bioethics Unit and Students' Wing

***By Dr Padmaja Samant**, Professor Obstetrics and Gynecology, Seth Gordhandas Sunderdas Medical College*

The unit was established in 2015 and earlier known as GSMC MUHS UNESCO Bioethics Unit.

Aims and objectives

- To integrate the MUHS approved UNESCO Bioethics curriculum in the undergraduate curriculum and ensure effective implementation of the same.
- To train the faculty and postgraduate students in bioethics.
- To prepare an updated and modern curriculum reflecting the need for integration of ethics during the training period, and for its effective implementation in clinical practice and accommodating medical, technological

and scientific progress.

- To conduct training workshops in bioethics for teachers and students of Health Profession Education.
- To introduce and deliver bioethics and professionalism training in undergraduate and postgraduate students and all faculty across disciplines.
- To introduce values involved in healthcare delivery and raising awareness for competing interests in healthcare.
- To introduce various non-medical facets of medicine, like sociology, economics, philosophy, and public health to students.
- To initiate, collaborate, facilitate, and participate in research related to bioethics.
- To create a Resource Library to teach and explore bioethics in healthcare services.
- To promote a sense of fraternity among students across streams.

For the attainment of the above Aims and Objectives the unit may:

- Hold periodic meetings to discuss bioethical dilemmas and promote a healthy exchange of ideas related to bioethics,
- Annually publish the bulletin to promote ethics discourse in health,
- Collaborate with other medical societies and associations of KEM Hospital,
- Create opportunities of learning and understanding through active participation of students, and
- Participate and hold CME /conferences in bioethics.

Steering Committee

The Steering Committee of GSMC-MUHS-UNESCO bioethics unit shall consist of up to 20 members (inclusive of office bearers) who are trained in bioethics in a course approved by UNESCO and would be appointed by the Chairperson/Dean of the college ensuring proportionate representation of all departments including Nursing.

Students Wing

A student's wing will be formed with a minimum of 12 members and applications will be invited for the same. The unit conducts teaching programs, including foundation course lectures for undergraduate students. Numerous competitions based on the theme of the year are conducted, like artistic poster painting, scientific poster, essays, poetry, street play, film making etc. Annual publication of Bioethics bulletin called INARCH, inaugurated on the day of World Bioethics Day celebrations, is in the 3rd week of October every year. For postgraduate students and faculty of various departments, we conduct bioethics grand rounds about three departments/ event.

Hospital Infection Control Committee (HICC)

***By Dr Gita Nataraj**, Former Convener, KEM Hospital Infection Control Committee*

The KEM Hospital Infection Control Committee was established in March

1990 with an aim to develop policies and procedures for hospital acquired infection control. Dr V.N. Acharya was the first convener and Dr P.M. Pai, the then Dean, was the first chairperson of the committee. The committee consisted of members from clinical departments, pharmacy, nursing, microbiology, and administration. Through its monthly meetings, several seminars and training programs, the committee has tried to establish and monitor good practices for infection prevention and control.

The committee, its members, and its activities have evolved and expanded over the years, delving into matters pertaining to the use and choice of disinfectants, appropriate methods of sterilization, aseptic practices, and guidelines for operation theaters, standard and universal precautions and antibiotic use audit to name just a few. Periodic antibiograms are generated by Microbiology department and shared with the clinicians. Clusters/ outbreaks of hospital acquired infections are dealt with immediately.

The First Indian Conference on "Hospital Infection- It's Prevention and Control" was conducted by KEM-HICC on 6th, 7th and 8th March 1992. Prof T.D. Williams (UK), President of The International Society for Chemotherapy, inaugurated this conference. Hospital Infection Society, India was established during this conference.

The advent of HIV in the '80s saw the strengthening of measures to prevent blood borne infections, a relook into the reuse policy, awareness, training, and stringent implementation of standard precautions. Sodium hypochlorite became the disinfectant of choice for decontamination of environment and blood/body fluid spills. With the advent of post-exposure prophylaxis, reporting of needle stick injuries was encouraged for timely initiation of preventive treatment. In 1998, Ministry of Environment, Forests and Climate Change notified the Biomedical Waste Management and Handling Rules. Infection Control Committee led the policy development and training to implement correct practices.

The COVID-19 pandemic brought with it the need to strengthen airborne infection control, in addition to rapid testing and isolation. The overall compliance with hand hygiene improved significantly, so also did the use of N95 respirators as and when needed.

Targeted surveillance and audit of device associated infections is carried out periodically and timely feedback, as appropriate, is provided to the clinicians and the administration to improve upon the deficiencies identified. An infection control team consisting of a microbiologist, an infection control nurse, and a medical officer has been established. The team is responsible for targeted training, audit and surveillance related activities in addition to trouble shooting in consultation with the infection control committee.

Since the last few years, the infection control committee has been proactively providing Hepatitis B preventive vaccines to students and healthcare workers regularly. Today, the infection control committee at KEM hospital is moving towards complying with the requirements of NABH standards and monitoring the key performance indicators with the overall aim is to reduce and prevent

the development of hospital acquired infection.

Institutional Animal Ethics Committee (IAEC)

This was established in the year 1996. The primary objective of the Institutional Animal Ethics Committee (IAEC) of the Seth G.S. Medical College and KEM Hospital is to ensure that animal experiments are performed carefully and humanely with minimal pain to the laboratory animals. The Central Animal House which houses the laboratory animals is registered with the CCSEA for the purpose of 'Breeding and Research on animals'. The IAEC is approved by the Committee for the Control and Supervision of Experiments on Animals (CCSEA), previously known as Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA). The IAEC consists of a total of nine members which include both internal and external members. The five internal members are nominated from amongst the institutional faculty members and the CCSEA nominates four external members.

Institutional Ethics Committees (IEC)

By Urmila Thatte, *Former Member Secretary, Ethics Committee, Emeritus Professor, Department of Clinical Pharmacology, Seth G.S. Medical College & KEM Hospital*

History

Dr G.B. Parulkar, Dean, Seth G.S. Medical College and KEM Hospital, Mumbai constituted the Ethics Committee on 6th Jan 1987. Dr S.M. Karandikar was the first Chairperson and Dr S.D. Dahanukar was the first Member Secretary of this committee. The committee was reformulated in 1999 with the chairperson from outside the institution. In 2002, it was renamed as Ethics Committee for Research on Human Subjects (ECRHS). In 2008, the Director ME & MH, Dr Sanjay Oak constituted and launched an additional committee, Committee for Academic Research Ethics (CARE) on 14th Nov 2008 to oversee ethical review of thesis and investigator-initiated projects. In 2009, the IEC received international recognition from Strategic Initiative for Developing Capacity in Ethical Review (SIDCER) and Forum for Ethical Review Committees in Asia and the Western Pacific Region (FERCAP). A new SAE Subcommittee of the ECRHS was formulated on 24th March 2009 with Dr Urmila Thatte as Head of the SAE Subcommittee and Dr Raakhi Tripathi as Executive Secretary.

In 2012, the IEC received international re-recognition from Strategic Initiative for Developing Capacity in Ethical Review (SIDCER) and Forum for Ethical Review Committees in Asia and the Western Pacific Region (FERCAP). In 2013, keeping with recommendations of the SIDCER surveyors, the ECRHS and CARE were dissolved on 31st December 2012 by the Dean, Dr Sandhya Kamath and two new boards were constituted with same SOPs Institutional Review Board–I and II (IRB-I and IRB-II) from 1st January 2013. The SAE Subcommittee was also re-constituted at the same time. In 2013, the IEC–I was registered with DCGI on 22nd April 2013 and IEC-II was registered with DCGI on 6th August 2013.

The IEC received international re-recognition from Strategic Initiative

for Developing Capacity in Ethical Review (SIDCER) and Forum for Ethical Review Committees in Asia and the Western Pacific Region (FERCAP) in 2016.

In 2018, IEC-I & II were accredited by NABH (National Accreditation Board for Hospitals & Healthcare Providers (Constituent Board of Quality Council of India). Three separate committees were formulated with the SAE Subcommittee in March 2019 and IEC-I and IEC-II were re-registered with CDSCO on 15th Oct 2019. The IEC-I, IEC-II and IEC-III have been registered with Department of Health Research (DHR) provisionally on 12th Oct 2019.

In 2020, the IEC-I underwent re-accreditation audit by NABH on 4th & 5th Feb 2020 and received certificate no.: ECCT-2018-0027, May 19, 2018 to May 18, 2021. In 2021, the IEC-I underwent re-accreditation audit by NABH on 18th May 2021 and received Certificate no.: EC-CT2018-0027, May 19, 2021 to May 19, 2024. In 2021, IEC-I, IEC-II and IEC-III sought approval from Dept. of Health Research (DHR) having validity for five years from 22nd Oct 2021 to 21st Oct 2026. In 2022, IEC-I, IEC-II and IEC-III have started their functioning for which the members have been appointed by the Dean (as per NDCT Rule 2019) for the tenure of 16th October 2022 to 16th Oct 2025. In 2023, IEC-I underwent re-accreditation audit by NABH and received Certificate no.: EC-CT-2018-0027 which was valid from May 19, 2019 to May 19, 2024. In 2024, IEC-I received re-registration approval from CDSCO having registration number ECR/229/Inst./MH/2013/RR-2024 valid from 22nd April 2024 to 21st April 2029. In 2024, IEC-I underwent re-accreditation audit by NABH on 23rd Sept 2024 and received Certificate no.: EC-CT-2018-0027.

Year	Total Reviewed Projects till 16th Dec, 2024														Total Reviewed
	IEC-I					IEC-II					IEC-III				
	Pharma	Govt	OA	Thesis	Total	Pharma	Govt	OA	Thesis	Total	Govt	OA	Thesis	Total	
2015	13	05	70	137	**225**	10	02	73	133	**218**	-	-	-	-	**443**
2016	13	04	106	123	**246**	11	04	110	121	**246**	-	-	-	-	**492**
2017	19	01	78	102	**200**	00	04	82	106	**192**	-	-	-	-	**392**
2018	23	03	83	139	**248**	11	05	96	143	**255**	-	-	-	-	**503**
2019	22	00	00	02	**24**	00	05	87	112	**204**	04	81	101	**186**	**414**
2020	17	08	04	01	**30**	00	10	85	51	**146**	00	94	53	**147**	**323**
2021	15	08	12	03	**38**	00	08	90	110	**208**	00	105	108	**213**	**459**
2022	19	03	11	00	**33**	00	05	82	98	**185**	00	94	88	**182**	**400**
2023	35	03	04	02	**44**	00	05	98	144	**247**	05	89	145	**239**	**530**
2024	20	03	08	01	**32**	00	03	86	149	**238**	05	78	145	**228**	**498**
Total	**196**	**38**	**376**	**510**	**1120**	**32**	**51**	**889**	**1167**	**2139**	**14**	**541**	**640**	**1195**	**4454**

Institutional Committee for Stem Cell Research (IC-SCR)

The Institutional Committee for Stem Cell Research (IC-SCR) was established in 2008 and registered under National Apex Committee for Stem Cell Research and Therapy (NAC-SCRT), Department of Health Research Ministry of Health and Family Welfare Government of India.

Initially, it was constituted in Seth GSMC & KEM Hospital and was functional till 2012. It was reconstituted and was functional from 9th July 2020. One project was discussed in an online meeting held on 12th July 2023. As per the circular released by ICMR Advertisement dated 31st May 2023 regarding Dissolution of National Apex Committee for Stem Cell Research & Therapy (NAC-SCRT), published by ICMR-DHR for public opinion, the IC-SCR is now dissolved.

National Plasma Fractionation Center (NPFC)

By Dr Jayashree Sharma, *Professor and Head of Department, Transfusion Medicine, Seth G.S. Medical College & KEM Hospital & Dy Director In-charge National Plasma Fractionation Center, KEM Hospital*

There was a long-felt need for safe and good quality plasma fractionation products be manufactured in our country using plasma of voluntary blood donors. In 1985, Director General of Health Services (Govt of India) initiated the proposal for setting up a plasma fractionation plant on a non-profit basis. KEM Hospital Blood Bank was selected for setting up the first Plasma Fractionation Plant in the country. The Swedish International Development Agency (SIDA) was approached for support and establishment of the plant. The cost of the project that time (1985-1986) was 35 million rupees (₹ 3.5 Cr) along with facilities for component separation in the Blood Bank. The required infrastructure and finances for site preparation were provided by the Ministry of Health, Government of India and the Bombay Municipal Corporation. In 1986, the Bombay Municipal Corporation agreed to undertake the project. It was decided that the center would be established as an autonomous body to be managed by a trust. The service charges on the products would be incurred.

Thus in 1988, for smooth functioning of NPFC, a Trust viz. "Research Foundation for National Blood Transfusion Services" was created by the MCGM, vide their Resolution No. 989 of 27/01/1989 & was registered with the Charity Commissioner Bombay under no. E (12342), on 5th August 1989, as per the provision of Bombay Public Trust Act, 1950. The Hon'ble Municipal Commissioner is the Chairman of the Trust, the Municipal Commissioner (now Additional Municipal Commissioner) In-charge of Health Department, MCGM is the Managing Trustee and Other Trustees include Deans of KEM, Sion, and Nair Hospitals, Director NPFC, the Hon'ble Mayor of Mumbai, Leader of the House, Leader of Opposition, Chairman of the Standing Committee, Chairman of the Public Health Committee, Deans of all major Municipal Hospitals, Chief Accountant, Law Officer, and the Central and State Government representatives

The objectives of this project were:

- upgrading of blood transfusion services,
- better screening procedures for donors,
- training programs for blood bank officers to manufacture safe plasma products using individually screened donor plasma from voluntary donors,
- to learn and adopt fractionation technology, good manufacturing practices, and virus inactivation concepts,

- to produce standardized blood products like albumin, immunoglobulins etc. to be made available to all economic sections of the society especially to public hospitals.

The staff was trained accordingly on various aspects of fractionation and virus inactivation procedures. The Plasma Fractionation activity was being carried out in the space allotted at KEM Hospital, 7th floor, multistory building (Approx. 7000 sq. ft. area) from the year 1989 till the year 2003. Regular fractionation based on column chromatographic techniques and standardization of products began in 1990. The internal and external quality control of the products was strictly followed. The plant could fractionate upto 10,000 liters of plasma every year. However, due to change in FDA norms (Introduction of Schedule-M for Plasma fractionation activity), and resignation from the expert and competent staff who left for better prospects, the license to manufacture the product at NPFC, KEM Hospital was discontinued from 2003.

In 2006, the Hon'ble Municipal Commissioner allotted 2000 Sq. Mt. land with the existing building measuring 1400 sq. meters in the campus of the Pandit Madan Mohan Malviya Centenary Municipal Hospital (Shatabdi Hospital) at Govandi. The capacity of the plant was proposed to be increased from 10,000 liters to 18,000 liters and the Technology for this project was to be provided by the M/s. GE Healthcare, Sweden and supplied GE Process Chromatography Machines along with accessories in June 2006.

The actual work of the site was started in the month of September 2009 after release of Rs. 1 crore in advance to M/s. Clean Air Projects Pvt. Ltd. (CAPL) for Turnkey Project by MCGM. MCGM also sanctioned ₹10 Crore to start the project, and ₹5 Crores was provided in the first phase.

However, this project under control of NPFC was not successful for the following reasons:

The contract was awarded to the lowest bidder with the period of 1.5 years for the completion of project. The bidder was called afterwards for negotiation and was asked to accept the project at price quoted by bidder amounting to Rs. 16.87 crore in 2009. When the project was halfway completed, the bidder M/s. CAPL requested for additional cost along with additional time, which was not accepted by then NPFC and MCGM authorities. This resulted in partial completion of infrastructure for installation of core machinery such as Chromatography systems, columns, and filtration system. This core machinery was to be procured as a grant from NACO of ₹ 4.48 Cr only after completion of infrastructure for installation. However, then NPFC management procured this machinery hurriedly to avail the grant which otherwise would have lapsed.

As a result, the machinery remained idle without installation and started wear and tear due to non-utilization and non-servicing in lack of proper environment of pharmaceutical production and the project has remained abandoned from the year 2003 till date. This is because NPFC authorities did not have expert staff for project implementation. Therefore, it was decided that a consultant will be appointed for the project which will be

completed and owned by MCGM and will be given later on for operation to NPFC. Accordingly, Hospital Infrastructure Committee (HIC) of MCGM was given the task in 2015. HIC appointed a Consultant M/S Elomatic for the project. M/S Elomatic stated that ₹ 150 Crores will be required to start of the activity as a Greenfield project. They had got the plan also approved by CDSCO west Zone, Mumbai Central. It was planned that the project will be taken up as a PPP model. However, the funds required for the project could not be arranged, hence the project is status quo presently.

Currently NPFC is collecting plasma from MCGM Blood Banks like KEM, Sion, Nair, and Rajawadi and Blood Banks like St. George Hospital, Shree Sainath Blood Bank, Shirdi and stored at Shatabdi Hospital Govandi Cold Storage Center for which license from FDA has been obtained.

Subsequently, Human Albumin IP (20%, 100ml) and Human Intravenous Immunoglobulin IP (5%, 100ml) are procured from M/s. Reliance Life Sciences and issued to poor patients admitted in Government and MCGM hospitals free of cost under various schemes and through Poor Box Charity Funds from the issue counter at 7th Floor, Multistory Building, KEM Hospital. For those who can afford it, it is given at subsidized rates.

Dr Vijayalakshmi Ray started Contract Fractionation in year 2006 to avoid wastage of valuable plasma stored at Govandi Shatabdi Hospital cold storage for contract fractionation. This activity is in continuation till date. The Blood Products are issued for free under various schemes like MJPJAY (Mahatma Jyotiba Phule Jan Arogya Yojana), PBCF (Poor Box Charity Fund), JSSP (Janani Shishu Suraksha Programme). Since 2022, Dean, Dr Sangeeta Ravat has taken Additional charge as Director NPFC and Dr Jayashree Sharma, Professor and Head, Department of Transfusion Medicine, has taken Additional charge as Deputy Director, NPFC.

Efforts for reviving National Plasma Fractionation Center are underway.

Patient Education Center

***By Dr Kamaxi Bhate**, Retired Professor, Community Medicine, KEM Hospital, Mumbai. Ex- Member Secretary, Savitribai Phule Gender Resource Center*

The Patient Education Center at KEM Hospital was founded within the Community Medicine Department in 2003. Its primary goal is to raise awareness among the patients, their families, and the community about different health issues, their causes, and methods for prevention and treatment. This information is presented in simple language, often with visuals, to help individuals take responsibility for their own health, support the well-being of their families, and embrace healthier lifestyles.

The idea to establish such an education center had been in our minds for many years. Dr Shrikala and I would create posters with the help of interns skilled in drawing and painting. We focused on themes like the WHO day, Breastfeeding Week, Eye Donation Day, TB Day, Geriatric Day (on Hypertension and Diabetes), and Malaria and Dengue during the monsoon. While some funding was available for

making these posters, there were times when talented interns were not available, making the posters less visually appealing despite the budget.

When we had the funds, we would invite interns from other departments on Saturday afternoons to create posters. If we had artistic interns available, we would sometimes fund the posters personally. Once we had a good set of posters, we would invite senior faculty members, including Dr Ravi Bapat, Dr Dahanukar, Dr Fernandes, Dr Ravi Ramakantan, Dr Ajit Phadke, and Dr Bhalerao, to review them critically. Their feedback was invaluable, and they even helped us secure small projects, such as creating pamphlets and booklets with numerous pictures on topics like blood donation, kidney health, preventing road accidents, home safety, diabetes, and school health. These materials were used by our interns and RMOs in hospitals and the community. Most of our educational materials were reviewed and modified based on the feedback received.

However, this effort lacked continuity and consistent quality in the posters. When we created flip charts manually, they were unclear, and there was no consistency in the faces depicted. What we needed were three things: an artist, a computer, and a budget! We managed to secure an artist—our very own Sachin! We were thrilled because he could draw whatever was needed. We provided him with a list of images to create for our picture bank, such as a boy, girl, elderly person, someone suffering from fever, mosquitoes, a person coughing, a pregnant woman, school children, adolescent girls, balanced diet, vegetables, kidneys, first aid, and many more. We acquired a second-hand scanner and computer through the UNICEF project for Adolescent Girls on Life skills education. Our artist underwent basic training in computer usage and page design software. Our friends donated a camera and printer, and the department provided us with a small room to use as the patient education room!

Dr Dahanukar and Dr Bapat provided invaluable support by designating the Patient Education Center (PEC) as a project under Diamond Jubilee Society Trust (DJST) after evaluating our work. The DJST began funding our artist and supplying resources such as poster stands and tables. Dr Nirmala Rege further supported the PEC by providing us with a high-end computer and scanner.

By 2005, we were creating posters, pamphlets, flipcharts, modules, and scrolls for various departments at KEM, other medical colleges, and NGOs focused on health and hygiene. At this point, we prepared an impressive PEC brochure that quickly summarized the topics covered, the number of posters available, and the languages offered (Marathi, Hindi, English, and Gujarati). Dr Lopa Mehta helped by translating our posters on ANC care, childcare, Leptospirosis, and Osteoporosis into Gujarati. Some of the most frequently used materials by other departments and NGOs include posters on Antenatal Care, Child Care, Breastfeeding, Tuberculosis, Organ Donation, Blood Donation, and preventing household accidents. Our most widely distributed flip charts and booklets cover topics like Growing Up and Adolescent Health, Blood Donation, and Organ Donation. All the materials produced by PEC over the

past twenty-two years have been uploaded on the KEM website. These resources are freely available for download to aid public education.

Redressal Forum

Forum for redressal of patients' grievances, King Edward VII Memorial Hospital, Parel

By Sunil K Pandya

At a meeting in the Tata Institute of Social Sciences, the subject of a lack of a forum where the patients' complaints could be attended to was discussed. It was strongly felt that such a forum was necessary. It would have several benefits. It would help patients who had genuine complaints. The forum would investigate the basis for these complaints, identify the causes and address, and implement solutions of a permanent nature to prevent other similar experiences amongst patients. If one or more individuals was found to be guilty of malpractice, disciplinary action would be taken by the Dean against them.

One of our staff members who had attended this meeting at Tata Institute of Social Sciences brought this need to the notice of Dr Pragna M. Pai, Dean, with a request that our institution set up a committee for this purpose to help our patients. There was no similar committee in any of the medical institutes of our city or our state. Whilst the primary purpose was to help our patients, it was also felt that the proceedings of such a committee would help show the transparency with which our administration functioned. The committee would also help in reducing items in newspapers against our hospital and staff and the resultant unwelcome publicity in the media.

Dr Pai was enthusiastic and immediately set about formulating such a committee with an administrative officer of the rank of Assistant Dean as its head. The committee was to include a member from the non-clinical departments, one each from the medical and surgical disciplines, one respected member from the press, one social worker, and a secretary for the maintenance of records and official correspondence. Where required, experts from other departments could be requested to help as *ad hoc* members.

The procedure was as follows. The establishment of this committee was widely publicized amongst the staff of the hospital and to patients and their families in the outpatient department and in the wards. This notification was issued in English and in three regional languages namely Hindustani, Marathi and Gujarati. Any patient or relative with a complaint was requested to hand over to the secretary of the committee a written memorandum describing details. Realizing that some patients or relatives may not be able to write, the secretary was authorized to record the complaint based on verbally provided details. The written document was to be read aloud to the patient, translated into his or her language. On obtaining the complainant's authorization, the document would be signed by the secretary and put on record.

Copies of this complaint were distributed to the individual against whom the complaint had been made, the head of the relevant department, and to members of the committee. A suitable date within a week of receipt of the complaint was fixed for learning details from the complaint and for discussion by the committee members.

The date was fixed after ensuring that it was convenient for the complainant. The meeting was held in the room adjacent to the Dean's office. The complainant was requested to remain present during the discussion on the complaint. If the complaint was against one or more individuals, they were requested to be present along with the Head of the related department.

After recording all details and giving the complainant an opportunity to ask questions to the person(s) against whom the complaint had been filed, the former was requested to leave the room. Members of the committee then discussed the complaint on merit, making their own inquiries to the person(s) involved and the head of the relevant department. If it was felt that there was merit in the complaint, members recorded their suggestions on steps to be taken and the consensus opinion was recorded. This document was then sent to the Dean for further action.

After obtaining the decision of the Dean on each complaint, this decision and corrective action taken were conveyed to the complaint. All documents were filed on record. This system served the hospital and its patients well and the committee functioned as long as Dr Pai was the Dean. The Chairperson of the committee was Dr Satoskar and members included Dr Lopa Mehta and Sunil Pandya.

Regional Resource Center-Western Region, National Medical College Network (NMCN)

Seth G.S. Medical College and KEM Hospital, Mumbai was selected as a Regional Resource Center for Western Region under National Medical College Network (NMCN) project in 2015. In the first phase of NMCN scheme, five government Medical colleges from the states of Maharashtra, Gujarat, and Goa which already have connectivity provided by National Knowledge Network (NKN) have been identified for NMCN activities. This linkage is for Tele education, Tele CME, Tele specialist consultations, Tele follow-up, sharing of surgical and interventional skills, and access to Digital Library. There is RRC(W) Program Management Unit committee, and they are members from the faculty headed by the Dean ex officio members (NMCN). There are Telemedicine Infrastructure & Network Administrator, Content Developer, NHM Support Facility Manager, Content Developer (e-classroom), AV Technician (e-classroom).

Seth G.S. Medical College Multidisciplinary Research Unit [GSMC-MRU]

The GSMC-MRU serves as the central research laboratory of the institution which is one of the requirements for the institute to be recognized by the National Medical Commission. It is located on the 1st and 2nd floor of the Mortuary Building of the institute. It was established under the aegis of the Central Sector Scheme of the Department of Health Research (DHR), Government of India for the development of infrastructure for promotion of health research in different areas of non-communicable diseases. The unit received funding from DHR in September 2014 and started functioning from June 2016.

Mandate

- To encourage and strengthen an environment of research in non-communicable diseases (NCD),

- To bridge the gap in the infrastructure which is inhibiting health research, and
- To improve the overall health status by creating evidence-based application of diagnostic procedures/processes.

The GSMC-MRU is headed by Dean ex officio and a faculty member as a Nodal officer. The scientific and technical work at MRU is managed by two research scientists, two lab technicians and a lab assistant cum data entry operator. The overall management of the unit is done as per the recommendations of the Local advisory Committee (LAC), the Research Advisory Committee (RAC), and the Purchase committee (PC). The RAC has been formed as per ICMR requirement and has seven external and seven internal members from various specialties as recommended by ICMR.

The RAC plays a key role in recommending project proposals for funding and/or using infrastructure facility of the unit. It offers recommendations for selection of equipment to promote and encourage quality multidisciplinary medical research in the Institution.

Infrastructure

GSMC-MRU has four major labs, namely Molecular Biology lab, Biochemistry lab, Immunology Lab, and Chromatography Lab. It has state-of-art equipment installed and a total of 24 major equipment and 23 minor equipment.

Telemedicine

***By Dr Kamaxi Bhate**, Retired Professor, Community Medicine, KEM Hospital, Mumbai. Ex- Member Secretary, Savitribai Phule Gender Resource Center*

History

ISRO launched a telemedicine pilot project in 2001, demonstrating the feasibility of using satellite communication for remote healthcare delivery. ISRO was to provide satellite bandwidth, telemedicine equipment, and software to hospitals across India, particularly in rural areas, enabling them to connect with specialist doctors in the urban hospitals to rural health centers.

The first telemedicine center project for Maharashtra was to come to JJ Hospital Mumbai in 2001–2002. Dr Nilima Kshirsagar, the then Dean of GS Medical College, always sought to get the best for the institute. This was the opportunity given by Telemedicine project, to utilize the best abilities of our medical staff for the service of the community in need, especially for those who could not have traveled to Mumbai (for the first or second opinion about their illness/es). Moreover, this was the year that KEM Hospital was to celebrate 75th year of its establishment. It was thought that it may not be possible to get second center in Maharashtra but our advisory members of the institute, after several discussions, felt that there was no harm in trying! Dr Nilima Kshirsagar initiated the preliminary talks with Government of Maharashtra and ISRO. The proposal was written by Dr Sandeep Bavdekar, and movement of the files was done by Dr Kamaxi Bhate. Continued efforts were made by the team till the project was sanctioned in 2003–2004.

Provisions for Satellite Infrastructure

For the Telemedicine project, ISRO, through INSAT satellites network, provided the communication backbone for transmitting medical data, like ECG, Radiographs, and CT scan, and facilitated real-time video consultations. This has successfully linked the college and hospital to healthcare centers in remote and rural areas of Maharashtra. Thus, connectivity between patients at the remote end and the specialist doctors has helped in facilitating the diagnosis and appropriate treatment advice is made available, thus making it truly Telehealth. By 2006–2007 the project became completely functional. Dr Kamaxi Bhate and Dr Sandeep Bavdekar were in charge of the project till 2010. Dr Milind Tullu replaced Dr Sandeep Bavdekar in 2010. Dr Kamaxi Bhate looked after the Center till her superannuation in 2019. The Facility Manager, Mr. Sandip Mehendale, looks after co-ordinating the specialists' consultations with the district hospitals and other day-to-day office work.

Currently, the KEM Telemedicine Center is supervised by Dr Milind Tullu, Dr Tushar Rathod, and Dr Dynaneshwar Kurle. Dr Sangeeta Ravat, the Dean, is the nodal officer of the Center.

How Does it Work?

Patients in rural areas can consult with doctors in Mumbai via telemedicine. For example, even if their local hospital doesn't have a radiologist, the reporting of radiographs/CT scans are done by our radiologist. Patients can be seen live, and their treatment can be discussed, especially for dermatological consultations. The most common cases are related to Radiology, Dermatology, Ayurveda, and Orthopedics. Other department involved in providing consultations include Internal Medicine, Surgery, Cardiology, Pediatrics, Gastroenterology, Urology, Nephrology, and Hematology, etc.

A total of 67 districts and sub-districts in the state are connected through telemedicine. The telemedicine department receives at least 30–40 cases per day and specialist consultations are provided by the faculty from the hospital. When some difficult cases are diagnosed by our consultants at KEMH, with the initiative of local doctors, a CME is organized for the training of the local doctors. This helps diagnose and treat the patients locally. Our postgraduate students have done research about the type of cases referred and how it helps the patients. Monthly reports are submitted to the authorities and the budget goes through the Government of Maharashtra through DMER and National Health Mission. Many departments also conduct teaching sessions and case discussions with other advanced teaching centers using these services.

Women's Grievance Cell

***By Dr Kamaxi Bhate**, Retired Professor, Community Medicine, KEM Hospital, Mumbai. Ex- Member Secretary, Savitribai Phule Gender Resource Center*

History

The Brihanmumbai Municipal Corporation (BMC) is the oldest, and also the largest, municipal corporation in India, and we can proudly say that it is also the most gender-sensitive civic body in the country. Women constitute more than 47% of the

over 100,000-strong workforce employed by BMC. In 1997, BMC became the first municipal corporation in the country to implement the Supreme Court's 'Vishakha Guidelines', which were aimed at preventing sexual harassment at workplace. The guidelines became a legal landmark in ensuring the safety of women at work and helped the Government to legislate the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013.

Well before the enactment of this law, BMC took a bold and progressive step by setting up a mechanism for the safety of its women workers and adopted the 'Vishakha Guidelines'. In 2004, BMC formulated its policy of 'zero tolerance' to sexual harassment of women. The policy was formulated only after a systematic exercise of 'needs assessment', in which many focus-group discussions were conducted in various workplaces of BMC. Under the guidance of the then Municipal Commissioner, and the supervision of Executive Health Officer Dr Karande, this author, along with Dr Usha Ubale, conducted the 'needs assessment' discussions in selected hospitals, medical colleges, and maternity homes. Most women whom we interviewed, and many men, felt that a policy for the safety of women at workplaces was most essential.

Women recounted harrowing cases of sexual harassment, for which they had no redressal. In the absence of a clear policy, heads of institution had no idea of how to conduct impartial inquiries, how to protect the identity and dignity of the victims, and how to take punitive action against the guilty. After the policy was formulated, the BMC formed 64 Internal Committees (ICs) in its various departments for the prevention, prohibition, and redressal of sexual harassment at workplaces (PSH). It was made mandatory for every IC to have an NGO member, typically a woman with dedication, commitment, and experience in dealing with the issue of sexual injustice and atrocities against women.

Rigorous training was conducted for all members of the Internal Committees. This author, along with Ms. Sneha Khandekar (an NGO member), worked as a trainer. I also served as the chairperson of the local IC of KEM hospital from 2004 to 2007. In addition to my regular teaching job at KEM Hospital, I was given the responsibility to serve as the Member Secretary and RTI Officer of the BMC's main Internal Committee at the headquarters. In this capacity, I worked under Ms V. Radha, Additional Municipal Commissioner, who was the chairperson main IC.

Establishment of the Savitribai Phule Gender Resource Center (SPGRC)

Formulating a policy is the easy part. But far more important is its effective implementation. Establishment of Internal Committees for this purpose was a major step in this direction. However, the sheer magnitude of the work involved in prevention of sexual harassment in scores of departments of the BMC, and also institutions run by the corporation, required both training and awareness creation to be carried out on a large scale. This necessitated the setting up of a dedicated organisation.

Hence, Ms Radha conceptualized the idea of founding a Gender Resource Center with a mission statement that said,

"Making Mumbai a Women Friendly City". She became its first chairperson and asked me to serve as its first Member-Secretary. Furthermore, she decided to provide a sufficiently large standalone building for its activities. Accordingly, the BMC allotted two floors, with an area of 9,000 square feet, at a municipal building located close to Elphinstone railway station on Balashet Murudkar Marg.

This is how the first ever gender resource center of the country was born. It was named Savitribai Phule Gender Resource Center (SPGRC) of BMC. One of the first activities SPGRC conducted was to train a large number of persons to undertake the work of Internal Committees in various offices of the BMC. As a result, the number of ICs rose to more than 90. In order to make Mumbai a gender-friendly city, SPGRC's activities could not be confined only to its own premises. They had to be decentralized and conducted at the community-level also. Therefore, we established active contacts and collaborations with many women's organizations. SPGRC, thus became a catalyst for multifarious activities aimed at women's empowerment, with a focus on combating sexual harassment not only within the BMC family but also in the city as a whole.

To support these growing activities, we established a large library for women and girls. It was felt necessary to have a counselling center for violence survivors and legal experts to help them. All this couldn't have been done solely by the BMC staff. Ms Radha, who was a dynamic IAS officer, asked us to seek help from the gender sensitive NGOs and legal bodies in the city. Out of more than 15 NGOs that were called, we selected four: AKSHARA, SNEHA, Stree Mukti Sanghatana, and Lawyer's Collective. SPGRC entered an MOU with all of them. Over the years, many eminent personalities from all over India have visited SPGRC and appreciated its work. Inspired by its activities, several municipal corporations in the country have established similar gender resource centers to help in the campaign against sexual harassment at workplaces.

NGOs That Work Closely With SPGRC

AKSHARA

AKSHARA runs a gender-friendly library and a reading room at SPGRC for women and girls free of cost. It is widely used by women of all social and educational backgrounds. It is heartening to see mothers coming to the library with their small babies and spending time reading books and magazines and interacting with activists in the women's movement. It is working with adolescent children and transgender people in schools and colleges, sensitizing them on gender issues. It also provides scholarships to girls and transgender people.

One of its main activities is capacity building of grassroots women's activists. It conducts computer training, gender workshops, theater workshops, video training, and training in social research methods for them. All this helps in leadership development at the community level. It provides internship opportunities to college-going students to work in the community.

SNEHA

SNEHA runs a counselling center for girls, boys and transgender people who are survivors of gender violence and

provides legal help to them. It conducts community counselling programmes as well as internships to students.

Stree Mukti Sanghatana

Stree Mukti Sanghatana is one of the oldest and most reputed women's organizations in Maharashtra. Among its many activities, it has been fighting against the menace of domestic violence. It works extensively among poor women engaged in rag-picking, who are often victims of sexual abuse and violence. It provides counselling in cases domestic violence for women and families. It also provides legal remedies to women in abusive relationships, divorce cases, and helps women in matters of child custody and visiting rights. It provides help to elderly people facing domestic violence and runs community counselling centers and internships for young people interested in doing community service.

Lawyers' Collective

Lawyers' Collective is a reputed organisation of socially committed lawyers who are committed to the issues of human rights, workers' rights, women's empowerment, and legal aid to the poor. It provides legal help to NGOs associated with the SPGRC. SPGRC also seeks help from the District Legal Cells of the Maharashtra government for legal counselling.

SPGRC and the Main Internal Committee

SPGRC hosts the main Internal Committee of the BMC, and its members include senior officers from the corporation's legal, security, administration, education and solid waste management departments, besides senior doctors from the BMC-run medical colleges. It is chaired by a high-ranking woman officer from the BMC. SPGRC is the main coordination center for more than 90 ICs of the BMC. It conducts regular training for IC members, with the help of partner NGOs. Each case coming to local ICs gets discussed by members of the main IC, who check if the documents are in order and whether the case has any lacuna before it is formally examined.

The main Internal Committee receives nearly 40 to 45 complaints of sexual harassment. Each case needs to be properly examined. Recommendations are confirmed only after discussing with the chairperson of the local IC. Recommendations are then sent to the relevant administrative chiefs for necessary action. The main IC also follows up of all cases to ensure that its recommendations are taken seriously. Every year we submit our report to Maharashtra Government.

All documents pertaining to all the cases are kept at SPGRC. In such cases that the case goes to courts, the SPGRC takes care of legal follow-up with the help of the legal department of the BMC. Every year on 3rd January, i.e. Savitribai Phule's birthday, there is capacity building exercise, with a talk or short training and the yearly report of ICs is shared with all 90 committees of BMC.

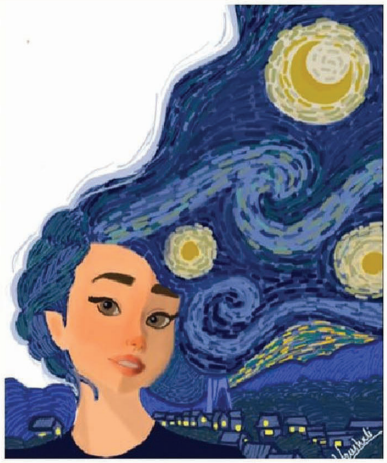
SPGRC celebrates International Women's Day on 8th March each year by giving Savitribai Phule Gaurav Puraskar to members of the BMC's Internal Committees who have done outstanding service.

Internal Complaints Committee (Women's Complaints Committee)

The committee was constituted in 2013. It works actively to address and resolve

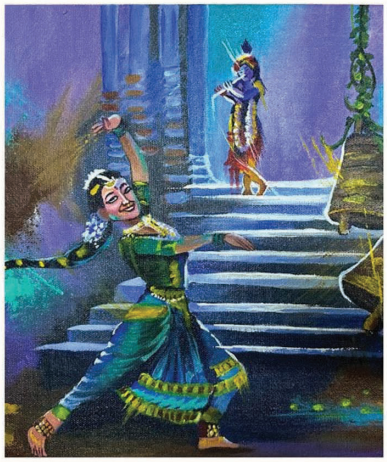
the issues as per the rules and conducts sensitization programs for employees and students at this institute. It is comprised of the Presiding Officer Matron/Chairperson of KEM Hospital, one NGO member, and seven other members.

Pallav Shelke
MBBS 2023



Vrushali Rajput
MBBS 2020

Aishwarya Desai
MBBS 2021



Madhura Kadam
MBBS 2023

5

Unique Legacy of GSMC and KEMH

Janus Archives

An Archive That Lances into the Past

***By Uma Asher**, The Times of India, Bombay, 28 January 1991.*

"In the continual remembrance of a glorious past, individuals and institutions find their noblest inspiration."

This quote of Sir William Osler at the entrance of the Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital archives sums up the *raison d'etre* of the museum.

The archives are named after the Roman god, Janus, who could look as far back into the past as he could look forward into the future. Housed in what used to be the pharmacology laboratory, the archives were inaugurated on the 65th anniversary of the foundation of the institution, last week. They are the only medical archives in the city, and probably in the country, says Dr Manu Kothari, head of the anatomy department of the college.

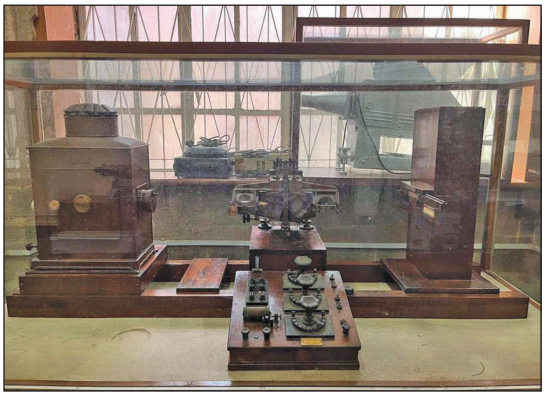
The museum houses some interesting medical and non-medical antiques which had, until now, been lying in various departments of the institution. On display are news reports from *The Times of India* and photographs from *The Illustrated Weekly* of the inauguration of the institution in 1926. The Times of India called the hospital a "tribute to Bombay's philanthropy."

There is even a copy of a tender notice issued by the municipality of Bombay in 1915, inviting tenders for clothing and linen in municipal hospitals. Copies of old annual magazines and collections of antique instruments are housed in old wooden cabinets with glass fronts. New shelves will have to be added as each department gathers more information about its history, says Dr Kothari.

Of particular interest among the collection of instruments is a set of acupuncture needles and a Chinese scroll belonging Dr Sharad Kotnis (Sic.). Also on display are antique microscopes, an oxygenator used in the first heart transplant to be performed in India and the first electrocardiograph to reach India. The cardiovascular and thoracic center of the GS medical college was the first teaching institute in the country to possess an ECG. The instrument is a wood and metal contraption, mounted on a heavy wooden base 3.5 feet across.

The archives also contain the only Indian-made apparatus for brain surgery, which dates from 1967. For those interested in non-medical antiques, there is an old Steck piano which one belonged to the nurses' quarters, a five-foot tall wooden hat-rack and a delightful wall-mounted telephone of wood and brass. There is also

a collection of photographs of graduation days, farewell parties, deans, and matrons of the institution from 1925 onwards. The first batch had 33 students. Today, there are about 1500 students taking undergraduate and post graduate courses in 19 departments.



The first EKG machine imported in India (late 1930s).

This was the first EKG machine imported in India (late 1930s) which was also used to record Mahatma Gandhi's EKG. The galvanometer made electrocardiography practical, creating a new branch of medicine and even a new industry. Einthoven (1913) and Lewis (1920) dominated the early years of electrocardiography. The period following 1920 was influenced largely by Wilson who contributed immensely to the advancement of knowledge on EKG. The interest shifted to the theory of the EKG, abnormalities of wave form, and of EKG leads.

Getting Better, a Documentary on GSMC-KEMH

By Ravi Ramakantan Former Professor and head, Department of Radiology, GSMC-KEMH.

In 2008, Gulserene Dastur, a Swiss woman of Indian descent, undertook to make a film on KEM Hospital and GSMC as a passion project in memory of her father, who lost his life in an accident in Mumbai. She originally intended to only donate, but that led to trying to collect funds from friends and relatives, which in turn led to many visits to the hospital, and getting to know and admire the place and people to such an extent that she decided to share her experiences with the world. She gathered a film crew and spent the next five years filming, and two more years in post-production. The film was funded by her share of her father's life insurance, 100'000 Swiss Francs, and is used to this day to raise funds and awareness for the Institution.

New Film Captures Drama, Death and Amazing Grace in a Reputed Mumbai Public Hospital

***By Nandini Ramnath**, 18th December 2014*
https://scroll.in/article/695316/new-film-captures-drama-death-and-amazing-grace-in-a-reputed-mumbai-public-hospital

Gulserene Dastur's documentary reveals the achievements and problems of the city's renowned KEM Hospital.

Still from the documentary 'Getting Better'.

Gulserene Dastur has made her documentary debut at the age of 64.

Getting Better takes us into the corridors, wards and operation theaters of the King Edward Memorial Hospital in Central Mumbai, one of the best-known public hospitals in the region and therefore, one of the most overstretched. The statistics recounted during the 79-minute documentary tell you why KEM matters, and why it will always resemble a war zone. Every day, it attends to 230 in-patients, 5,800 outpatients and performs 150 surgeries. That amounts to 1.7 million visitors a year. Thus, when a doctor says, "What we do is somehow never enough," it's a statement of fact rather than an attempt at fake humility.

Never a Dull Moment

The briskly narrated documentary opens with the *Dahi Handi* celebrations, for which revelers form multistory human pyramids on the city's streets. Inside the hospital, a special squad of doctors, nurses and technicians is on standby to attend to bruised skulls and broken limbs. This sequence establishes the 88-year-old hospital as a round-the-clock health care provider to anyone who lands up at its doors.

KEM's vital role in providing free or subsidized treatment to underprivileged people is underscored by the portrait of Suyesh, a boy with a hole in his heart who has been waiting for three years for a crucial operation. Suyesh's case is illustrative of the frustrations of dealing with a public hospital of this scale. His father has nowhere else to go, but he is also worn out by the endless delays and the constant changes in the operation date because of a mile-long waiting list and a shortage of vital equipment.

One Death, Many Lives

A strange set of circumstances led Dastur, who has worked in civil aviation most of her life, into making. *Getting Better*. She had been attending to her ailing father at Mumbai's Jaslok Hospital in 2008. As she spent time at the prestigious (and therefore expensive hospital), she began notice the presence of a whole set of patients from poorer families there. Some of them had sold their homes to pay for the treatment at Jaslok. After her father's death, Dastur wanted to help such patients financially, and the advice given to her was that, "If you want to help the poorest of the poor, go to KEM", and it led her to making *Getting Better*.

It's Getting Better and Worse

Getting Better's account will be familiar to anybody who has worked or dealt with government institutions in India, especially in the field of medicine. Demand far outstrips supply, and too much needs to be achieved with too little. Despite the growing clamor for increased privatization of essential services, it's clear that India's underprivileged citizens need free or heavily subsidized medical care. Yet, KEM and its peers in Mumbai and other parts of India are constantly foraging for resources. Sanjay Oak spends a small part of the film persuading the municipal corporation to complete the construction of a much-needed student hostel. Media reports regularly highlight malfunctioning equipment, poor sanitation, under-equipped wards and understaffed departments in public hospital.

The documentary's title is partly influenced by American doctor and writer Atul Gawande's *Better: A Surgeon's Notes*

on Performance, which recommends that medical practice needs to resurrect the basic qualities of "ingenuity, doing right and diligence". These qualities help in making it through the average day at KEM, and not only among the doughty doctors and staffers. Dastur is alive to the laments of the mostly needy and worn-out families of the patients. The film acknowledges their complaints but also suggests possible explanations. "That is what I saw – it is not a perfect place, but it is doing its best," she said.

Disasters Managed: Role Played by GSMC-KEMH

Source: The Larynx, 3rd Edition: Nov '15-Jan '16

By Nitish Sancheti, *Batch of 2011, Editor-in-Chief*

Communal Riots of January 1993

A catastrophe fell upon Mumbai. A dark cloud engulfed the city. Mumbai experienced an outbreak of violent communal riots in the month of January. A humongous 413 casualties were treated in KEM Hospital from 7th to 15th January 1993, of which about 194 people required admission and further management. 27 were found dead on arrival. The large influx of casualties that sustained over a period of 9 days overwhelmed the medical infrastructure. Such times tested the iron-willed doctors who catered to the ailing victims all through the day and night during the chaos.

The high influx of casualties created a massive load on existing medical equipment and drugs required for resuscitation, treatment and operations. It subsequently helped in establishing better disaster control management protocol to tackle the various problems created by such catastrophes. The tragedy went on to further depict the doggedness of the entire fraternity of the hospital in overcoming such incidents with valor despite the limited resources.

Serial Bomb Blasts of 1993

By Dr Pragna Pai*, Past Dean Seth G.S. Medical College and KEM Hospital*

KEM Hospital efficiently handled many mass casualties like poisoning, building collapse, major accidents, riots. However, the magnitude of the same was different after the Babri Masjid demolition and serial bomb blasts in Mumbai. Following is a case study on disaster management.

Triage

As the stream of patients started flowing in, quick sorting was carried out by the attending team. The patients were directed or taken to the specific area mentioned below, depending on their condition and prioritizing of critical cases first.

A: Dead bodies were covered and kept in a secluded passage by the side of the entrance hall.

B: Critically injured requiring immediate intervention.

C: Critically injured but capable of tolerating short delay if supportive treatment started immediately.

D: Those not requiring hospitalization i.e. injuries requiring dressing, suturing, plastering on OPD basis.

E: Those requiring only reassurance and guidance.

Work Distribution for Managing Teams

Many medical, para-medical and non-medical staff members had rushed to casualty areas, many with the intention of helping and some as inquisitive onlookers, specific duties were communicated/allotted to minimize chaos.

a. Surgical unit having an emergency day to work in operation theaters.

b. Pre-emergency units to attend to patients arriving in casualty and emergency areas.

c. Post-emergency unit to manage indoor and ICU patients.

d. Ground floor wards were vacated to accommodate disaster victims.

Identification of Patients

a. Patients brought unconscious and those who could not communicate were given temporary identification marks of small tape containing arbitrary code numbers pasted on the foreheads, for example, A,B,C; A2,B2,C2; X,Y,Z. The same number was used on the indoor paper, pathology forms, X-ray forms, and reports.

b. For those brought dead, a tag containing code number was tied to the wrist.

c. Medical and General stores were kept open for 24 hours.

d. Boards mentioning names (when known) of the victims were displayed at the gate. Name and ward number was mentioned (in the style of railway reservation board) and trade union members guided the relatives. Photographs of the dead were displayed in the hall to enable identification to relatives. This obviates the need for relatives to see multiple dead bodies stacked in the mortuary.

e. Coroner was requested to set up a satellite coroner's court next to the mortuary as the main court was not reachable due to curfew.

Other Issues

a. Security arrangements:

In addition to local security staff, a special security force from the Government was requisitioned. Police force was busy with the troubled areas and trade union members also assisted in maintaining the law-and-order situation.

b. Convenience of overworked staff and the members who were stranded because of curfew and non-availability of transport:

A simple meal (*khichadi* with available vegetables) was prepared in the hospital kitchen for these members. Political parties i.e. members were requested to arrange for milk for tea/coffee for the working staff. Big cans of milk and large packets of biscuits arrived almost immediately. The Students' hostel, Resident Medical Officers' quarters, and rooms of 8 storey building were used for stranded staff to sleep.

c. Handling media:

The Assistant Dean responded to phone calls coming from Press and Television to give relevant information. He also controlled undesirable photography by them.

d. Handling visitors:

   Politicians, VIPs and visitors from all over started coming. It was decided that all of them need not be accompanied by Dean and hence, the appointment of accompanying officers was planned in advance.

e. A pandal was erected to carry out blood donation of donors who gathered in large numbers.

f. Rumor mongering:

   There were rumors that the 'drinking water and milk are poisoned', and that the staff was deliberating causing harm to patients belonging to some religions etc. This had to be suitably handled.

g. Efforts to trace relatives of hospitalized patients were made with help of the Social Service Department.

h. Arrangements for transport and travel of the recovered patients were made.

By and large there was full cooperation from all the staff members. Overworked staff of mortuary and casualty were served free tea/meals in the hospital campus for days of heavy work and token honorarium was paid to these members. Overall, this was a challenging, educational experience barring a few issues. It also helped in planning out disaster protocol for the future.

Floods of 2005

Source: 2005 Annual Report

***By Dr Nilima Kshirsagar**, Past Dean GSMC KEMH*

On 26th July 2005, Mumbai city received an unprecedented rainfall of 944 mm in a single day–the heaviest rainfall recorded in the past 90 years. As this rainfall coincided with the high tide period of the sea, the storm water drains became functionless, and the city was heavily flooded and remained waterlogged for 48 hours or so. This event completely disrupted the social and physical milieu of the city. It was estimated that at least 20–25% (3 million) people remained in contact with water which was contaminated with sewerage contents for an average of 5-6 hours and thus were exposed to a lot of infectious diseases.

One can understand the enormity of the situation when one realizes that out of 24 municipal administrative areas or wards in Mumbai, 14 were affected the worst. 6 out of these 14 wards were allotted to KEM Hospital for medical relief operations. It was a challenging task, but KEM Hospital took up the challenge and accomplished the mission of controlling a major epidemic, being the first institution to respond to the emergency events in Mumbai. The earliest health team to reach the slum areas in Kurla, one of the worst affected areas, was a team of doctors from KEM Hospital.

Interventional strategy adopted at the KEM Hospital

An exclusive fever-OPD working 24 hours was established near the casualty for flood affected people. An additional 178 beds were made available in anticipation of increased patient turnover in the Emergency Medical Services department, Medicine Intensive Care Unit, and Pediatric Intensive Care Unit and no patient was turned away for want of bed. The department of Microbiology strengthened its emergency and routine

laboratory services by procuring the necessary kits and increasing the number of personnel managing the labs. Rapid assessment kits and platelet suspensions were made available in the blood bank free of cost. The departments of Medicine and Pediatrics prepared a standardized protocol for treatment and case management. The doctors from the departments of Medicine and Pediatrics were deputed to all 16 peripheral municipal hospitals to provide training regarding the standardized protocol.

Essential drugs were mobilized from FDA, MCGM, and public health department to ensure a constant supply. One pharmacist was deputed exclusively for the management of drug procurement and distribution. Preventive health camps and health education programmes were organized at vulnerable pockets in the designated wards. Based on the disease-surveillance data available, strategies for the control of leptospirosis, malaria and dengue were designed.

7/11 Bomb Blast Disaster of 2006

Source: Bomb Blast Disaster 2006: Role Played by Seth G.S. Medical College and KEM Hospital

By Dr Nilima Kshirsagar, *Past Dean GSMC KEMH*

The Disaster Management Plan's (DMP) disaster drill conducted few months before the bomb blast greatly helped in the efficient response to this disaster and assistance from many people helped in dealing with the unexpected evening of 11th July 2006.

At 6:25 pm, we received message from the control room of Municipal Corporation of Greater Mumbai (MCGM) about the serial bomb blasts in suburban trains in Mumbai. The first patient arrived a few minutes later. Thereafter, in the hours that followed, nearly 100 patients were brought in, 26 of whom were unfortunately already dead. The next few hours and days that followed tested the stamina, teamwork, and professionalism of the staff of Seth G.S. Medical College and KEM Hospital.

Over 150 doctors, nurses, ward boys, *ayahs*, and student nurses rushed to the spot. Over 300 radiological investigations were done, 175 units of blood transfused, and 18 emergency operations carried out. Help poured in from all corners. Right from providing medicine to patients and dinner to tired nurses, from 1000 volunteers donating blood to wheeling patients to wards, the citizens of Mumbai helped in every way required.

The Municipal commissioner, Additional Municipal commissioner, Deputy Municipal Commissioner, and staff of control room were in constant touch and supported throughout. The hard work done by all was rewarded by gratitude and smile on the faces of patients and relatives and by words of appreciation by dignitaries, Honorable President of India Shri APJ Abdul Kalam, Honorable Prime minister Shri Manmohan Singh, and Chief Minister of Maharashtra, Shri Vilasrao Deshmukh, and others.

Aruna Shanbag

A Brave Girl Aruna

From The Larynx, 2nd Edition: May-Aug 2015

By Nitish Sancheti, *Batch of 2011, Editor-in-Chief*

Aruna Shanbaug, after all, was not a woman to forget. Born in a sleepy town of Haldipur in South Karnataka, Aruna was an intelligent girl. "I taught mathematics to her in Classes VIII and IX. She was smart and would score 60 to 75 per cent marks." says H.M. Shanbaug. She would borrow books from school seniors if she could not buy them. Unlike her, none of her siblings completed higher education. Aruna, fondly called "Bai", was the eighth among the six brothers and three sisters.

Aruna became among the first women to leave the shores of Haldipur, with its limited opportunities, in search of own fortunes, after finishing schooling in 1965. It is not clear how Aruna rallied the strength to move to Mumbai, which at the time was a huge risk. She was just 17 and wanted to make something of her life. For a woman to do what she did at that time was unique. She wanted to become a doctor and become financially stable and work in the social sector. But her brothers had no money to spare for MBBS, and so Aruna decided to pursue nursing. During her nursing course at KEM Nursing College, Aruna applied to several colleges in London. "She knew the salary there was higher, the exposure better. She was smart," says her cousin Nirmala, who was in awe of her guts.

Following the three-and-a half-year nursing course, Aruna joined as a staff nurse in KEM Hospital. From 1966 to 1973, she lived at the nursing hostel, across the road from the hospital. Aruna used to assist in the neurosurgery operation theater. Her family says she was "quick to learn" and was favored by several doctors as she was quite good at stitching after an open surgery. Aruna never refused any duty even when doctors called her in the night after a long day at work.

On 27th November 1973 her entire world changed. Every man alive in the hospital was shaken to the core. She was left in a vegetative state. Her family could not afford her hospital care and so the Municipal Corporation of Greater Mumbai decided to bear all the expenses. If the incident was the dark cloud in her life, the nurses of KEM hospital were the silver lining. They were her guiding angels. They bathed her, dressed her, fed her, sang to her, and prayed for her. The nurses were her mother and she, their child. For them she was a child whom they had cared for and nurtured for 33 years. About 30 days after the incident, Aruna had started laughing suddenly, says a nurse. They all thought she would recover, only to find her crying afterwards uncontrollably. The fits between bubbles of laughter, sobs and shouts continued until her death. She breathed her last on 18th May 2015. The nurses now know that she has gone to a better place and her soul is liberated from suffering. Hers was a story of hope and despair, joy and glee but what never changed in her was her willingness to laugh.

Dr Roshan, Rise Above Challenges

***Narration by Roshan Jahan Shaikh** of her own story*

The accounts of Dr Roshan Jahan Sheikh's tragedy have appeared in many newspapers with startling titles such as "Post-accident, Roshan shines with grit, hard work"; "Felicitation of a fighter in High Court"; "Identify your ability … not disability"; "Vendor's daughter who lost her legs stands tall: Victim of train Mishap all set to be a doctor". And one in Hindi "*Train ke pahiyo ne pair kuchale, sapane nahi*"). The following is an account of her story as told by her in third person, as she put it, "I am writing about myself for the first time and giving it a title"

Introduction

Dr Roshan Jahan Jawad Shaikh is an MBBS, MD Pathologist, Motivational Speaker, TEDx Speaker, 96% disabled, Train-accident Survivor, and Bilateral Amputee. She is a motivational speaker who spreads awareness about the importance of education for girls, motivating people with her journey and highlighting issues of the differently abled.

Her Story

The daughter of a humble vegetable vendor in Jogeshwari, Mumbai, she always dreamt of becoming a doctor. She studied hard and stood out as the top scorer of her suburb in the SSC exams. On a fateful day in 2008, while returning from her Class 11 exams, she fell off from a Mumbai local and lost both her legs. The left from the knee on and the right one from the hip down. The world she had known crashed in front of her eyes after this tragic accident. After hospitalization, she gathered herself along and went on to finish her Class 11 exams on a wheelchair. With motivation from surgeon Dr Sanjay Kantharia and family support, she continued studying hard by not only completing her class 12 with a score of 75% but also by surprising everyone by achieving 3rd rank in the medical entrance exam in the physical handicapped quota.

But her struggle did not end here. She was unable to pursue MBBS as her disability was on a higher side when compared to the permissive percentage of 70%. Without losing hopes, she approached the Bombay High Court to challenge this law. With the help of a good lawyer who waived off his fee, she joined Seth G.S. Medical College and KEM Hospital in Mumbai, one of the premier medical schools of our country. In this process, she attracted public attention and help poured in from NGOs, and school and college teachers took care of her expensive prostheses, and the MLA, Mr. Amin Patel took care of her educational expenses. She inspired many around her as she passed MBBS in first class in 2016.

She became the first 86% disable candidate to complete the MBBS degree in India.

She then set her goals even higher to pursue a postgraduate specialization. She faced the same problem of getting rejected on the basis of her disability. Seeking help from the BJP MP, Mr. Kirit Somaiya, who was so impressed by her journey, a historic decision was taken by the Health Ministry solely on the basis of Roshan's application, and a 20-year-old medical law was changed within two days. She not only got a chance to pursue an MD in Pathology in her alma mater, but her precedence also paved the way for future aspirants like her. The gritty girl created history when the 'up to 70% disability' as a permissible criterion for medical courses was done away with. Now, she has completed her MD in Pathology with first class and secured the 4th rank in KEM hospital.

She received many national level awards and accolades for her motivating journey; 'Bharat Prerna Award' being the most recent one. She is a true inspiration for all of us especially the ones who make excuses for their failures. She has been going all over Maharashtra and some other places as a motivational speaker to motivate students, especially girls, for higher studies. Her indomitable spirit and the power to challenge difficult circumstances is something we need to learn from this powerful girl.

Dr R.N. Chugh

Sunil Pandya

Dr M.R. Chaudhri in his interview referred to Dr R.N. Chugh. He was studying either in Lahore Medical College or Karachi Medical College at the time of painful partition within 3–4 months. He came to GSMC as a refugee from there. Dr Chaudhri mentioned that he was very well accommodated and accepted with prevailing the then Nationalistic spirit. He was short, bulky and stocky in stature. He completed his MBBS from GSMC. He did postgraduation also. Then he moved to Delhi and made his position in higher echelon up to being the physician to our beloved Late Prime Minister Lal Bahadur Shastri and accompanied him to Tashkent, where Shastri died. The story remains mystifying.

Madhubala Joshi-Chinchalkar

As told by Madhubala Joshi-Chinchalkar

I have been working as an Anesthesiologist in ESIS Hospital for 31 years. I studied in Seth G.S. Medical college and KEM and completed MBBS (1981) and MD (1984) with special interest in Psychology, specifically Clinical Psychology. I have been associated with the field of Mental Health and Anesthesia since 2008 after passing MSc in Applied Psychology with first class.

In November 2016, I was selected to be the only doctor accompanying the 36th Indian Scientific Expedition to Antarctica

by Government of India, Ministry of Earth Sciences, and National Center for Antarctic and Ocean Research (NCAOR). I was a member of the wintering team, spending a year on ice. I was based in the Indian Research Station 'Maitri' during this period along with Indian scientists and logistic members.

Basic cardiopulmonary resuscitation in 'Maitri'.

In Antarctica, summer is for three months, from December to February, when there is midnight sun. Winter is from March to November and the most challenging period. The continent gets cut off from the rest of the world during this period! Polar night goes on for 3 months and the sun does not rise! I was awarded the title of 'Polar Woman' for wintering in Antarctica!

I provided medical care to my team members during this period. Being an Anesthesiologist really helped in handling various medical conditions like acute trauma, foreign bodies, I&D, and other medical illnesses of members and I managed it single handedly on that isolated continent during winter. I was able to handle a medical emergency in Antarctica and successfully performed medical evacuation of the patient by first flight that resumed after winter!

Indeed, it was a life changing experience!

A Personal Note on Madhubala Joshi-Chinchalkar by Dr Sunil K. Pandya

She was an intern at KEM Hospital whilst our operation theater was under repairs and had brought her father for treatment. We identified a cerebral tumor and sent him on with other patients needing surgery to J.J. Hospital. The operation showed a malignant tumor, and he died 15 days later. This catastrophe sparked off an acute depression in Dr Joshi. It took her many months to get over this incapacitating illness.

Tokens of Appreciation

Little Gestures and Big Smiles Keep KEM Doctors Going

Source: As published in the Times of India, 29 July 2001

Little gestures and big smiles keep KEM doctors going
Minwalla, Shabnam
The Times of India (1861-current); Jul 29, 2001;
ProQuest Historical Newspapers: The Times of India (1838-2003)
pg. 8

Little gestures and big smiles keep KEM doctors going

By Shabnam Minwalla

MUMBAI: The King Edward Memorial Hospital hospital — the critical core around which the city's health system was to evolve — was born out of indignation. Dr K. N. Bahadurji who returned from London with an MD was rejected for the post of professor in favour of an under-qualified Englishman. He proposed that the Bombay Municipal Corporation establish a medical college staffed by Indians. In 1909, the corporation agreed to step into the public health arena and set up "a fully equipped hospital to meet the growing needs of the north of the island".

The government provided a slice of the old Governor's House Estate in Parel. Local philantropists contributed towards the hospital, while the Gordhandas Sunderdas trust made a whopping donation towards the college. "Seth Gordhandas' heirs pitched in because they were grateful to Pherozeshah Mehta, Narayan Chandavarkar and Chimanlal Setalvad for settling a property dispute," explains Dr Salvi, adding that the canny Pherozeshah Mehta convinced the donors to insert a clause that the college be staffed by Indian doctors.

Although British officials "deprecated the racial character of the amendment" at a meeting, Dr G.V. Deshmukh managed to convince them that "the salaries were so low that no European medical man of repute would accept any of the appointments". Eventually, a group of skilled Indian doctors—including M.D. Gilder, 'Daddy' Cooper and 'Kaka' Purandare—were appointed. George Wittet, the architect responsible for the Museum and Gateway of India, was commissioned to design the hospital.

More than anybody else, however, the first dean of KEM left an imprint. Jivraj Mehta, who subsequently became the CM of Gujarat and India's high commissioner in London, was a stern disciplinarian given to midnight rounds, spot-checks of the 'sanitary facilities' and tight housekeeping. "An RMO once complained that even stray dogs would not eat the hostel food. To this Dr Mehta retorted, 'Then it's a good thing I don't need to employ the dogs,'" recounts Dr Manu Kothari, who himself is a KEM legend, having spent almost half a century amidst the yellow-grey buildings, cannon-ball trees and ambulance sirens.

Dr Mehta was known to track down bright students and lure them to G.S. But such ruses soon became unnecessary. "Perhaps because we have maintained standards, we have always attracted toppers," says Dr N. Kshirsagar, dean of KEM Hospital. "We have many firsts to our name—for example, the first open heart surgery, heart transplant and kidney transplant in India. We produced the country's first test tube baby and boast the first Plasma Fractionation Unit in Asia."

These headline moments apart, it is the little gestures and big smiles which keep the doctors going. "Recently a stranger stopped me on the road and offered me chai—just because he had recovered from an illness," recalls Dr Salvi, who is often amazed at how the hospital chugs along. "Every day, we use 700 litres of milk, generate 1,300 kg of garbage and send out a truckload of laundry. The sheer scale is overwhelming."

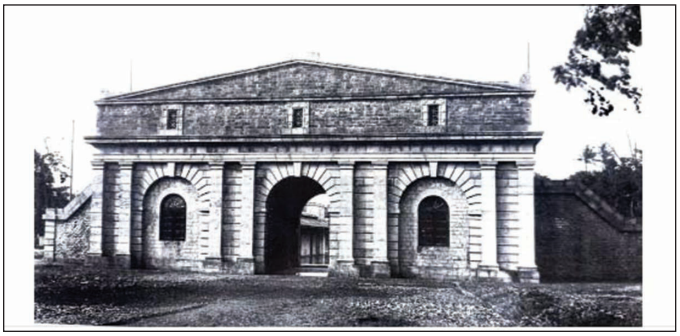
While KEM remains the jewel in Mumbai's medical crown, recent scandals and an acute resource crunch have robbed it of some lustre. Today, however, the hospital clearly requires emergency surgery and transfusions. "We need a single space to house the scattered OPDs, for example," says Dr Parulkar, pointing out that the Platinum Jubilee function in December offers opportunity to take stock, connect with alumni and raise funds. "We also need to upgrade all areas of intensive care and invest in new equipment. We must restore the hospital to its former glory."

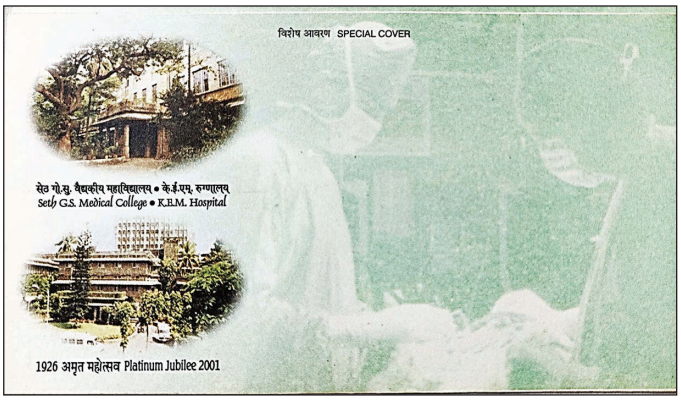
This is essential for the greater good of the city. "KEM stands for the belief that prince and pauper are entitled to the same medical care, that it is anti-humanity and anti-science to deny free treatment to those who need it, that patient welfare, not profit, is the guiding factor in medicine," says Dr Kothari, emphasising that hospitals like KEM are the last bastions against commercialisation in medicine.

Dog Kennel, Forgotten

Tridipkumar Parmeshwar Shende
May 20

Photo of the dog kennel (used to house animals for its laboratory's use) at the King Edward VII (KEM) Memorial Hospital, Parel, Mumbai. This structure has now been demolished.





Platinum Jubilee: Day 1, First Cover

On Completion of 90 years

Silver Jubilee Stamp

6

A Few Anecdotes

An Unknown Aspect of Dr Datta Samant

By Dr Sanjay Pai, *MD, Consultant Pathologist and Head of Pathology, Manipal Hospital, Yeshwanthpur, Bangalore*

My father, Arvind Mukund Pai, was an alumnus of GS, and never let me forget it! He joined GS in 1954 as an MBBS student, and subsequently did his MD in pathology from the same institute. Just some of his illustrious classmates were Dr Ajit Phadke (Urologist), Dr Manu Kothari (who needs absolutely no introduction), Dr M.V. Ingle (ENT surgeon), Dr V.S. Palekar (Physician), Dr Rajni Khokhani (Cardiologist), and one more who achieved fame as well as some notoriety, in an entirely different field—Dr Datta Samant.

Most people know of Datta Samant as the militant trade union leader who led many successful strikes, and of course, one unsuccessful strike, which the mill owners used as an excuse to eventually close most of the many mills in the city. Samant was murdered in 1997. But Datta Samant was an alumnus of GS Medical College and my father's closest buddy (along with Palekar). How a militant future trade leader and a near-Gandhian were the best of friends was a question that many have wondered about. But that is irrelevant here. The two anecdotes that I mention here are those of Datta Samant in his salad days and perhaps give an early indication of the path that he would eventually take.

Datta Samant, according to my father, was an excellent and caring general practitioner in Pantnagar, Ghatkopar, in the 1960s and was, in fact, our family doctor and took care of me when I was a kid. He often had patients from the quarries of Powai; these patients often had no money to pay the doctor's fees. Upon inquiry about their financial status, he learned that they were being exploited and were being paid very poorly. As a concerned doctor, he approached the owners of the quarries and fought for the workers' (his patients') rights and won! The story of the success of a doctor doubling up as a union leader spread and soon, he was approached by other workers for assistance. One thing led to another, and the rest is history...

But now for the two anecdotes handed down to me:

My father and Datta were dining in the hostel canteen when they saw an unfamiliar person eating there who walked out without paying the cashier. While paying their own bill, Datta asked the manager, "Who was that guy? I can't recall seeing him. Is he a new student?" The manager replied, "Far from it… he's a local *dada* (thug). He eats here often and doesn't pay. And we are scared of him because of his ways."

"Let's see," Datta replied. The next day, the man entered the canteen, ate and was walking out of the canteen, when Datta suddenly blocked his way. "You haven't paid the manager," he said. "And what's more, this canteen is for students. Don't ever turn up here again. Now pay up and leave." The *goonda* replied, as expected, "Do you know who I am? *Udyaa baher yeh, mag dahkavto tula*." [Get out of the campus tomorrow and I'll take care of you.] Datta too replied, as expected, *"Udyaa kashala? Aata chal*." [Why wait until tomorrow? Let's go right away.]

His body language made his intentions clear—he was not afraid of the thug. The goon knew he had met his match, paid up, and was never seen again in the canteen.

The other story my father told me was about when they were standing in a bus queue near Bandra station. Some ruffians were indulging in catcalls and sexual harassing women. While everyone else in the line stayed quiet, only one man spoke up—Datta. He called out to the ruffians and told them to stop their boorish behaviour. Which they did, promptly.

While GSMC cannot take credit for these actions of this man, certainly they can be proud that they had such an alumnus.

Notorious Patient, D.K. Rao

By Rahul Kothari, *Intern*

Respected Sir (refers to Dr Sunil Pandya),

I am currently reading a book called *The Deadly Dozen - Hitmen of the Mumbai Underworld* by Gabriel Khan, and I came across an unexpected reference to KEM there. It is in a chapter about a gangster D.K. Rao, who was caught by the police on 11th November 1998. It reads as follows:

"The van reached KEM Hospital in Parel and drove around to the back where the morgue was. As per procedure, the policemen were taking what they believed to be five dead bodies for postmortem so that the reports could be attached to the inevitable paperwork that followed such encounters. To their utter shock—some of the policemen actually thought they were seeing a ghost—Rao crawled out from under his friends' bodies, bleeding from several bullet wounds and screaming that he was alive. *'Mee jivant aahe, Doctor mala vachwa,* help, help.' The police squad was too stunned to react for the first few seconds. Then all hell broke loose. Other civilians at the morgue started running away in fear, the medical attendants who had come forward to take charge of the bodies stood in confused silence and the policemen went for their guns. Shouting abuses and threats at the top of their voices, they made Rao come out of the van with his hands raised, after which they turned him over to the doctors."

I found this fascinating and have been trying to look for more information on this on the Internet, but could not find any references to this event other than articles referring to the book itself. I once spoke to an associate professor in the department of Forensic Medicine on a similar topic, and he told me that currently, most cases of shootings present to GMC rather than KEM. Was this an unusual occurrence earlier too?

Yours sincerely,
Rahul Kothari

7

Ancillary Services

Societies

Department Development fund (DDF)

The DDF was officially registered with Charity Commissioner in 2003 and for more than 35 years, this trust has fulfilled its aim to setup and support the growth of scientific research and development in an efficient manner of various departments. Its ultimate goal is to augment patient care facilities in KEM hospital with up to date and modern equipment and instruments to attend to and take care of the patients.

Diamond Jubilee Society Trust (DJST)

Advancements in medical diagnosis and treatment require sophisticated, often expensive equipment. To support this, the Diamond Jubilee Society Trust (DJST) was established in 1989 as a Public Charitable Trust under the Charity Commissioner, Mumbai.

Objectives

- Conducting research in health, medicine, and applied sciences to benefit underprivileged communities, including slum dwellers and industrial workers served by the hospital.
- Promoting medical education through continuous opportunities for skill and knowledge enhancement.
- Providing medical relief and improving healthcare services across various sectors of society.

Since its inception, DJST has played a vital role in the growth and development of both institutions, adapting to their evolving needs.

Managing Trustees

- Dean, Seth G.S. Medical College & KEM Hospital
- Hon. Secretary
- Hon. Treasurer
- 3 trustees from the faculty
- 2 external trustees
- Some retired staff members are on the board as advisors

GOSUMEC Alumni Association (GAA)

The GOSUMEC Alumni Association, originally established as the "Past Gosumec's Society" in 1947, aims to:

- Promote and advance medical and allied sciences across various fields.
- Encourage public health initiatives and continuing medical education.
- Foster sportsmanship, particularly within the medical community.

Over the years, the association has actively organized orations, seminars, and other events to strengthen collaboration between past and present Gosumecs. There are a total of 18 Managing Committee members of which 6 are from the faculty, 10 are alumni, and 2

are invited with members elected every third year.

Managing committee members and Office Bearers:

- President-Ex-Officio, The Dean (G&K)
- Vice Presidents: One each from the faculty and the alumni
- Hon. Secretaries: One each from the faculty and the alumni
- Hon. Joint Secretaries: One each from the faculty and the alumni
- Hon. Treasurer: One from the faculty

Research Society

The King Edward VII Memorial Hospital and Seth Gordhandas Sunderdas Medical College Research Society was formed in 1952–53 at the time of celebration of the Silver Jubilee of the twin institutions. The Research Society, registered under the Societies Registration Act XXI of 1860 and has supported and financed many young and rising researchers.

Aims and Objectives

- To promote medical research in all its branches including industrial diseases and accidents,
- To finance research inquiries,
- To endow research fellowships,
- To give grants for research, and
- To further the growth of research work in medicine and allied subjects.

Office Bearers and Executive Committee Members

- President: Ex-Officio, The Dean
- Hon. Vice President: A Faculty Member
- Hon. General Secretaries: Two faculty members
- Hon. Treasurer: One faculty member
- Executive Committee members: Four faculty members

Activities

- Research grant is provided twice a year for research projects undertaken by the faculty who are members of the Research Society.
- Research proposals are peer reviewed before sanction of the grant.

Staff Society

Seth G.S. Medical College and KEM Hospital Staff Society is registered under the Bombay Public Trust Act (1950) on 10th March 1993, and is a nonprofit organization dedicated to advancing medical education and research. It aims to enhance healthcare delivery, foster fraternity among members through social events, and facilitate scientific discussions, ethical deliberations, and collaborations with medical associations. The society publishes the Journal of Postgraduate Medicine, coordinates orations, and raises funds through donations and events to support its objectives.

Executive Committee Office Bearers and Members

- President: The Dean
- Ex-Officio Vice President
- Hon. Secretary
- Hon. Joint Secretary
- Treasurer
- Editor of JPGM
- 16 Executive Committee Members

Poor Box Charity Fund (PBCF)

The Poor Box Charity Fund was instituted by the Standing Committees in 1926, with the following aims:

- To provide special medicine & surgical appliances, to poor and needy patients.
- To establish and maintain a workshop press for rehabilitation of patients.
- To run a gift shop at the KEM Hospital.
- To collect and preserve blood and pay to the blood donors.
- To pay wages and allowances to the staff appointed for the fund establishment.
- To pay money to the doctors.

It receives funds from individual donors and various sources such as Prime Minister's National Relief Fund, Chief Minister's Relief Fund, and from Non-Government Organizations such as Sir Dorabji Tata Trust, Tata Education and Development Trust, Shree Siddhivinayak Ganpati Mandir Trust, Shree Mahalakshmi Temple Trust, Nana Palkar Smruti Samiti, and Tarun Mitra Mandal, etc. The money is used for poor and deserving patients after necessary sanctions are obtained. Till date, this fund has served many needy and will continue to do so in future too.

Support Systems

Administrative Offices

The Dean is the Administrative Head of the twin institutions. The dean runs the administration of the college and hospital and is assisted by the Academic Dean, the Medical Superintendent, 2 Deputy Deans, 3 Assistant Deans, 5 Administrative Officers, 5 Senior AMOs, and 13 Junior AMOs. All the sections of both the offices have a Head Clerk and a Clerk working under them. The name of the section specifies what work it is responsible for. The college office is under charge of one Administrative Officer.

The college office has the following sections:

- GHC: College Clinical Establishment.
- GNC: College Non-Clinical Establishment
- GSP: College Proposal
- GNT: College Non-Teaching Establishment
- GUG: College Under Graduate
- GPG: College Post Graduation
- GTR: College Training and Research
- GCH: College Cash
- GAC: College Billing and Dispatch.

The hospital office has 4 Administrative Officers.

The hospital office has the following sections:

- Nursing
- Superior Establishment
- Hospital Dispatch
- Labor Establishment
- Medical Store
- General Store
- Proposal, Tender, Cash Section
- PBCF
- Diet
- Linen

Artist Department

The Artist Department at Seth G.S. Medical College was established in 1938, with Shri Bhandarkar as the first artist. It has a rich history of contributing to medical art and photography rising to the changing needs of the academic departments, from 35mm transparency to power point presentations. It has changed its location constantly, from the second floor of the old building near the seminar hall to the ground floor of the college building to the second floor of the hospital building again. It is currently housed in the UGPG Hostel building. The department is equipped with digital and SLR cameras and computer. Keeping pace with technological advancements, the department has integrated computer technology into its operations, with most staff members now proficient in creating digital images and artworks.

Diet Department

The Department of Dietetics at KEM Hospital has been providing food services since 1926 and plays a crucial role in patient care. The first dietitian post was created in 1964 and currently, the hospital has five dietitians managing dietary services.

The department plans and counsels indoor and outdoor patients across various specialties, including medical, surgical, pediatric, orthopedic, endocrine, and CVTC units, attending to around 20,000 patients annually. Special ketogenic diets are provided, and ICU rounds are conducted for SICU, AICU, IPCU, LICU, IRCU, and ICCU patients. Dietitians assess and manage conditions such as hypertension, diabetes, gastrointestinal disorders, cardiovascular diseases, renal issues, burns, cancer, and inborn metabolic errors.

For pediatric patients, dietitians plan and counsel new cases of metabolic disorders from the Pediatric Research Laboratory (PRL) and school clinic, ensuring regular follow-ups. Nutritional management of rare disorders and ketogenic diets are exclusively handled by KEM dietitians.

The hospital kitchen serves therapeutic food to around 1,800 inpatients daily and provides special meals on significant occasions. The diet department oversees food quality, hygiene, and kitchen operations. Additionally, it trains postgraduate dietetics interns and conducts nutrition education programs for BMC schools and rural hostels under Maharashtra State Initiatives

Engineering Services

At the initial stage, a separate Engineering Department in the hospital was virtually non-existent. But with the advent of electricity and plumbing, there was a necessity of electricians and plumbers in addition to the existing carpentry and masonry staff. Subsequently, an engineer was appointed to supervise this staff. A major expansion took place in the 1980s, when an Assistant Engineer (Civil) was provided to supervise three major hospitals. Further, in 1985, an Assistant Engineer (M&E) was provided along with a Sub-Engineer to supervise the work. In 1988, two more Sub-Engineers were assigned to the M&E Department and one Sub-Engineer and Jr. Engineer to the Civil Department.

The Ward Officer is the In-Charge of the Engineering Department with two Asst. Engineers working under him. There is a general misconception that the role of engineers is restricted to repairs of equipment in the hospitals. Basic duties of the engineers can be categorized as maintaining water supply, maintaining electrical supply, maintaining continuous supply of medical gases like oxygen, nitrous oxide, compressed air and vacuum, air conditioning and ventilation, civil works, and providing maintenance/service for equipment.

Library

The library was started in 1926–27 along with Seth G.S. Medical College and has evolved significantly over the years. Initially strengthened by contributions from esteemed doctors and alumni, the library has continually embraced modern technology to meet the advancing needs of medical sciences.

The first Librarian the medical college was Mr. W.W. Patange (from 1933 to 1961). During his tenure, two deputies from World Health Organization, visited the library along with 28 other medical college librarians to know the working of the library, and they were extremely happy with the services rendered by it. It was creditable that only two libraries were promoted by them, of which our library was one. Soon after that the United Nations rewarded our college with a separate library building with all the latest (World Standard) facilities, lecture rooms, and lecture theaters, etc.

Personal efforts partly helped in promoting GS Medical College for higher medical degrees of the Bombay University. Mr. N.G. Wagh was the next librarian from 1961 to 1980. And Mrs. Minoti Chatterjee from 1980 to 1983. In 1983, the library was shifted to a new, separate, and centrally air-conditioned building with Mrs. K. Rangan as the librarian from 1983 to 1992.

In 1987, a separate, Audiovisual Section was started with kind donation received from Dr Laxmi Baxi, in memory of her sister, late Chandrika Bhatia. It was renovated in 2011 with kind donation from 1984 Batch. In 2016, Audio Visual Room was converted into the Regional Resource Center (RRC Western Region Head) and Telemedicine center. In 1989, Information technology was introduced with the purchase of computer in the library. Mrs. S.B. Kolekar, Chief Medical Librarian (1992 to 2014) saw the purchase of 'Medline on CD ROM' during her tenure. In 1993 'Medline database' was prepared by the National Library of Medicine; it contains indexed information from 1966, with abstracts of articles from more than 3600 Medical Periodicals, published all over world. This has proved to be a boon to the medical students, researchers, and doctors.

The "Yashwant Doshi, Home Lending Library For Undergraduates" was started in 1993 with kind donations from Dr Himanshu Doshi and Dr Mayank Doshi, in memory of their father, Mr. Yashwant Doshi. The 'Book Bank Section' was started with a special grant received from Social Welfare Departments of Government of India and Maharashtra. In 1997, the State Bank of India accepted our proposal and donated, Rs. 7,00,000, which enabled us to purchase a 'CD NET with 14 CD ROM Drive Tower' and four computers. 2001, the "Platinum Jubilee Year" saw

M/s. Infosys Co. Ltd. offer 'Intranet facilities with internet connection'. All the computers in the campus were connected to KEM server, and it enabled all doctors to search holdings of the library from their department computers. In 2009, we became a part of NML consortia and got a special grant for purchase of computer and data entry. We got access to 2400 full text journals from NML. A complete renovation of the first floor library i.e. Undergraduate Section took place in 2010.

Today, the library boasts a collection of over 25,981 medical books and 31,956 bound volumes, subscribes to approximately 136 periodicals annually, and offers access to numerous online medical databases and e-books. Facilities include a centrally air-conditioned building with separate sections for postgraduate and undergraduate students, a renovated Audio-Visual room, and 24-hour reading rooms. The library continues to serve as a vital resource for students and staff, providing up-to-date information and services to support medical education and research. At present, the library has a Postgraduate Section, Undergraduate Section, and an Old Books & Bound Volumes Section.

Highlights and Achievements

- Seth G.S. Medical College, Library is subscribed to 136 journals with online access made available on Intranet.
- Following six databases have been made accessible:
  - Clinical Key
  - Proquest Health & Medical Complete
  - Ovid MD (online access to 147 eBooks and 146 eJournals)
  - Up-To-Date (a medical database having text information)
  - Thieme MedOne Education (170 eBooks)
  - Clinical Key Student (an interactive education platform)
- More than 10,000 eBooks and more than 3,000 eJournals and Dissertation & Thesis (1637- current) are available.
- Arranging orientation program for first year undergraduate students.
- Internet section has been renovated with new chairs and cubicles.

Donation and Grants

- The library has received the membership of National Medical Library's ERMED Consortia. This has enabled to access 239 online journals and "Access Medicine" and "BMJ Case Reports" medical databases.
- There is a Library Committee guiding the working of the Library.

Medical Record Department

The Medical Record Department has played a pivotal role in managing patient information since the 1963. Over the years, the department has evolved to incorporate modern technologies and methodologies to efficiently handle the increasing volume of medical records. This evolution ensures the seamless storage, retrieval, and management of patient data, thereby supporting clinical care, research, and administrative functions within the hospital. The department's commitment to maintaining accurate and accessible records has been instrumental in upholding the hospital's reputation for excellence in medical care and education.

Social Service

The Social Service Department was founded in 1954, and the first batch of Medical Social Workers were appointed integrated with the Preventive and Social Medicine (PSM) Department. Social Service Department branched out into a separate department in 1994 with Mrs D.R. Javeri as its Head. The department is concerned with the interactions between people and their social environment as illness cannot be treated in isolation.

Community Development Officers play a crucial role in patient care through individual and family counselling, discharge assessments, medicolegal case handling, and rehabilitation referrals. They also coordinate medical and material aid, group work, and follow-ups with respective departments to ensure holistic care. Financial assistance for emergency medicines has been provided by the G.T. Sheth Trust since March 2023, while Aadi Jin Yuvak Charitable Trust and other organizations continue supporting patients with medicines and equipment. Additionally, Community Development Officers have also facilitated donations for cochlear implant surgeries.

The Social Service Department—CSR Wing has successfully partnered with public and private sector organizations to secure CSR funding for patient care. Their efforts extend to counselling, donations, and rehabilitation initiatives. In terms community care, they provide guidance and fieldwork orientation for postgraduate students from various social work colleges, fostering professional development in healthcare-related social services.

Nursing

Nursing plays a vital role in hospital services, ensuring round-the-clock care in inpatient, outpatient, and community settings. Nurses are essential for patient recovery, infection prevention, and overall well-being. Their responsibilities extend beyond bedside care to include managerial tasks like inventory management, ward cleanliness, staff supervision, and coordination with doctors. They also play a crucial role in medical documentation and teaching nursing students.

Specialized nurses assist in complex procedures such as heart, liver, and kidney transplants, and actively participate in ICU setup and disaster management. Additionally, they contribute to environmental cleanliness programs, blood donation drives, and community health initiatives.

The history of nursing at KEM Hospital dates back to 1925 with the establishment of the Nursing Service Department. Over the years, it has grown significantly, providing training and specialization in various fields, including pediatric, psychiatric, and critical care nursing. Nurses have also contributed to research, health education, and social service programs.

The Department of Nursing is one of the most important ones, as its members are involved in the activities of all departments. The total staff strength is over 1300, and many are involved in various committees of the hospital. The School of Nursing, housed in the stately structure of the Nurse's Hostel since it's inception in 1926, mainly undertakes

the education of nursing students and trained staff. It fosters a three years' Undergraduate Nursing Course to which 120 students (after H.S.C.) are admitted annually on an " Earn and Learn" basis.

To support their well-being, cultural and recreational activities are organized. Their dedication and continuous skill development have made them indispensable pillars of healthcare, ensuring high standards of patient care and medical excellence.

Pharmacy

Prior to 1946, a Chief Dispenser was in charge of Hospital Pharmacy which contained only one dispensing unit. In 1946, Dr Jivraj Mehta Lab was started near RMO's mess. It was shifted to its present site above the Blood Bank in 1060. Pharmacology lab was established with an idea of manufacturing Transfusion bottles and other articles which were not easily available in the market.

Over the years new and multiple activities have been undertaken. The space, the staff and the utility of the department have expanded enormously.

The Pharmacy Department at KEM Hospital plays a vital role in steam and E.T.O. gas sterilization of materials from wards and operation theaters. It supplies distilled water to hospital wards, laboratories, and M.C.G.M. garages across Mumbai.

It provides PD fluid for dialysis patients under the guidance of the AKD Department and issues Insulin injections for Type 2 and Juvenile Diabetes patients, a first-of-its-kind public hospital initiative, through Dispensary No. 31.

Medicines are dispensed from multiple dispensaries, including CVTC and Orthopedic Dispensary, with one main unit functioning 24/7 for OPD and indoor patients. Specialized KEM formulary preparations like Glycerine Acriflavine, Acne Lotion, and Eusol Solution are also provided.

The Pharmacy Department oversees medical stores, ensuring procurement, storage, and distribution of medicines across departments. Four pharmacists are stationed in medical stores for smooth operations.

Additionally, it conducts training programs for pharmacy students, offering hands-on experience in C.S.S.D., pharmacy operations, dispensing units, and hospital pharmacy training for diploma, degree, and postgraduate students in Hospital Administration.

The department is managed by the Superintendent of Pharmacy, supported by senior pharmacists, laboratory technicians, and attendants.

Security Department

In KEM Hospital, every day, 5,000 to 6,000 patients and relatives of patients come for treatment in the hospital. Security guards are appointed at necessary places in the hospital premises to manage such a huge crowd. Many times there are arguments between the patients and the hospital staff in the hospital. At such times, the security guards are handling the incident harmoniously. If any untoward

incident takes place in the hospital, the security guards are responsible for quickly responding to the incident and keeping the situation under control. Sometimes some social miscreants also enter the hospital as patients and try to steal mobiles, money, and valuables of the patients. After receiving such complaints, appropriate action is taken in this regard through the security department and handed over to the police department for taking action against the concerned in coordination with the police department. Security guards are always ready to prevent such incidents. The staff comprises of Municipal Security Jamadar, Municipal Chief Security Guards, Municipal Security Guards, Chief Security Guards, Armed Security Guards, Security Guards, Board Security Guards, Private Security Guards.

Transfusion Medicine Department

The main aim of the Department is to provide quality medical care to patients by dispensing safe and good quality blood, and to discharge its responsibility to the voluntary blood donors who provide blood. The other aims include training resident and medical officers, creating awareness regarding Blood Donation, and giving motivational lectures regarding Blood Donation.

(Refer to the section 'Department of Transfusion Medicine' under 'Medical Departments' for a broader overview)

8

Gymkhana and its Activities

The Seth G.S. Medical College Gymkhana is the sole body responsible for undertaking the activities to resurface the hidden extracurricular talents of the highly gifted GSites. Ever since its inception, 100 years ago, it has been at the forefront in organizing a host of events from the cultural annual social event *Aavishkaar* to the annual intra-college sport event *Synergia*, the gymkhana has been at the heart of all activities.

Departments Under Gymkhana

- Academic Department
- Archives
- Aspire
- BCR & Boys Hostel
- BSc PMT
- Cultural- Fine arts and performing arts
- GOSUMAG
- KD & Canteen
- Ladies Welfare & Sports
- Medical Humanities
- Occupational Therapy
- Physiotherapy
- RRDD (Reading Room and Debate Discussion)
- Wallpaper and Website

Sports Offered

- Athletics and Aquatics
- Badminton
- Cricket
- Football
- Gymnasium
- Hiking
- Indoor Games
- Tennis
- Volleyball
- Basketball

Events

1. Academic Department Confluence:
   a. Virtuoso (Quiz)
   b. Symposium
   c. GSMUN
   d. TEDxGSMC
2. ASPIRE
   a. Research methodology workshops
   b. Panel Discussions and talks
   c. Journal Club
   d. Maintaining the Research Opportunity Database for UG students
   e. Regular updates on SPECTRUM- part of ASPIRE educating peers regarding career options after MBBS
3. Cultural Department
   a. Fine Arts
      i. Artist of the month
      ii. Photographer of the month

iii. Photography contest

iv. Art Relay

b. Performing Arts

c. Holi Celebration

d. Atharva Celebration (Ganesh Festival)

e. Garbha Night

f. Freshers' week

g. College week (Traditional day, batch photos, tie and saree day, etc.)

h. Prison Break (Dance competition)

i. FAHRENIET (Fashion Competition)

j. Orchestra of GSMC Youth (ORGY)

4. Medical Humanities ASCENSION:

a. Nritya Abhay (the dance competition)

b. Corpus Callosum (the pop culture quiz)

c. Symphony (the vocal competition)

d. Battle Of the Band.

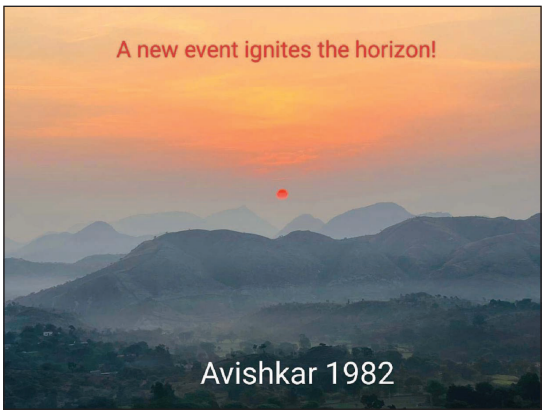
5. Aavishkar:

a. ALFAAZ, DREAMZ, Fahrenheit, ORGY, Apurvai

6. ADVAIT (State-level Drama Competition)

Aavishkaar: When it All Began

***By Sharad Iyengar**, MD, DNB (MCH), DCH, GSMC 1978 Batch, Organizing Secretary of the first Avishkar held from 31 Jan to 2 Feb, 1982; Co-founder of Action Research & Training for Health (ARTH), non-profit community health organization. Dr Aniruddha Chandorkar provided vital inputs.*



The first teaser released in November 1981

[Disclaimer: To write this, I put on my undergrad medical student hat on and referred to friends of my own generation along with their batch-year for reference, but without using the honorific "Dr". Today, they all are accomplished senior doctors. I have used the term Avishkar because that is how we spelt it at the time. Lastly, because this is a walk through the memory lane traversing 43 years, any recall errors are mine alone]

In the summer of 1981, while preparing for my 2nd MBBS examinations, I had emerged from a difficult, bruising GSMC Gymkhana election for the post of Secretary of the Reading Room and Debating Department (RRDD). Saifee Plumber (Batch of 1976), two years my senior, had earlier adopted the role of campaign manager. Covertly yet systematically, he'd mix and mingle with students and interns across different batches to gauge my prospects, discretely returning in the afternoon to my (UG boys') hostel room to instruct, steer, and modulate extensive person-to-person campaigning by me. My victory by a huge margin affirmed the hard-won nature of the position and the urge to make it a significant tenure.

Aavishkaar '19
Alfaaz
Core
Junior Core/PR
JUNIOR CORE/PR
Apurvai
Fahrenheit
Decor
Informals
Dreamz
Excelsior

Meanwhile, as a regular public speaker from the age of 11 at school, I had represented GS Medical at inter-collegiate competitions within the city and at annual festivals, including at IIT Bombay's *Mood Indigo*, St Xavier's *Malhar* and IIT Delhi's *Rendezvous*. Going beyond the cheerful buzz that these 3–5-day events entailed, I observed that more than the guest participants and spectators that such mega events inevitably attracted, the organizers themselves appeared to be having a whale of a time even while playing responsible roles.

"So why not an inter-collegiate event hosted by GS Medical…?" became a sentiment that found ready echo among friends, with Rajesh Parikh and Prakash Nadkarni (both from Batch of 1974) and Aniruddha Chandorkar (Batch of 1976) quickly joining in the effort to actualize it. As planning progressed, I took on the role of Organizing Secretary (Avishkar was organized and hosted by RRDD), Aniruddha became Project Coordinator while Rajesh and Prakash served as Advisors—this gang of four steered Seth G.S. Medical College's first Intercollegiate Literary Festival to fruition.

While there was immense challenge in conceptualizing and nailing down diverse priorities like fund raising, creating a volunteer corps, branding, scheduling, etc, we had one major convenience that today's organizers do not have the luxury of, having emerged from deep within our heads, Avishkar was a completely unknown entity and hence, there was no set template, no prior expectations and no standards to match. So, we debated a lot over extended evening meetings and came up with a veritable potpourri. Meanwhile, since ages, Annual College Week was being organized by the Gymkhana's Cultural Department, which included music, singing, dramatics, rangoli, etc, and was essentially a non-competitive, 3 to 4 day, largely evening event. By contrast, Avishkar was meant to be intercollegiate and largely competitive, focused on writing, sketching, painting, cartooning, photography, debates, elocution, and quiz events.

Preparing for the first Avishkar was the busiest and most fulfilling period of my life as an undergraduate medical student, other than giving examinations. Having entered the first term of 3rd MBBS with ambitions to major in Medicine, and given the fact that final MBBS marks would determine the merit list for postgraduation (no NEET or equivalent in those days), I wished to do my 3-month Medicine Clinical & Ward posting *after* Avishkar. With trepidation, I met Dean Dr C.K. Deshpande with a request to permit switching my Medicine term with Obstetrics-Gynecology, which I considered as lower priority. Dr Deshpande counseled that there was no need to make the effort to organize a large event at personal cost and that I had already done well in my role as RRDD Secretary. He, nevertheless, kindly consented to making the change. Later in 1984, I did opt for Pediatrics. It proved to be ironic that years later, from 2000 to 2013, I served as Co-Chair of the Gender and Rights Advisory Panel and member of the Scientific & Technical Advisory Group of the Human Reproduction Programme of WHO at Geneva. I was invited to these advisory roles after I spoke at an international conference, so public speaking did ultimately play a part.

Our core group of four realized early that a string of highly competitive events that entailed participation only by a few skilled students, with most being from other colleges, could potentially alienate the mass of GSMC students laboring through their routine of classes, practicals, wards, and examinations. Hence, we liberally peppered the schedule with creative competitions and non-competitive events that our own students could enjoy and even participate in, including the evocatively named Just A Minute, Dumb Charades, Call My Bluff, Connections, and Pull Wool, as well as cartooning, sketching, creative writing, Treasure Hunt, and Eye Cue. The last event was a mass scale audience quiz held in the MLT that allowed multiple participants to collaborate and participate as a team by responding to rapid fire on-screen visual cues. Additionally, we featured a classical music session in the MLT on one of the evenings.

Of course, there were the usual debates and elocutions for which the host institution was renowned but deliberately avoided dominating. The result was a high degree of participation and interest among students busy with studies and clinical postings, who nevertheless dropped in to attend a few events in full or part. We liberally gave out smartly designed certificates to winners. All these measures were intended to inculcate participation, foster a sense of ownership of the debut event, and to warm up GS students to their newfound role as hosts to other university students of Mumbai.

A notable aspect of prepping for over six odd months for Aviskhar was the large number of volunteers assigned to myriad roles. We used the bureaucratic term "committee" for each bunch of volunteers. And so, there were committees for Publicity, Maintenance, Refereeing and Judging, Transport, Fund Raising, Reception, Décor, etc. About 60 volunteers, mostly from the juniors' batches, enthusiastically signed up to help and each was officiously allotted to a suitable committee. Through afternoons and evenings, they made posters and banners, shopped for stationery and items to conduct sessions, drafted, (snail) mailed invitations, and tracked responses from participating colleges. This was an era when computers, mobile phones, and the internet were not even on the horizon; today's medicos would probably consider it a stone-age Avishkar. The volunteer team relied on scheduling all meetings in person, argued and reached decisions, sought appointments using the landline at the Gymkhana office or their home-phone (there was a 10–14 year waiting period to get a landline connection, hence, many of us did not even have a home-phone and instead relied on coin-operated public phones). We prepared handwritten drafts that were typed out when absolutely necessary, and kept accounts using a cash book with bills duly filed for the record.

And yet, given the energy of young people planning and executing a brand new event, their enthusiasm was electric and infectious. The "Undergraduate Library" located immediately to the right of the college entrance lobby, which had always served as de-facto (hence, noisy) common room for boys and girls, became noisier with groups huddled over sketches and papers, and preparing posters and props. A spilt bottle of Camlin gum one afternoon even provoked our resident *shaayer*

Abbasi Mustansir (Batch of 1978), who allegedly was trying to study there, to look up and extemporize: *"Yeh mai farma kya rahaa hoon—itni saari khushi ke beech, yeh Gum kaisa?"* We all laughed and drove him out of the busy chaos.

Sunday, 31 January 1982, dawned with the entire host team in readiness and the college front lawns, main gate and lobby all gaily decorated with welcome banners, floral garlands, rangolis and traditional lamps for an inaugural by Vice Admiral M.P. Awati, Commander-in-Chief of the Western Naval Command, Dean Dr C.K. Deshpande, and Vice-President of RRDD Dr J.B. Dharani. About 800 students from 42 colleges of Mumbai, from beyond the four government medical colleges, turned up, and several registered for different events. As the day wore on and the first Avishkar rolled out smoothly, I abruptly realized that I had nothing to do, no issue to firefight, no glitch to iron out, and no one to give any instructions to. It felt like being excessively well prepared for an examination and hence, an anticlimax. The three-day event cost Rs 41,000 to organize; funds had been raised from about 15 donor entities, but not from EduTech firms or medical coaching classes as they did not exist at the time (even if they had existed, we likely would not have approached them). With frugality being an unstated principle, there were no sponsors' stalls, no food kiosks, no corridor clutter, no outdoor stage, woofers or seating, just an extra counter set up by the college canteen to deal with hungry crowds. The entire focus was on students' events organized directly by the students themselves, which made it human-resource intensive with modest use of devices or technology.

The daytime schedule and nature of sessions at Avishkar '82 meant that more undergraduate students and interns attended as active participants or spectators, while the busier resident doctors and faculty were fewer by comparison, except during the evening classical music performance. We realized that postgraduates and faculty would probably prefer evening music and dramatics events as part of College Week, as a time to chill out from work routines and catch up with old friends. And we wondered whether Avishkar would endure, or fall by the wayside as a one-time, one-year wonder.

Given that I left Mumbai in 1987, and have since lived in Northern India (Udaipur, since 1997), I learnt along the way that Avishkar had indeed continued and thrived. Four decades later, I dropped in on the evening of 15th October 2022, the 40th Aavishkaar, briefly met the organizers, navigated sponsors' kiosks and food stalls, and went to the tennis court quadrangle as rear-row spectator at a loud, pulsating open-air dance-opera performed by a troupe of 15-odd highly skilled GS undergrads before a crowd of 500 spectators. Their grace, finesse and synchronization were simply amazing. I was informed that they had trained long and hard for the performance. And yet, I was left wondering as to how a booming, strobe-lit, Bollywood-style music event (staged adjacent to hospital wards) that resembled wedding *Sangeet* on steroids, could have blended within an intercollegiate festival, notwithstanding the intended representation of cultural activities.

I am given to understand that Aavishkaar nowadays has a budget of several lakhs, with 10–12 medical colleges participating in a few events like singing, dance, treasure hunt, and debates. Clearly, the passage of time, a change of context and priorities, and expanding sponsorship opportunities have resulted in radical changes to the template established in the first year. There is no doubt that today's infotech, exhibits, and music technology are leaps ahead of the 1980s, and we cannot remain tethered to fossilized nostalgia. We, however, need to ask ourselves whether an important and expensive annual co-curricular event has become more about vendor-operated hi-tech arrangements that obviate the need for direct student effort and participation, except as passive spectators. An important aspect of a young doctor's growth should be the ability to plan, budget, organize, host, communicate, generate consensus, and evaluate within diverse teams. These are traits even required for establishing and running a successful practice or health-care facility. An event like Avishkar could help to hone such skills. As founder-organizer, I would therefore appeal for enhanced focus on making the annual festival more student-intensive in a manner that enables large numbers of undergrads to participate as planners, organizers, hosts, and active participants.

ADVAIT

By Sakshi Kasture, *Ex-secretary, Advait*

ADVAIT is a renowned state-level open drama competition that stands as a significant cultural milestone in Maharashtra. Organized annually by the undergraduate students of Seth G.S. Medical College and KEM Hospital, this prestigious event has gained immense popularity over its 24 year history. The competition serves as a dynamic platform for showcasing Marathi culture through the powerful medium of theater.

Each year, more than 40 drama teams from across Maharashtra participate in ADVAIT, bringing a diverse range of performances that highlight creativity, acting skills, and the rich traditions of Marathi Performing Arts. The competition is known for its rigorous selection process. After multiple rounds of evaluation, only five teams make it to the grand finale, which becomes a celebration of the best theatrical talent in the state. These teams are judged on various aspects including scriptwriting, direction, acting, set design, and overall execution, ensuring that every facet of the performance is recognized.

One of the core missions of ADVAIT is to promote and preserve the Marathi *sanskruti* (culture). The event is not just a competition but also a vibrant cultural festival that brings together performers, enthusiasts, and audiences who share a deep passion for Marathi theater. It acts as a nurturing ground for budding artists to showcase their skills, encouraging the growth of new talent in the world of theater.

Over the years, ADVAIT has garnered a reputation for fostering artistic excellence and has become a highly anticipated event for both participants and spectators. The competition continues to play a vital role in keeping the tradition of Marathi theater alive, while simultaneously pushing boundaries and inspiring future generation of theater artists.

Apurvai

By Vishwatej, *Secretary, Apurvai*

Apurvai, a tale beyond theater, is a celebration of Marathi culture, drama, and dance. The Apurvai family first came together in 1999 with a desire to produce something original on stage—by our students and for the students. Dr Amol Khole and Dr Ghanshyam Rao, along with other students, pioneered this modern take on often overlooked topics like elections, relationships, intercaste marriages, medical bonds, and more. माय मराठीच्या नगरी (1999) marked the beginning of this grand journey called Apurvai.

This year marks a significant milestone with Apurvai celebrating its Silver Jubilee. Apurvai's signature slogan "अरे आवाज कुणाचा अपूर्वाईचा", uniting every Apurvaikar in spirit and pride.

Ascension

By Nikit Kothale and Mehreen Mir, *First Secretaries of Ascension, 2017*

The Ascension conference is a multidisciplinary conference held annually under the aegis of Dr Manu VL Kothari Chair and Division of Medical Humanities since July 2017. It is organized by the medical students selected by Gymkhana as Secretaries of Ascension. This conference is designed to blend academic rigor with creative engagement, fostering a deeper understanding of medicine's humanistic and ethical dimensions. The event's structure includes thought-provoking talks, dynamic debates, engaging panel discussions, and creative online competitions.

The talks and speeches, delivered by renowned experts, cover topics like the life and work of medical pioneers and contemporary issues in healthcare. These sessions aim to inspire participants with stories of compassion, resilience, and innovation. The debates tackle pressing ethical dilemmas, such as the commodification of healthcare, encouraging students and professionals to critically analyze contrasting perspectives. Panel discussions provide a platform for addressing broader challenges and fostering dialogue and collaboration among attendees. Online competitions in art, writing, photography, and film making add a creative dimension, allowing participants to explore medicine's human side.

Organizing such an event is not without challenges. Securing funds and resources, engaging collaborators, and capturing students' interest require significant effort. Partnerships with GOSUMEC Alumni Association, ICMR, BMJ, and UNESCO Bioethics Unit were instrumental in overcoming these hurdles. As Dr Lopa Mehta aptly said, "You can lead a horse to water, but you can't make it drink." Our role was to guide and inspire students to connect with the initiative.

The conference benefits both students and doctors by bridging the gap between science and humanity. Students gain insights into communication, ethics, and compassion, while professionals revisit their purpose and broaden their perspectives. By combining academic, ethical, and creative elements, Ascension provides a holistic approach to learning, inspiring participants to become

compassionate, well-rounded healthcare professionals.

ASPIRE

***By Dr Alhad Mulkalwar**, Founder Secretary, A.S.P.I.R.E., MBBS Batch 2015, Seth GSMC*

A.S.P.I.R.E. (*Association for Support and Propagation of Innovation, Research and Education*) is the official student research wing of Seth G.S. Medical College established in March 2020.

Objectives

- Collaborate with different departments of the institute to educate students on various aspects of research through seminars and workshops
- Conduct activities and workshops for students to increase the participation of undergraduate students in research projects
- Coordinate with various departments of the college to make ongoing research projects more approachable for the students
- Help students find the right mentor and requisites to work on a novel research idea or innovation
- Guide students working on a research study throughout the process with the help of research experts from our college
- Collaborate with various institutes and trusts of other disciplines to promote research and innovation

The activities conducted by A.S.P.I.R.E. focus on building a peer-based research environment to learn via module-wise teaching and mentoring sessions, a practical approach to learning through evidence-based medicine via *journal clubs*, and maximizing the available opportunities *via research opportunities database*. Online discussion forums and social media platforms were also created to facilitate active discussions and remote learning, like the *'National Research Forum'* for students and faculty members across borders to interact, discuss, and share various aspects and breakthroughs in the field of medical research and technology. *'Spectrum – MBBS and Beyond'* is another platform that brings together graduates in the field of healthcare from different professions, backgrounds and work profiles to share their experiences through a series of interviews, interactive sessions, podcasts, informative discussions, and networking opportunities with an aim to educate students about the vast array of avenues as future career options in healthcare. Today, these initiatives have blossomed into a global network of thousands of students. Today, A.S.P.I.R.E. is recognized as one of India's first student-led Department of Medical Innovation and Research at a Medical College. A.S.P.I.R.E. stands out from the student research councils due to its exclusively peer-based mentoring approach, well-defined student team structure, annual teaching module, and a variety of novel initiatives like the research database. Over the span of 5 years, over 10 medical colleges nationally and internationally have adopted their working model.

Journal Club: Sessions for undergraduate students to help them understand the different components and analysis of research articles and study designs. This will enable them to better comprehend and critique published medical literature.

Research Consultation OPDs: With the help of faculty members, consultation OPD's by research experts for specific aspects of research methodology for medical students pursuing a research study, could be arranged on a regular basis to help eliminate the technical hurdles they may encounter in the course of their projects.

Research Database: a single up-to-date compilation of the researches currently in progress in The Institute and vacancies there in for students could be maintained so that they could be a part of the research project of their interest.

Workshops and guidance by faculty members of the institute for **designing** and **validating questionnaires** and conducting **community-based research studies** in collaboration with the Department of Community Medicine.

Initiatives of ASPIRE

Sessions in coordination with the **Institutional Ethics Committee** for guidance on drafting Ethics Committee Proposals and Informed Consent Document to ease the process of submissions for research studies undertaken by students of the institute.

Interactive sessions by experienced faculty members to enable young students in understanding the contribution of research to administration and **policy making**, eventually translating into practice to **standard treatment guidelines** for National Health Programs.

Educational visits to various laboratories and departments of the college to orient and stimulate young minds in paraclinical research studies, such as the institutional biochemistry and microbiology laboratories, pharmacology practical experiment center, Animal House for animal-based research studies, and Ayurveda Research Center, etc.

Sessions on writing **medical literature**, understanding different types of media (poster / paper / symposium) and platforms to present their studies, hands-on workshops for using **search engines like PubMed** and software like **SPSS for biostatistical analysis.**

Confluence

***By Dr Ashutosh Pai**, Secretary of First Confluence, MD (Peds), Neonatology trainee*

"The country's leading medical college has to have its own Undergraduate National Medical Conference", as I made this bold declaration to my fellow Gymkhana committee members of 2014, I knew very well this was not going to be an easy task. We had the determination and dedication to make this dream a reality, but we needed guidance. And this was ably provided by our Academic Secretary, Dr Smriti Bajpai.

Our first task was to set up a team of equally motivated GSites to help with the different aspects of the event. The conference was aptly named Confluence —where ideas meet, as it was a coming together of different batches.

Countless days and nights planning each event, putting together a team, contacting medical colleges throughout the country, organizing the finances, and deciding the judges, all bore fruit in August 2014 as Confluence opened with a bang. I am particularly proud of the fact that despite being in its 1st year of existence, Confluence was able to attract students from across the length and breadth of the country, even a few from our neighboring countries. This is testament to the fact that hard work and courage can make the impossible

possible. What was the most satisfying was that Confluence was carried forward as a legacy by each successive junior batches taking up the mantle keeping the conference alive.

GOSUMAG

By Dr Jayesh Vira, *Consultant Ophthalmologist, Ex-Secretary, Gosumag 2011*

The GoSuMag (derived from Gordhandas Sunderdas Magazine) is the annual students' magazine published by the Seth GSMC Gymkhana on behalf of the undergraduate students of the Seth GSMC and KEMH.

The GOSUMAG was started around the year 1934. Over the years, and keeping in time with the growing student strength of the college and the social dynamics of the student community, the magazine has sequentially been published by the Wallpaper and Magazine department (and as the Wallpaper-Website-Magazine Department from 2011 onwards) with the said Gymkhana Secretary also serving as The Editor-In-Chief.

The financial support for publication is contributed by the Gymkhana and voluntary donations from the faculty, alumni, and well-wishers and friends of the institution. In the initial years, the editorial team consisted of mix bag of team members from across the MBBS batches. Since the institution of the 5.5-year pattern of the MBBS curriculum, the magazine has been published by the students of the III Part I MBBS and their parallel OT/PT batch mates.

The multilingual magazine has been a compilation of essays and poems; cartoons and caricatures; and quizzes and puzzles contributed by the students, alumni and faculty members; interviews of eminent college faculties, alumni, celebrities, sportspersons, artists, and personalities with good social standing. Over the years, the magazine has published photography sections showcasing the artistic photographs and paintings of the multifaceted students of Seth G.S. Medical.

The magazine was published in monotone until 2010. The 2009 edition was published in a CD format. The first fully multi-colored version of the magazine was published in 2011, which was also the first edition to publish an extended e-book where articles and photographs which were not incorporated in print, were published online. Apart from the creative outlet, the GOSUMAG also publishes the annual batch photos of each of the MBBS and other allied courses batches, the photos of the various sports teams and student committees, and the annual report of the Gymkhana.

Larynx: The Voice of Our Institution

By Nitish Sancheti, *Batch of 2011, Editor-in-Chief*

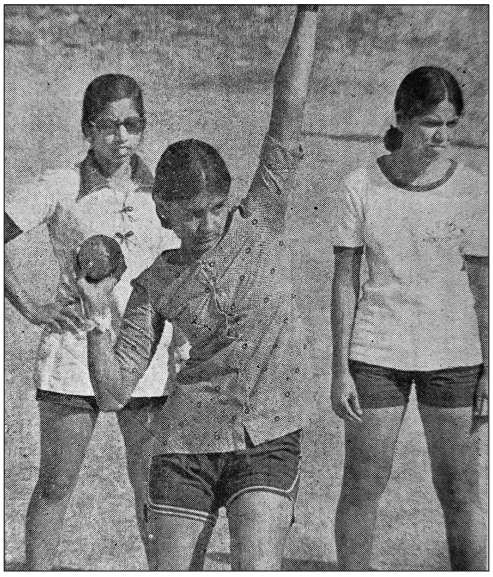
As we celebrate the foundation day of Seth G.S. Medical College and KEM Hospital, it is an opportune moment to reflect on the essence of what makes our institution unique—not just as a center of medical excellence but as a vibrant ecosystem of stories, struggles, and triumphs. Among these many facets, *The Larynx*, our institute's quarterly newsletter, holds a special place. As the inaugural Editor-In-Chief of *The Larynx*, I feel an overwhelming sense of gratitude and pride in recounting its journey and vision.

The idea of *The Larynx* was born in 2015 upon recognition of the multifaceted nature of the institution and the need for a platform that can capture its pulse. It was envisioned as a mirror to reflect the lives and contributions of all stakeholders—students, faculty, staff, and patients. It aimed to celebrate unsung heroes and narrate stories that often remained unheard. Whether it was a breakthrough in research, the dedication of a class IV employee, or the resilience of a patient, *The Larynx* sought to be their voice.

The inspiration behind *The Larynx* owes much to Mahatma Gandhi's *Indian Opinion*, a weekly periodical he started in South Africa in 1904 to unite the marginalized Indian community and fight against racial discrimination. Gandhi saw journalism as a tool for service, a medium to disseminate truth, and inspire collective action. Similarly, *The Larynx* was conceived to be more than a mere collection of updates; it was to be a fearless and honest chronicler of the institute's journey, echoing the aspirations, challenges, and ethos of its people.

Over the years, *The Larynx* has evolved into a platform that educates, informs, and inspires. It has shed light on pressing issues faced by the institute—from student well-being and academic innovations to patient care and resource challenges. In doing so, it has fostered a sense of community and purpose. Each issue has been a testament to the spirit of collaboration and service that defines Seth G.S. Medical College & KEM Hospital. Beyond being the voice of the institution, *The Larynx* has also been the voice of young medical students, capturing their aspirations, challenges, and achievements. It has chronicled their journey—be it through academic triumphs, extracurricular accomplishments, or personal reflections—giving them a platform to express themselves and be heard.

Reflecting on the past decade, it is heartening to see how *The Larynx* has become a vital thread in the fabric of our institution. It has documented milestones, celebrated achievements, and, most importantly, preserved the human stories that often get overshadowed in the bustle of medical life. For me, personally, being part of its inception was a journey of immense learning about the power of words, the depth of our institution's legacy, and the enduring spirit of its people. As *The Larynx* continues its journey, may it remain a strong, fearless voice that ignites thought and action. Let it inspire future generations to carry forward the legacy of service, truth, and humanity that our institution so proudly upholds.



All students actively engage in sporting activities. Gosumag 1974-75, courtesy: Dr Falguni Kapadiya Shah.

CONFLUENCE x ASCENSION
2022
AN INTERNATIONAL MEDICAL, RESEARCH & MEDICAL HUMANITIES CONFERENCE
BLENDING IDEAS WITH EXPERIENCE, A HOLISTIC APPROACH TOWARDS MEDICINE
VISSCO
CONFLUENCE
Where Ideas Meet!
2021
ASCENSION
A STEP ABOVE

Annual Ganeshotsav celebrated by the students year after year. Image courtesy: Girish Parmar.

9

Hostels

Hostels

***By Dr Yuvraj Bhosale and Dr Sunil Kuyare**, Ex-Wardens GSMC-KEMH*

Hostel Procurement Journey of Seth G.S. Medical College and KEM Hospital, Parel

In 2002, when Dr Yuvraj Bhosale was appointed as Warden of the Main Boys' Hostel, 1st year students did not have the facility to avail hostels. At the time, there were four hostels, i.e. Main Boys Hostel (in campus; capacity: 272); Ladies' Hostel (next to the Dean's bungalow; capacity: 108); Sewree Hostel (capacity: 60); and Naigaon Boys' Hostel (capacity: 138). Hence, a search of empty buildings within 2 km premises was initiated by him and a partly used BMC school building, Peru compound, Lalbaug, and a building at Mazgaon were shortlisted. After great efforts, permission was sought for using both these buildings. Dr Sunil Kuyare was made the caretaker of this hostel, and renovations began to create toilets and bathrooms with the help of the Civil Department.

In 2004, the first-year students were provided the hostel without furniture and by the end of 2004, basic furniture i.e. beds, chairs, and tables were allocated to these two new hostels with the assistance of AE(M&E). Now the hostel had three wardens (two for the Boys' Hostel and one for the Ladies' Hostel). After 3 years, the we were informed to shift the Lalbaug Hostel, and one building at Kalachowki (capacity:100) was chosen but it was in a dilapidated condition. The engineering team came forward and renovated the building, and students from Lalbaug were transferred to Kalachowki Hostel. As the demand increased due to increases admissions from outside Mumbai, the search was expanded. 50 flats were received from BMC in Vignaharta building, near Lalbaug area, for UG boys (capacity: 84) and UG girls (capacity: 80).

Simultaneously, the need for hostels for PG students emerged as well. A building in MGM College, Parel and one in Veterinary College, Parel were rented. Later, a five-story new building at Elphinstone Hostel constructed by the BMC was handed over to KEM as well for PG students, with a floor for undergraduate students (UG students capacity: 35). A new building behind the nursing quarters, called the 'Anchor Hostel' was transferred to KEM for UG girls (capacity: 54), a another building in Bavlawadi for PG students.

In 2003, the requirement for a permanent hostel within the campus was put forth by Dr Nilima Kshirsagar. The road towards Gate No. 7 was the only area which could be considered and was proposed to Dean madam. The idea was accepted, and work began in 2003. To utilize the area to

the fullest extent, Wardens, Dr Yuvaraj Bhosale and Dr Sunil Kuyare visited different hostels of Mumbai and Pune. A 20-storey hostel building was constructed under the guidance of the then Dean, Dr Sanjay Oak, and was inaugurated in 2012 for both UG and PG students. The administration and hostel committee has put in a lot of effort to meet the increasing requirements.

Currently, a total of 11 hostels are available for undergraduates.

For Boys: Main Boys' Hostel, Boys Hostel Annex., Naigaon Hostel, UGPG Boys' Hostel, Elphinstone Hostel, Vignahartha Boys Hostel.

For Girls: UGPG Girls' Hostel, Sewree Hostel, Mazgaon Hostel, Anchor Hostel, Vignahartha Girls' Hostel.

This journey will soon end with the allocation of the 16-storey dedicated buildings for UG and PG students proposed by Dr Avinash Supe (Dean, G&K and Director, MCGM) at Wadala, along with a dedicated building for superspeciality students which will be soon ready and handed over to college.

Details of Undergraduate Student Boys' Hostel

	Boys' Main Hostel	**Boys' Hostel Annex.**	**Naigaon Boys' Hostel**	**Currey Road Boys' Hostel**
Address	On campus, Seth G.S. Medical College, Parel	Near KEM campus	Near Bombay Dyeing Spring mill, SS Wagh Marg, Naigaon	Sukhakarta building, Near Currey Road station, Currey Road(E)
Distance From Campus	In Campus	Across the road	1 km	1 km
No. of Rooms	130	51	42	21
Capacity Per Room	2/3	2/3	3	4
Total Capacity	260	120	126	84
Availability of Indoor Games	No	Yes	Yes	Yes
Own/Rented	Own	Own	Own	Own
Furniture	2 beds, 2 tables, 2 chairs, 2 cupboards	Bed, table, chair, cupboard	3 beds, 1 table, 2 chairs, 1 cupboard	3 beds, 1 table, 2 chairs, 1 cupboard
Recreation Room	TV room, Table Tennis, Carom Board, Chess Board	TV room, Table Tennis, Carom Board, Chess Board	TV room, Carom Board, Chess Board	TV room, Carom Board, Chess Board
Computer and Internet Facilities	Yes	Yes	Yes	Yes

Details of Undergraduate Student Girls' Hostel

	UGPG Hostel	Anchor Girls' Hostel	Currey Road Girls' Hostel	Mazgaon Girls' Hostel
Address	On campus, Seth G.S. Medical College, Parel	Near KEM campus	Sukhakarta building, Near Currey Road station, Currey Road(E)	Motishah Lane Marathi Municipal School, Mazgaon
Distance From Campus	In Campus	Across the road	1 km	4 km
No. of Rooms	62	51	20	24
Capacity Per Room	3	3/4	4	2/3
Total Capacity	186	54	80	70
Availability of Indoor Games	Yes	No	No	No
Own/Rented	Own	Own	Own	Rented
Furniture	3 beds, 2 tables, 2 cupboards	Bed, table, chair	3 beds, 1 table, 2 chairs, 1 cupboard	Bed, table, chair, cupboard
Recreation Room	TV room, Table Tennis, Carom Board, Chess Board	TV room, Carom Board, Chess Board	TV room, Carom Board, Chess Board	TV room, Carom Board, Chess Board
Computer and Internet Facilities	Yes	Yes	Yes	Yes

RMO Quarters

By Dr Dhangauri Narayan Shenvi, *Incharge, Postgraduate Hostel Committee; Professor and Head, Department of Physiology, GSMC-KEMH and*

Dr Ramakrishna Umesh Kamath, *Assistant Warden (Bavlawadi Hostel); Assistant Professor, Department of Physiology, GSMC-KEMH*

The RMO (Resident Medical Officer) Quarters has seen too many changes due to perpetual increase in the number of RMOs with increase in the number of departments, bed capacity of the hospital, and faculty. The original RMO quarters (incidentally, they were originally nurses' quarters and became RMO quarters when nurses' quarters building came up.) A new building had come up in seventies next to the original RMO quarters but because of its poor structural health it had to be demolished. As the following table shows, RMOs are accommodated at different places.

Details of RMO Quarters

Sr. No.	Name of Hostel	Departments	Male/Female	Capacity
1	Ashwamedh CHS Ltd., D.G. Mahajani Marg, Sewri (West), Mumbai – 400015.	Pharmacology, Pathology, Microbiology, Community Medicine, Dermatology	Female	45
2	Anchor Resident Doctors Hostel, Behind KEM CVTC Building, Near Mahalaxmi CHS Ltd., Dadabhai Chamerbaugwala Road, Parel, Mumbai – 400012.	Dermatology, Psychiatry, Ophthalmology, ENT, Microbiology	Female	52
3	Anand Niketan Resident Doctors Hostel, Fitwala Road, Dighe Nagar, near Prabhadevi Station, Mumbai – 400013.	Community Medicine, Pharmacology, Pathology, Microbiology, ENT, Ophthalmology, Anatomy, Forensic Medicine, Radiology, Physiology, Anaesthesiology, Respiratory Medicine	Male	134
4	Bavlawadi Resident Doctors Hostel, Municipal School Building no. 2, inside Dutta Krupa CHS Ltd. compound, Opp. Voltas House A, Dr B. A. Road, Lalbaug, Chinchpokli (East), Mumbai – 400012.	Pathology, Microbiology, Dermatology, Ophthalmology, Physiology, Radiology, Psychiatry, Community Medicine	Female	60
5	Old R. M. O. Hostel, K. E. M. Hospital campus, Acharya Donde Marg, Parel, Mumbai – 400012.	Medicine, Surgery, Pediatrics, Obstetrics & Gynecology, ENT, Forensic Medicine, Respiratory Medicine	Male	154
6	U. G. – P. G. Hostel, K. E. M. Hospital campus, Acharya Donde Marg, Parel, Mumbai – 400012.	Medicine, Surgery, Pediatrics, Obstetrics & Gynecology, ENT, Anaesthesiology, Superspeciality Residents	Female for all Broad Specialties except Anaesthesiology. Both Male & Female for Anaesthesiology & Superspeciality Residents	374
7	Multistory (New) Building, K. E. M. Hospital, Acharya Donde Marg, Parel, Mumbai – 400012.	Superspeciality Residents	Both	102
8	Old K. E. M. Nurses Quarters (Shanti Niketan), Senapati Bapat Marg, Prabhadevi, Mumbai – 400013	Superspeciality Residents Obstetrics & Gynaecology, Pediatrics, Pharmacology, Community Medicine	Both Male & Female	32
9	Sukhakarta Housing Society Wings F & G, Mahadev Palav Marg, Near One Avighna Park, Curry Road, Mumbai – 400012.	Pharmacology, Community Medicine, Orthopaedics, Radiology, Anatomy	Both Male & Female	150

10

Affiliated Institutions

The Nowrosjee Wadia Maternity Hospital and the Bai Jerbai Wadia Hospital for Children are both attached with Seth G.S. Medical College and are accorded recognition for postgraduate teaching by the University.

Nowrosjee Wadia Maternity Hospital In a country where Women's Healthcare was only just being established, and at a time when focus was shifting to women's requirements and their empowerment, Sir Ness Wadia understood the importance of catering to the medical needs of women across the board, regardless of their economic status.

True to the philanthropic tradition of the Wadia family, he set up the Nowrosjee Wadia Maternity Hospital in fond memory of his father Nowrosjee Wadia. The late Sir Cusrow Wadia left a legacy of Rs. 5 lakhs from which a new Out-patient Department with resident doctors' quarters above it was built. It was designed by Architect George Wittet who also designed the Gateway of India, the Prince of Wales Museum, and many other renowned landmarks in the city. The foundation stone was laid on 9th June 1925 and the hospital was declared open on 13th December 1926. When this hospital came up, the obstetrics services were terminated at the KEM Hospital and deliveries were conducted at this hospital. It was only in October 1958 that the obstetric services were restarted at KEM Hospital.

This joint venture between the State Government and the Bombay Municipality at the time, was set up to provide affordable comprehensive healthcare and super speciality services for women and to ensure that their changing needs are met through the comprehensive services provided.

The Nowrosjee Wadia Maternity Hospital specializes in offering affordable obstetric and gynecological services to women across all sections of society, catering to their changing needs through different stages of their lives.

The hospital does not limit its services to its patients alone. It acts as a tertiary-level referral center as well as helps rehabilitate these women and their families by showing them methods of improving the health and sanitation around their environment and thus ensuring a healthy life for their whole family.

With a dedicated team of over 20 specialists, this 305-bed hospital, declared as a heritage structure, sees more than 10,000 inpatients and over 100,000 outpatients, annually. In addition, as a teaching hospital, it also has a constant influx of aspiring doctors who train under some of the best specialists in not only the

city but also the country.

The Bai Jerbai Wadia Hospital for Children Before the onset of Pediatrics as an independent discipline, childcare was limited to using adult medication on to children, who were seen merely as mini versions of adults. It was in 1928 that Sir Ness Wadia and Sir Cusrow Wadia had a vision to provide specialized Pediatric and Neonatal care for children, and as strong believers in the idea that the need for quality healthcare is universal, they vowed to provide affordable world-class medical services to children in every section of the society. They built The Bai Jerbai Wadia Hospital for Children, in memory of their mother Bai Jerbai Wadia.

In the first board meeting held by the Trust in February 1928, Sir Cusrow Wadia was selected as the Chairman of the board consisting of his brother Sir Ness Wadia and six other members. Dr R.N. Cooper was appointed as Hon. Principal Medical Officer. The foundation stone for the hospital was laid on 7th March, 1928 and it was declared open on the 12th of December, 1929 by the Governor of Bombay at the time, Sir Frederick Sykes. BJWHC emerged as India's first independent specialized Pediatrics hospital, dedicated exclusively to healthcare for children, as recognized by the Indian Academy of Pediatrics.

Located in the heart of Mumbai, The Bai Jerbai Wadia Hospital for Children pledges to extend its services to people, regardless of their socio-economic status. Believing strongly in the fact that quality healthcare should not be restricted to only certain sections of society, the BJWHC offers state-of-the-art services for neonatal and pediatric care at affordable costs. A teaching hospital of world-wide repute, this 300 bed hospital is propelled by a highly accomplished team of over 60 pediatrics specialists devoting themselves to the care of over 100,000 children on an outpatient basis, and approximately 10,000 children as inpatients, annually.

In brightly painted wards, surrounded with their favorite Disney characters, children are treated for a wide spectrum of rare and complex conditions, in an environment that does its best to keep their spirits high. With tender care by the staff and each doctor taking a personal interest in every child's health and wellbeing, the hospital sees its responsibility as much more than just medical treatment. Besides providing comprehensive clinical care, it also offers rehabilitation and family focused methods of promoting a healthy environment for the child, thus striving to prevent childhood diseases. BJWHC also has the largest Neonatal Intensive Care Unit (NICU) in the West Zone. In its effort to provide universal healthcare, BJWHC also acts as a tertiary-level referral center, is a nodal center for Clubfoot in Maharashtra, and is the only center for Neonatal/Pediatric Dialysis in Western India.

Source:
https://www.wadiahospitals.org
Platinum Jubilee Souvenir

11

Panorama

Parel History

***By Dr Anita Garware**, Chairperson, Indian Heritage Society, Mumbai.*

thevoiceofmalabarhills.com › 2023 › 05

The Shilaharas clan was a vassal of the Rashtrakuta dynasty which ruled the Deccan plateau from the 8th to the 10th centuries. North Konkan (today's Thane, Mumbai & Raigad) was granted to Kapardin-I, founder of the Shilahara dynasty around 800 CE. Their kingdom lasted till around 1343, when the whole archipelago passed to the Muzaffrid dynasty.

An inscription dated 26th January 1187 (Purnima of Magha, Saka 1108) can still be seen recording the grant of this separate island by the Shilahara King Aparaditya II for a Vaidyanatha Temple. He had bought this island from the proceeds of sale of an apple orchard named Mahavali. This temple of Parli Mahadev, dedicated to Shiva, gave the name Parel to the island.

During the occupation of the island by the Portuguese, the temple was replaced by a church and a priory. The priory first became the summer home for the Governor of the East India Company and finally, the permanent residence. First came the temple, then the Jesuits built a monastery, which was taken over by the East India Company and converted as an official residence for their Governor. In 1771 William Hornby, the Governor of Bombay moved out of the Fort into this former friary, which then became Government House. In 1875 a Durbar Hall was added on the first floor to welcome the Prince of Wales. This remained so till 1883, when Governor Sir James Fergusson's wife died of cholera, and he moved his residence to Malabar Hill. Two years later the magnificent structure was used for Recorders Bombay Presidency.

On 10th August 1899, the House was finally handed over to Dr Waldemar Mordecal Haffkine, a medical social worker, for plague research and was designated as Plague Research Laboratory. This was renamed as Bombay Bacteriology Laboratory and finally, to acknowledge the efforts of Dr Haffkine in inventing the plague vaccine, in 1925 it became the Haffkine Institute we know today. The beautiful staircase, guarded by lions, leading to the splendid ballroom on the first floor is now used for training workshops and lectures. When the Governor moved to Parel, it suddenly became a much sought-after locality. Mansions, hospitals, educational institutions and soon the prosperous cotton mills took over the area, to become Girangaum (city of mills).

King Edward Memorial Hospital (KEM) and Seth Gordhandas Sunderdas Medical College (G.S. Medical College) were founded in 1926. In 1926, Sir Ness Wadia

funded the Nowrosjee Wadia Maternity Hospital, in memory of his father and The Bai Jerbai Hospital for Children in 1928, in memory of his mother.

1941 saw the birth of another hospital in Parel. Sir Dorabjee Tata Trust recognized the need to address the ever-growing fear of the dreaded disease, Cancer. The Trust funded the establishment of The Tata Memorial Hospital. In 1952, the Cancer Research Center, later named the Cancer Research Institute (CRI) was established. In 1957, the Ministry of Health took over the Tata Memorial Hospital and the administrative control was handed over to the Department of Atomic Energy in 1962. In 1966 the Hospital and the Center were merged to be 'the classic example of private philanthropy augmented by Government support with a mandate for Service, Education and Research in Cancer.

Dogs are considered 'man's best friends'. To take care of their health and the health of other animals, The Bai Sakerbai Dinshaw Petit Hospital was constructed in 1884 from funds donated by different animal lovers. It is managed by the Society for Prevention of Cruelty to Animals (SPCA), an NGO registered under the Bombay Public Trust Act, 1950. Approximately 10000 animals receive devoted care.

About 100 textile mills that came up in the 1850s started spewing pollutants, making the Parel inhabitable, and the destiny of the area changed. Homes started moving to the reclaimed flats on the western side of the island, and it became Girangaum, City of Mills. However, the fate of these too changed in 1982. A strike crippled the industry, and all the mills had to shut down, leaving a ghost town of decrepit factories, sheds, chimneys, and vast unkept land! Today, fortune seems to be shining again. The buildings are being reused for shops and restaurants, and the vacant land is seeing growth of high-rises for offices and residences. Parel is going back to its old image of being a posh locality. Destiny has taken a full circle!

A Walk Through Time: From Parel Station to KEM Hospital

Source: Adapted from A Wanderer's Diary, December 21, 2015 https://taxidiarist.blogspot.com/2015/12/a-walk-along-queensway.html

*by **Vishvatej Gaikwad**, Medical Student*

Stepping Into the Rush: Parel Railway Station

Every day, I take the same walk from the chaos of Parel Station to the towering presence of King Edward Memorial (KEM) Hospital. Yet, no matter how many times I tread this path, it never feels ordinary. It's not just a walk; it's a passage through time, where history, heritage, and healing intertwine. The moment I step out of Parel Station, I am greeted by the unmistakable rhythm of Mumbai—the honking of buses, taxis and cars, the hurried footsteps of office-goers, and the aroma of freshly brewed chai from roadside stalls. Parel, once, one of the original seven islands of Bombay, has seen it all-from ancient temples to its transformation into a hub for medical and industrial progress.

The Bridge That Stands Through Time

A short walk ahead, Elphinstone Bridge looms in front of me, a structure that

has stood since 1913, witnessing the relentless march of time. Built with steel girders from Glasgow, this bridge has played a silent role in countless Bollywood movies.

Queensway and Kingsway: The Forgotten Roads of Bombay

As I move forward, I find myself on Queensway, once a silent witness to Bombay's labor movements and student protests, Queensway is now known as Acharya Donde Marg after a schoolteacher who became the Mayor of Bombay. The Queensway runs from Parel station to Sewaree railway station. Going down the bridge along the road, we pass by the Church of St. Mary's, the Virgin built in Neo-Goethic style on the right. Further ahead comes the side entrance of Damodar Hall, now a posh theater where Dr Ambedkar had begun his political career. We reach the intersection of Kingsway and Queensway.

Kingsway, now Dr B.R. Ambedkar Road, was where the elite once moved in horse-drawn carriages, while workers trudged along Queensway, heading towards the mills. Walking here, I can't help but think of the people who walked these streets before me-freedom fighters, mill workers, medical pioneers… At the intersection of Kingsway and Queensway, I pass Gaurishankar Chhitarmal Mithaiwala, where the weighing scale is still worshiped every morning, a reminder of the traditions that refuse to fade.

The Changing Heartbeat of Mumbai: From Mills to Medicine

Once a thriving industrial belt, Parel's textile mills have now given way to towering hospitals. The sounds of spinning looms have been replaced by ambulance sirens, and mill workers by doctors and students in white coats.

The White Coats and the Walls of Healing

I know I'm close to my destination when I see students from Seth G.S. Medical College and doctors from KEM Hospital walking with purpose. Established in 1926, KEM stands as one of India's premier medical institutions. Across the street, Bai Jerbai Wadia Hospital for Children and the Nowrosjee Wadia Maternity Hospital symbolize nearly a century of compassionate care. Between the two hospitals Tata Hospital stands overlooking them.

The Final Stop: KEM's Gates

At last, I reach KEM Hospital. The energy here is electric; ambulances rushing in, doctors deep in discussion, patients waiting with hope in their eyes. It is a place of life, struggle, and healing. This walk from Parel Station to KEM is more than just a daily routine, it is a walk through history, a tribute to Mumbai's resilience, and a reminder that some roads don't just take you places, they take you through time.

King Edward Memorial (KEM) Hospitals Worldwide

Source:

1. *King Edward VII Memorial Hospital, Paul S. Dhillon, Saskatchewan, Canada (Spring 2016).*
2. *Dr Sayed Amjad Hussain, February 5, 2022.*

https://thefridaytimes.com/05-Feb-2022/from-artillery-barracks-to-anarkali-thee-early-history-of-lahore-s-king-edward-medical-college

***By Sharvari Khot**, Occupation Therapy Student*

KEM Hospitals are prestigious medical institutions established in various parts of the world, named in honor of King Edward VII. These hospitals have played a significant role in providing healthcare services and medical education.

Falkland Islands

The King Edward VII Memorial Hospital was established through public contributions and opened after the Battle of the Falklands on December 8, 1914. It evolved from the Victoria Cottage Home, which initially served as a Poorhouse and Nursing Home.

Australia

The King Edward Memorial Hospital for Women is located in Subiaco, Western Australia. It is a leading maternity and women's health hospital providing specialized care in obstetrics, gynecology, and neonatal services.

India

The King Edward Memorial Hospital (KEM), Mumbai, is one of India's premier medical institutions. Located in Parel, Mumbai, it is known for its excellence in medical education, research, and patient care.

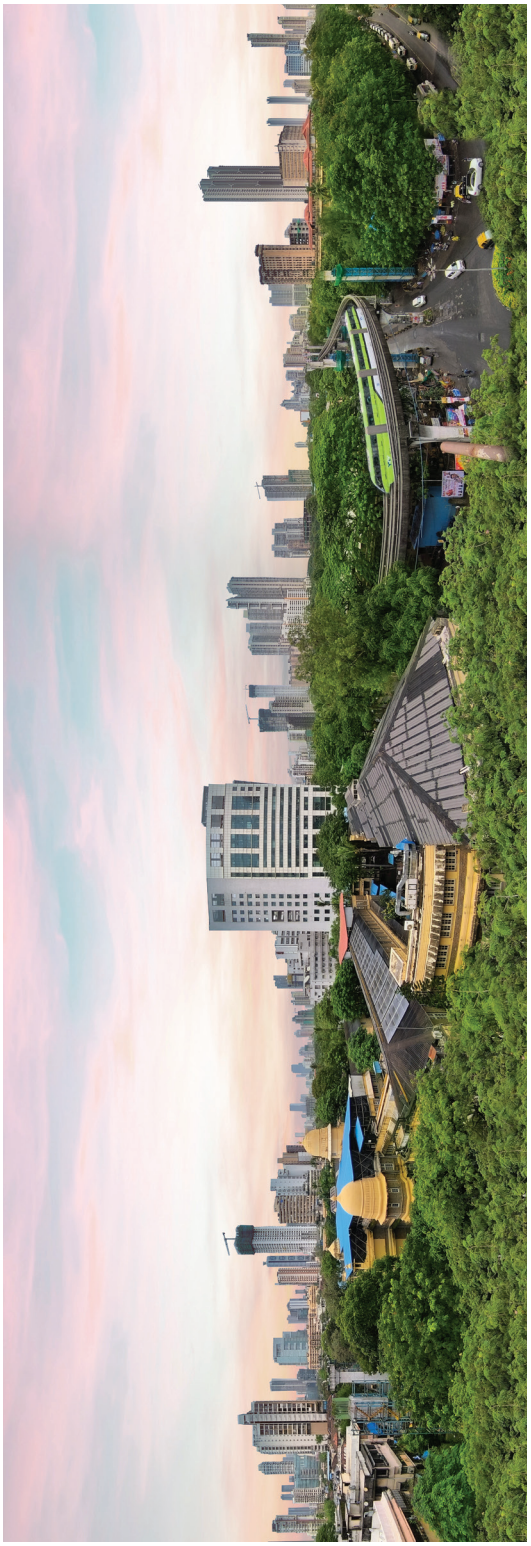
Pakistan

The King Edward Medical University (KEMU), Lahore, was originally established as Lahore Medical School in 1860 during the British Raj. It is one of Pakistan's oldest and most prestigious medical institutions, playing a crucial role in shaping modern medical education in the country.

Bermuda

The King Edward Memorial Hospital is a major healthcare facility in Bermuda, now part of the Bermuda Hospitals Board and supported by the Bermuda Hospitals Charitable Trust.

These hospitals have had a lasting impact on healthcare and medical education in their respective regions, continuing to serve their communities with excellence.



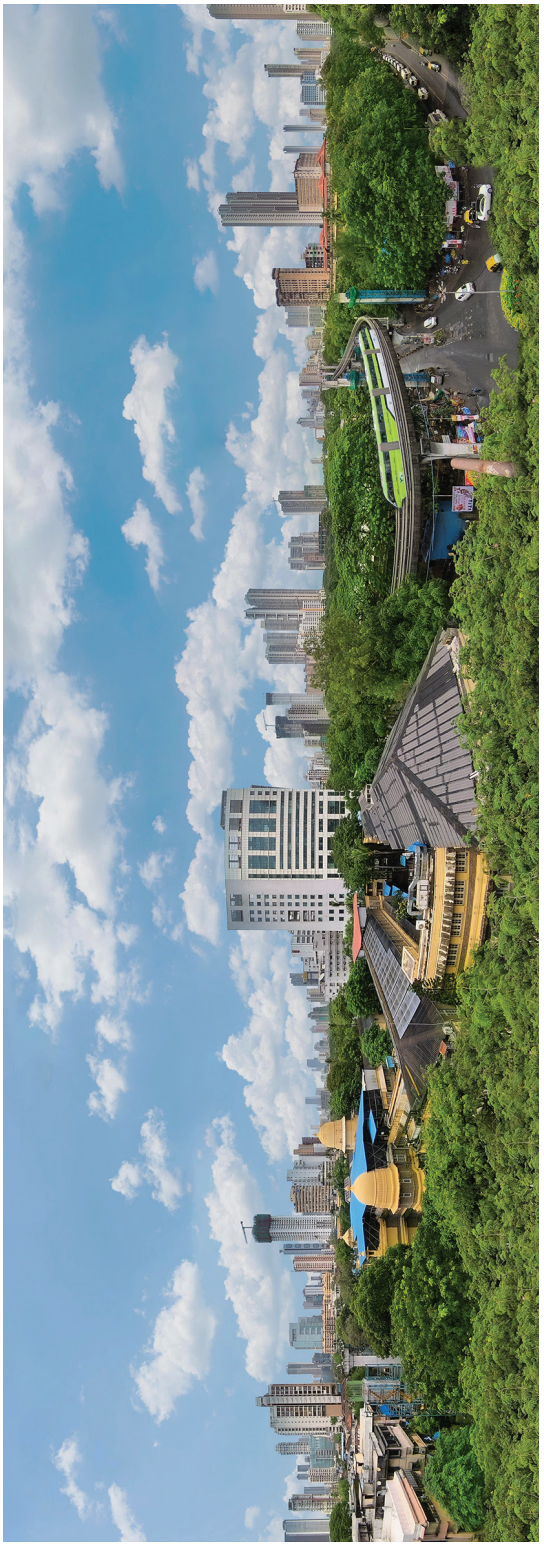


Image courtesy: Girish Parmar

12

National Honors

Padma Vibhushan, Padma Bhushan, Padma Shree, and the Dr BC Roy Award

(*Note*: The list of awardees is based on information made available to us. Though every effort has been taken to prevent omissions, nonetheless, any omissions are inadvertent and may be excused)

Padma Vibhushan

Year	Name of Recipient
1972	Dr Jivraj N. Mehta

Padma Bhushan

Year	Name of Recipient
1955	Dr Vasant Ramji Khanolkar
1959	Dr Jivraj Mehta
1969	Dr Keshavrao Krishnarao Datey
1969	Dr Prafulla Kumar Sen
1969	Dr Vallabhadas Vithaldas Shah
1972	Dr Lakhumal Hiranand Hiranandani
1972	Dr Bhalchandra Nilkanth Purandare
1981	Dr Prafulla Desai
1987	Dr Farokh Udwadia
1998	Dr Gurukumar Bhalachandra Parulkar
2013	Dr N.S. Laud
2017	Dr Tehemton Erach Udwadia
2024	Dr Ashwin Balachand Mehta

Padma Shree

Year	Name of Recipient
1954	Dr Vasant Ramji Khanolkar
1969	Dr Revanasiddappa Basappagowda Patil
1969	Lt. Col. Bishan Lal Raina
1972	Dr Dattatraya Nagappa Pai
1973	Dr Kandarp Tuljashankar Dholakia
1991	Dr Rustom Phiroze Soonawala
1991	Dr Jagdish Prasad
2004	Dr Ashwin Balachand Mehta
2006	Dr Tehemton Erach Udwadia
2011	Dr Indira Hinduja
2012	Dr Swati A. Piramal
2013	Dr Rajendra Achut Badwe
2014	Dr Shashank R. Joshi
2014	Dr Milind Vasant Kirtane

B C Roy Award

Year	Name of Recipient
1996	Dr N.S. Laud
1997	Dr Gurukumar Bhalachandra Parulkar
2000	Dr Farokh Udwadia
2002	Dr, Nilima Arun Kshirsagar
2004	Dr Atul Goel

Year	Name of Recipient
2004	Dr Milind Vasant Kirtane
2005	Dr Nargesh Motashaw
2005	Dr R.A. Bhalerao
2005	Dr Sanjay Oak
2008	Dr Rupin Shah
2014	Dr Avinash Nivritti Supe

Dr Pankaj Goyal for his painting on cochlea recognized in India Book of Records.

It looks like shell of snail so I created it by my imagination. Microscopically all 2.75 turns are around modiolus and further it has been divided into 3 parts. So from education and surgical purpose it is very helpful not only for residents, medical students (microscopic anatomy) but patients also where cochlear implant is required. As our ENT department is doing cochlear implant surgery for patients who had profound sensorineural hearing loss and before surgery to give education regarding implant, I thought this painting will give a better understanding.

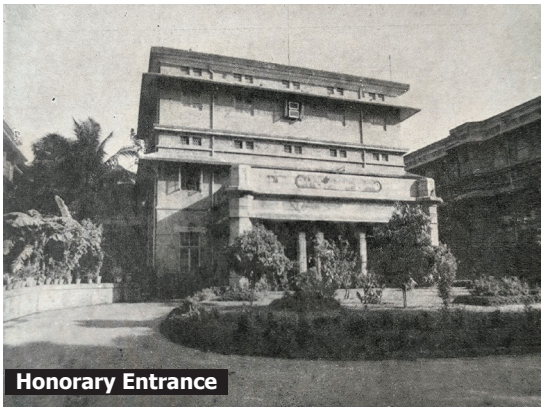
Source: International Journal of Clinical & Medical Images, Vol 7, Iss 9, 1000714 September, 2020.

Gallery

GSMC Entrance

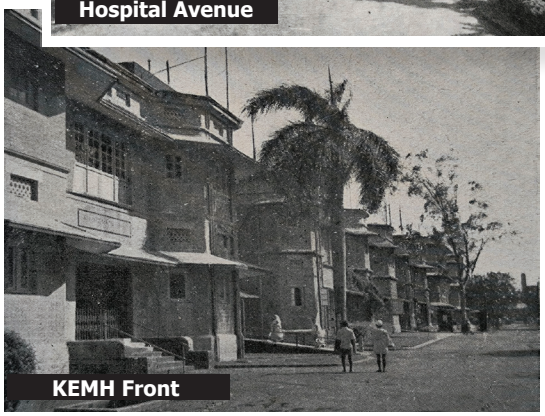
GSMC and KEMH OPD Buildings Interconnected

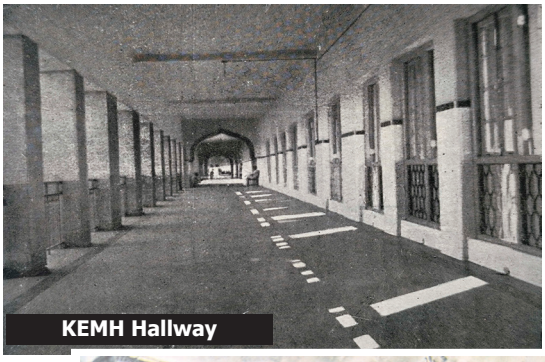
Image courtesy: Girish Parmar


Honorary Entrance

Hospital Avenue

GSMC Building

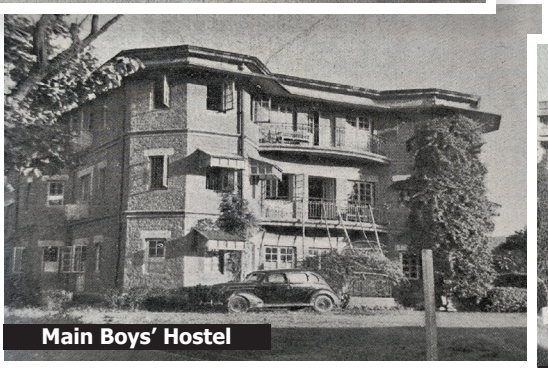

KEMH Front


KEMH Hallway

KEMH Painting

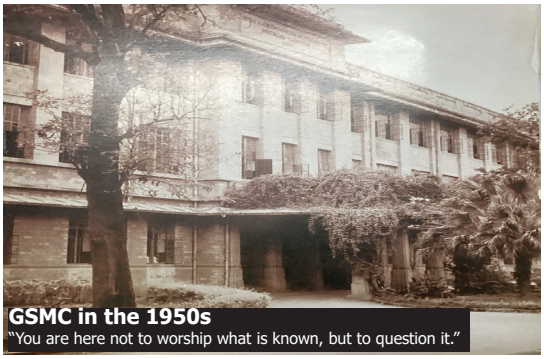
GSMC in the 1960s

Nurses' Quarters


Main Boys' Hostel

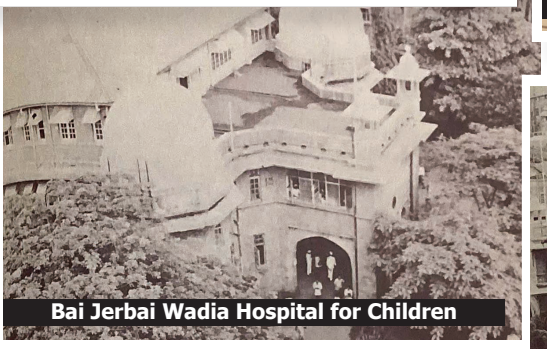
OPD Entrance

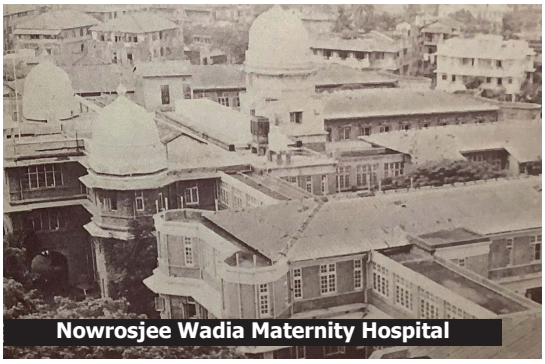
Orthopedic Center

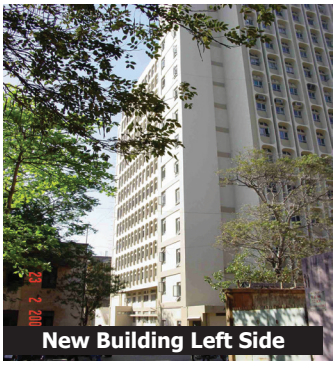

GSMC in the 1950s
"You are here not to worship what is known, but to question it."

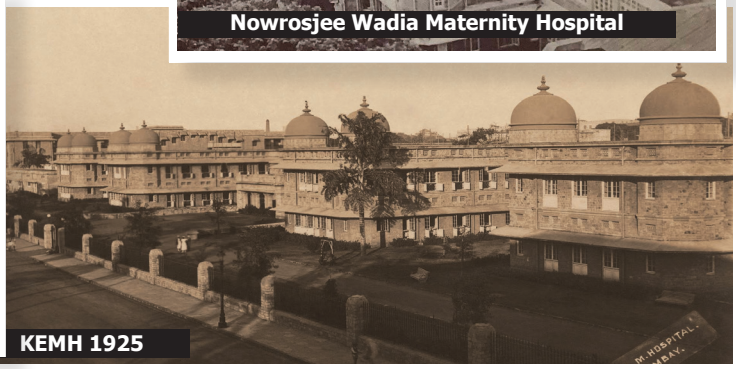
CVTC

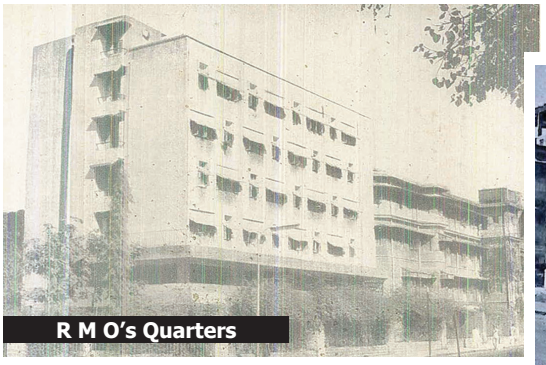
GSMC 1925

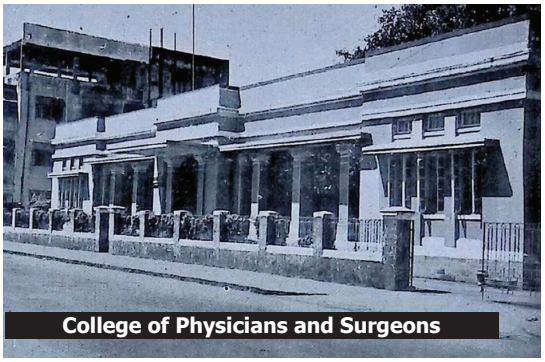

Bai Jerbai Wadia Hospital for Children


Nowrosjee Wadia Maternity Hospital

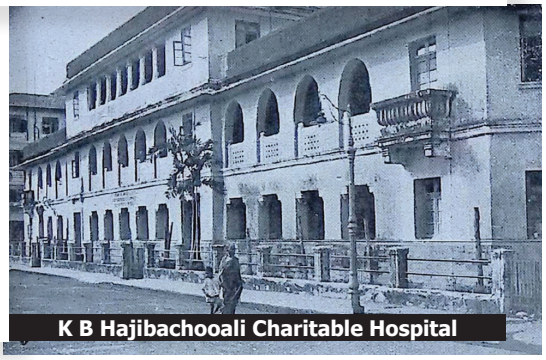

New Building Left Side

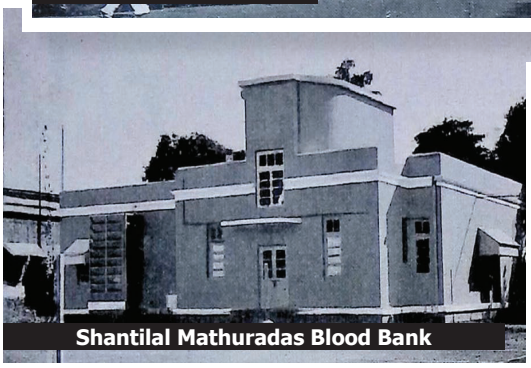

KEMH 1925


R M O's Quarters

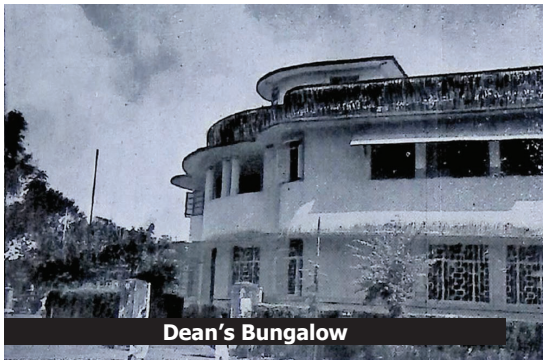

College of Physicians and Surgeons

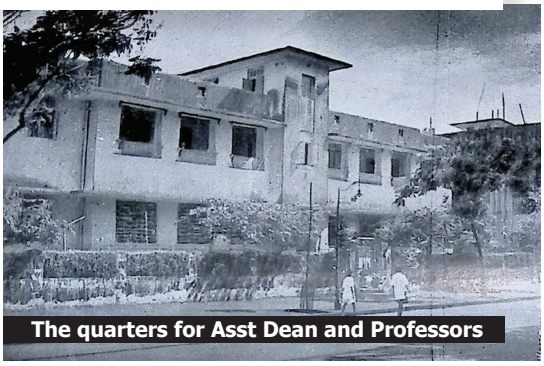
Haffkine Institute


K B Hajibachooali Charitable Hospital


Shantilal Mathuradas Blood Bank

Ladies' Hostel


Dean's Bungalow


The quarters for Asst Dean and Professors

Jamanadas Lalubhai Pathology Museum

Library Building

New UGPG Hostel Building

Image courtesy: Girish Parmar

Bibliography

Note

This handsome volume is the result of contributions from many people, most of whom are named and some of whom may not be named (inadvertently). The authors of the articles in the book have used sources from more than a hundred years ago to the present times. These sources have included, but are not limited to Annual Reports of the Seth G.S. Medical College, newspaper archives, books, academic journals, popular magazines and more. The internet search engine, Google, as always, was invaluable, as was the repository Internet Archive. As one would have expected, personal communications (oral, letters, e-mails) and memories have also played an invaluable part while we put together a history of the past 100 years, as seen through the lens of Seth G.S. Medical College. Great care has been taken to acknowledge all the sources and most of these sources have been referenced in the suggested readings at the end of the articles; however, it is possible that, unwittingly, we might have missed an occasional appropriate reference. For the latter, we apologize if such an occurrence is noted. To them as well as to all others, we are grateful for their scholarly contributions and largesse. Thanks to all.

Significant Readings

Dr Keswani, N.H. (Ed.). (1951). *Silver Jubilee Souvenir, Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital*. The Souvenir Committee.

Drs Bhatnagar, S.M. & Kothari, M.L. (Eds.). (1976). *Golden Jubilee Souvenir, Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital*. The Souvenir Committee.

Dr Mehta L.A. (Ed.). (2001). *Platinum Jubilee Souvenir, Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital*. The Souvenir Committee.

Annual Reports (1925 - 2024). *Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital*. Municipal Corporation of Greater Mumbai.

GOSUMAG Annual Magazines (86 Volumes)

Bhatnagar S M, Kothari M L, Mehta Lopa (Eds), (1980) Handbook- G S Medical College KEM Hospital.

KEM Hospital's Division of Medical Humanities: https://www.kem.edu/division-of-medical-humanities/

YouTube Channel — Dr M.V.L. Kothari Chair of Medical Humanities Division: https://www.youtube.com/c/Dr M.V.L. KothariChairofMedicalHumanityDiv

Archival Newspapers and Periodicals

The British Medical Journal.
"Retired." 6 July 1889.

The Hospital (London).
Anonymous. 1910. Commentary on King Edward VII as patron of hospitals.

The Times of India (Bombay/Mumbai). Various issues cited between 1885 and 1926, including: 24 June 1910; 30 September 1911; 4 July 1913; 22 September 1914; 19 October 1915; 16 March 1916; 12 May 1917; 11 May 1920; 16 November 1920; 15 February 1924; 27 November 1924; 19 May 1925; 8 July 1925; 22 January 1926; 27 January 1926.

21 May 1964. Obituary and retrospective commentary on **Dr. A. V. Baliga**.

The Afternoon Despatch and Courier (Bombay). 21 April 1987.

Books, Memoirs, and Monographs

Edwardes, S. M. *The Rise of Bombay: A Retrospect*. Bombay, 1910.

Sanderson E, Melville L. King Edward VII: His life and reign. The record of a noble career. Vol 6. London:The Gresham Publishing Company; 1910.

Velkar, M. B. *The Indian Medical Profession: Growth and Transition*. Bombay, 1942.

Setalvad, Chimanlal. *Recollections of Civic and Legal Life in Bombay*. Bombay, 1946.

Cooper, R. N. *Memoirs and Recollections of KEM Hospital*. Bombay, 1952.

Mehta, Jivraj N. *Reflections on Medical Education and Public Institutions in India*. Bombay, 1968.

Bhende, Y. M., S. G. Deodhare, and Y. M. Kelkar. *Textbook of Pathology*. Multiple editions. Mumbai.

Pandya, Sunil. *Medical Education in Colonial India: Institutions, Power, and Exclusion*. Mumbai, 2019.

Peer-Reviewed Journal Articles

Niyogi, S.P., N. Narayan, and B.G. Desai. "The Nutritive Value of Indian Vegetable Food-Stuffs. Part V: The Nutritive Value of Ragi (*Eleusine coracana*)." *Indian Journal of Medical Research* 22, no. 2 (October 1934): 373–380.

Patwardhan, V.N. "The Occurrence of a Phytin-Splitting Enzyme in the Intestines of Albino Rats." *Indian Journal of Medical Research* (1937).

Bhende, Y.M., et al. "A 'New' Blood-Group Character Related to the ABO System." *The Lancet* (1952).

Gogtay, N.J., L. Rajgopal, S.B. Bavdekar, S. Mehta, V.S. Salvi, and A. Goel. "Fifty Years of *Journal of Postgraduate Medicine*: A Journey in Time." *Journal of Postgraduate Medicine* 50, no. 3 (September 2004).

Pandya, S., and A. Goel. "Development of Neurosurgery at KEM Hospital." *Neurology India* 65 (2017): 836–849.

Speeches, Addresses, and Historical Orations

Mehta, Jivraj N. "Address at the Unveiling of Seth Jamnadas Lalubhai's Bust." *Journal of the Indian Medical Association* 8, no. 6 (March 1939). https://archive.org/details/sim_journal-of-the-indian-medical-association_1939-03_8_6

Cooper, R.N. "Presidential Address on Medical Education." Sixth Annual Conference of the Association of Surgeons of India, Lahore, 1944–1945.

Sheth, Vasant. "Farewell Address." *GOSUMAG Magazine*. Seth Gordhandas Sunderdas Medical College and KEM Hospital.

Journals and Editorial Histories

Journal of Postgraduate Medicine. Mumbai: Staff Society of Seth G.S. Medical College and K.E.M. Hospital. Founded 1955.

Indian Journal of Medical Ethics. Mumbai: Forum for Medical Ethics Society. Founded 1993.

Pandya, Sunil. "Appeal to Alumni of KEM Hospital and Seth G.S. Medical College." *Indian Journal of Medical Ethics*.

Institutional and Government Records

Bombay Municipal Corporation. Medical Relief Committee Reports and Proceedings, 1907–1926.

Bombay Presidency King Edward Memorial Association. Minutes and correspondence, 1910–1914.

Brihanmumbai Municipal Corporation. Hospital administration, expenditure, and infrastructure records, post-1946.

Government of Bombay. Administrative records relating to public health, hospitals, and municipal governance.

University of Bombay (University of Mumbai). Senate proceedings and affiliation records relating to Seth G.S. Medical College.

Indian Council of Medical Research (ICMR). Accreditation and recognition records.

Ministry of Health and Family Welfare, Government of India. National recognitions including ROTTO and SOTTO designations.

Institutional Publications and Archives

Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital. *Chronicle, Part II: 1946–2025*. Mumbai, 2025.

Potpourri, Part III: Annals of Seth GSMC and KEM Hospital (1925–2025). Mumbai, 2025.

Jubilee volumes, annual reports, departmental histories, and institutional archives.

Archival, Cartographic, and Visual Sources

Government of Bombay. Maps and estate records of Parel and Government House, including maps dated 1843 and 1906.

Seth GS Medical College & KEM Hospital Archives. Photographic collections, commemorative materials, departmental records, and correspondence (1925–2025).

Web-Based Scholarly Resources

Neurology India. http://www.neurologyindia.com

Index

A
Aadil Chagla 585
About the Book XXII–XXV
Accidents XXIII
Anecdotes XXV
Archives XXV
Art of Administration XXIII
Assistant Dean Captain R.E. Dadachanji XXIII
Bed strength XXIV
Beginnings XXII
Bibliography XXV
Bibliophiles XXV
Biographies XXIII
Bombay Medical Union XXII
Bombay Municipal Corporation XXII
British government XXIV
British hegemony XXII
Colonial ideology XXII
Colonial masters XXII
Diagnosis XXIII
First batch of 1925 XXIII
First Indian medical college and hospital XXII
Foundation XXII
Founder dean Dr. Jivraj Mehta XXII
Founders XXV
Freedom XXIV
Genesis XXII
Gordhandas Sunderdas XXIII
Honorary Staff XXIII
Hospital activities XXIV
Humility XXII
IMS XXII
Indian bureaucrats XXII
Indian Medicine XXII
India's Independence Movement XXII, XXIII
Infrastructures XXIV
Institutional bodies XXV
Interviews XXIV
Journals XXV
Juhi Jotwani XXII
Magazines XXV
Major and minor surgeries XXIV
Matron Mrs McCarthy XXIII
Medical education XXIV
Medical research XXIV
Medical service XXIV
Milestones XXIV
Municipal administrators XXV
National honors XXV
Nationalism XXII
National spirit XXIV
N.D. Mehta XXIII
Newspapers XXV
Number of admissions XXIV
Other staff XXIII
Outcome XXIII
Outdoor attendance XXIV
Personal communication XXV
Philanthropists XXV
Pioneers XXIII
Post-independence era XXIV
Potpourri XXV
Proud moments of achievements XXIV
Retrenchment and Reforms Advisor XXIII
Rupiya, anna, pai XXIII
Self-pride XXIV
Self-reliance XXIV
Sub-committee of the Medical Relief Committee XXIII
Suvarna XXIII
Treatment XXIII
Vital statistics XXIV
A.B. Samsi 399
A.C. Rebello 77, 558
A Few Anecdotes 648–649
An Unknown Aspect of Dr Datta Samant 648
Alumnus of GS Medical College 648
Militant trade union leader 648
Two anecdotes 648
Notorious Patient, D.K. Rao 649
Affiliated institutions 677–678
Architect George Wittet 677
Chairman of the board 678
Governor of Bombay 678
Ness Wadia 677
Out-patient Department 677
The Bai Jerbai Wadia Hospital for Children 678
The Nowrosjee Wadia Maternity Hospital and the Bai Jerbai Wadia Hospital for Children 677
Wadia family 677
A. Gopalkrishna 599
A.G. Viegas 19, 24
A.H.S. Khatri 41
A.J. Dhruva 375, 396, 404
Ajita A. Pandit 606
Ajit Phadke 626, 648
Ajit Rao 598, 599
A.K. Dalal 285
A.K. Mahapatra 580
A.K. Talwalkar 175, 176, 177, 196, 228, 298
Alhad Mulkalwar 667
Ameen Sayani (Binaca Geet Mala) 296
Amol Khole 666
A.M. Pathak 430
A.M. Patwardhan 428
Amresh S. Baliarsing 597
Anant Puranik 594
Ancillary services 650–658
Artist department 653
Established in 1938, with Shri Bhandarkar 653
Diet department 653
Food services since 1926 653
Hospital kitchen 653
Engineering Services 653
Library 654
Audiovisual Section 654
Book Bank Section 654
Donation and grants 655
Donations from Dr Himanshu Doshi and Dr Mayank Doshi 654
First librarian 654
Highlights and achievements 655
Medline database 654
Medline on CD ROM 654
M/s. Infosys Co. Ltd. offer 'Intranet facilities with internet connection' 655
National library of medicine 654
NML consortia 655
Regional resource center (RRC western region head) and Telemedicine center 654
Special grant received from Social welfare departments of government of India and Maharashtra 654
Started in 1926-27 654
United nations 654
World health organization 654
Yashwant Doshi, home lending library For undergraduates 654
Medical record department 655
Nursing 656
Dates back to 1925 with the establishment of the nursing service department 656
Specialized nurses 656
Pharmacy 657
Chief dispenser 657
Dr Jivraj Mehta Lab 657
Multiple dispensaries 657
Pharmacology lab 657
Security department 657
Social service 656
A separate department in 1994 656

Community development officers 656
The social service department—CSR wing 656
The social service department founded in 1954 656
Societies 650
Department development fund (DDF) 650
Diamond jubilee society trust (DJST) 650
Managing trustees 650
Objectives 650
GOSUMEC Alumni Association (GAA) 650
Managing committee members and office bearers 651
Past Gosumec's society (1947) 650
Poor Box Charity Fund (PBCF) 652
Donors and various sources 652
Instituted by the standing committees in 1926 652
Research society 651
Activities 651
Aims and objectives 651
Formed in 1952-53 at the time of celebration of the silver jubilee 651
Office bearers and executive committee members 651
Staff society 651
Executive committee office bearers and members 651
Support systems 652
Administrative offices 652
Academic dean, administrative head of the twin institutions 652
Administrative officers 652
Assistant deans 652
Clerk 652
College office sections 652
Deputy dean 652
Head clerk 652
Hospital office sections 652
Junior AMOs 652
Medical superintendent, Senior AMOs 652
Transfusion medicine department 658
A.N. Dalvi 452
Anil Desai 580
Anil Karapurkar 581
Anil Tendolkar 404, 417, 590
Aniruddha Chandorkar 660
Anita Garware 679
Anna XXIII
Annapurnabai Deshmukh 275
Annette Benson 253
Annual report (1925-1926) 47–57
Art of administration: the role of the dean 52
Indian civil service (ICS) officer 53
Economics 53
Jawaharlal Nehru visit 57
Municipal officers 47
C.W.E. Arbuthnot 47
Functioning of the institutions 47
H.B. Clayton 47
Some statistics 47
In-patients 47
Medicolegal work 47
Out-patients 47
Police cases 47
Roadside accidents 47
Need for a spirit of social service 54
Permanent affiliation for M.B.B.S. 54
Poor Box Charity Fund 51
Research 52
Central provinces and berar 52
Cooperation of municipal authorities 52
Madhya Pradesh 52
Other bodies 52
Staff society 51
The college 48
Hostel buildings 48
Merit scholarships 49
The committee's report 54
The hospital 49
Affiliation 49
Apparatus and furniture 49
Clinical data 49
College of nursing 49
Dean's quarters 49
Equipment 49
Gymkhana 49
Hostel 49
Library 49
Multi-story nurses' quarters 49
Pavilion wards 49
Two maternity and gynecology wards 49
X-ray and orthopedic departments 49
Annual report (1926–1927) 58–76
Advisory medical board 58
Changes in the staff 58
Appendices 63
General 63
Municipal officers 58
Permanent affiliation 58
Bombay presidency nursing association 58
Research 62
Gymkhana 62
Tournaments in tennis, cricket, badminton, and hockey 62
University training corps (UTC) 62
Haffkine institute 62
Nyctanthus arboritrisies (Parijatak) 62
Students' hostel 62
Terminalia arjuna and *Terminalia tomentosa* ('Arjuna' and 'Arjuna Sadara') 62
The college 60
Cost 61
Examinations 61
Fees and free-Studentships 61
Library 61
Royal Asiatic society 61
M.B.B.S. and L.C.P.&S. examinations 61
Museum 61
Forest department of Kashmir state 61
Materia medica museum 61
Special departments 62
The hospital 59
Equipment 59
Expenditure 60
Number of patients treated and expenditure 59
Poor Box Charity Fund 60
Problems in the buildings 60
Redistribution of beds 59
Annual report (1927-1928) 77–84
Advisory medical board 77
Affiliation 77
College of Physicians and Surgeons, Bombay 77
General 82
Appendices 83
Development in postgraduate education and research 83
Important visitors 83
Director-General, Indian Medical Services 83
Minister of education 83
Nawab of Palanpur 83
Prime Ministers of Bikaner and Mysore 83
Surgeon-general with the government of Bombay 83
Inspection 82
I.M.S. (official inspector of the general medical council in India) 83
Lucknow and Lahore 83
Syndicate of the University of Bombay 82
Visitors 82
Central Institute for Research 82
Central Research Institute, Kasauli 82
Congress of the Far Eastern Association of Tropical Medicine 82
League of Nations Interchange Health Officials 82
Medical Research Committee of the Medical Research Council of Britain 82
Medical research institute in Dehradun 82
Nagpur improvement trust 82
The Indian Research Committee 82
Research 81
Malarial parasites 81
Postgraduate instruction 81
Students hostel and gymkhana 81

Championship cups 81
Drs Shirwalkar and Cooper cups for lawn tennis singles and doubles 81
General secretary of the college gymkhana 81
Limbdi all-round championship cup 81
Staff 77
The college 80
Annual cost and revenue 80
Examinations 80
Intermediate M.B.B.S. examinations 80
Museums 80
Anthropomorphic study 81
Epidiascope 81
Materia medica and toxicological museums 81
Specimens 80
Wax models 81
The hospital 77
Buildings 79
Kitchens 79
Non-vegetarian food 79
Vegetarian food 79
Equipment 78
Electrocardiograph unit 78
Ultraviolet ray therapy 78
Expenditure on patients 78
Inpatients during 1927 78
Number of patients 77
Nurses 79
Bombay nursing association 79
Fête called the '5th week' 79
Government promissory notes 79
Sir Leslie Wilson's Hospital Fund 79
Poor Box Charity Fund 79
Proposal for venereal wards 78
The medical relief committee of the corporation 78
Annual report (1928–1929) 85–94
Advisory medical board 85
Changes in the staff 85
Governor's visit 85
The college 90
Admissions and total number of students 90
Affiliation 90
Applied microbiology 90
B.Sc. course in animal physiology (principal and subsidiary) 90
Microbiology (subsidiary); Microbiology (principal) 90
Buildings 93
Anatomy cart and bullocks 93
Crittall windows 93
Inflammable chemicals storage room 93
Photographic studio 93
Cost and revenue 90
Endowments 92
Bhavanagar State Entrance Scholarship 92
Shirwalkar Memorial Fund 92
Equipment 90
Balopticon (slide projector) 90
Bausch and Lomb 90
Examinations 90
Grant from the Indian Research Fund Association (IRFA) 92
Hostel and Gymkhana 93
Poona young cricketers (P.Y.C.) hockey tournament 94
Library 91
Bound journals 91
Municipal funds 92
Museums 91
Catalogue explaining and illustrating the pathological specimens 91
Specimens 91
Wax models 91
Postgraduate and special instruction 91
A course in medical photography 92
Clinical pathology and bacteriology 91
D.O. examination 91
The hospital 86
Central clinical laboratory and research studies 88
Delegation of the British Social Hygiene Council 88
Equipment 86
Radium and deep therapy apparatus 86
Hospital pharmacopoeia 88
Number of patients treated and cost 86
Casualty department 87
Surgical dressing section 87
Nurses 87
Poor Box Charity Fund 89
Scale of fees for Well-To-Do patients 88
The riots 88
Outpatient attendance 89
Wholesale cotton industry 88
Venereal wards 86
Governor's Hospital Fund 86
Annual report (1929–1930) 95–100
General 98
Grant from IRFA 98
Hostel and Gymkhana 100
Other inquiries 99
Retrenchment 100
Staff 95
The college 97
Affiliation 97
Annual cost and revenue 98
Endowment of a gold medal 98
Examinations 97
Library 98
Medical examination of students 107
Museums 98
Special course of lectures 98
The hospital 95
Equipment 96
New works 96
Nurses 96
Poor Box Charity Fund 97
Annual report (1930–1931) 101–110
Final remarks 109
Staff 101
The college 106
Affiliation 106
Annual cost and revenue 106
Hostel and Gymkhana 107
Hostel for women students 107
Inquiries 107
Library 106
Museums 106
The hospital 101
Civil disobedience movement 104
Fees for Well-To-Do patients 104
Floods 103
New works 103
Nurses 104
Poor Box Charity Fund 104
Annual report (1931-1932) 118–125
Equipment and works 120
Floods 122
Nursing staff 122
Nurses' Welfare Fund 122
Research 124
School clinics 122
Staff 118
The college 123
Annual cost and revenue 123
Gymkhana 124
Hostel 124
Hostel for women 124
Library 124
Museum 124
The hospital 118
The Poor Box Charity Fund 123
Annual report (1932-1933) 126–135
Research 133
Staff 126
The college 132
Annual cost and revenue 133
Examinations 132
Gymkhana 133
Hostel for women students 133
Library 133
Students' hostel 133
The hospital 126, 130, 131
Equipment and works 127
Poor Box Charity Fund 131
Present and future Considerations on beds, need for convalescent home 128
Annual report (1934–1935) 136–146
Staff 136
Senior teaching staff 136
The college 144
Annual cost and revenue 145
Examinations 145
Gymkhana 146

Library 146
Museum 146
Students' hostel 146
The hospital 137, 145
Donations 144
Equipment and works 140
Gift 144
Hospital pharmacopoeia 144
Nurses 141
Nurses' conference 141
Nurses Welfare Fund 141
Poor Box Charity Fund (appendix 15) 143
School clinic 142
Training of medical assistants in municipal dispensaries in the treatment of leprosy 141
Annual report (1938-1939) 147–159
Research 158
Defalcation of accounts 159
Social welfare for the labor class 159
Staff 147
The college 155
Annual cost and revenue 155
Gymkhana 156
Hostel for women students 156
Library and Museum 155
Students' hostel 156
The hospital 148
Extension of the hospital 150
Hospital pharmacopoeia 154
Motor accident cases treated in the hospital 151
Nurses 152
Nurses Welfare Fund 152
Patients brought in after mill accidents 151
Poisoning 151
Poor Box Charity Fund 153
School clinic 152
Annual report (1939-1940) 160–173
Appendices 173
Research 171
Social welfare for the labor staff 173
Staff 160
The college 169
Annual cost and revenue 170
Examinations 170
Gymkhana 171
Library and Museum 170
Students' hostels 171
The Co-operative Credit Society 173
The hospital 162
Donors 169
Extension of the hospital 164
Mill accident cases 165
Motor accident cases 165
Nurses 166
Nurses Welfare Fund 166
Poisoning 166
Poor Box Charity Fund 168
School clinic 167
Annual report (1940–1941) 174–194
Appendices to the report 185
Research 188
Triennial Inspection Committee 194
Staff 174
The college 186
Annual cost and revenue 187
Examinations 186
Gymkhana 187
Library and Museum 187
Students' hostels 187
The Co-operative Credit Society 194
The hospital 177
Cases of congestive cardiac failure 179
Extension of the hospital 179
Gifts to the hospital in kind 185
Mill accidents 180
Motor accident cases 179
Nurses 182
Nurses Welfare Fund 182
Other donations during the year 184
Poisoning and bites 181
Poor Box Charity Fund 183
School clinic 182
Annual report (1941–1942) 195–215
Appendices 215–235
Cooperative credit society Ltd. 210–230
Staff 195–215
Honorary staff 197–217
Senior staff 195–215
The college 204–224
Annual cost and revenue 204–224
Examinations 204–224
Gymkhana 205–225
Library and Museum 205–225
Research 206–226
Students' hostels 205–225
The hospital 197–217
Extensions of the hospital 199–219
Hospital pharmacopoeia 204–224
Mill accident cases 199–219
Motor accident cases 199–219
Nurses 200–220
Nurse's Welfare Fund 200–220
Other donations during the year 203–223
Patients with congestive cardiac failure 199–219
Poisoning 200–220
Poor Box Charity Fund 201–221
School clinic 201–221
The last report 211–231
The war 209–229
Annual report (1944-1945) 227–251
Addendum I 238–248
Addendum II 249
Addendum III 249–251
Research 234
Staff 227
The college 233
Annual cost and revenue 233
Gymkhana 234
Library and Museum 233
Students' hostels 234
The co-operative credit society, Ltd. 237
The hospital 229
Motor and mill accident cases 230
Nurses 231
Poisoning 230
Poor Box Charity Fund 231
School clinic 231
A.P. Bacha 47, 254, 267, 285, 289, 306, 573
A.P. Chaukar 396
A.P. Desai 419, 579, 606
Archana Bindra XVI
Ardeshir Koyaji 285
Arigo Lessana (France) 428
Arjun Sehgal 291
Arthur E. de Sa 264, 386, 573
Arthur Road and Maratha Hospitals 87
Aruna Shanbhag 397
Arvind Mukund Pai 648
A.S. Erulkar 21, 58, 85, 88, 262
Ashok Vaidya VII
Ashutosh Pai 668
Atmaram Pandurang 13, 256
Atul Gawande 637
Atul Goel 567, 580
Atul M. Shah 614
Avantikabai Gokhale 41
A.V. Baliga 262, 273, 289, 375, 565, 573
Avinash Supe 448, 617, 618
A.V. Potnis 417

B

Bachhabai 255
Badruddin Tyabji 38
Bai Premcoover bai 556
Banaji and Billimoria 23
Bapat Sharad D 299
Barrister Kaka Joseph Baptista 29
B.B.C. London 283
B.B. Yodh 21, 262
B.C. Roy 261, 282, 285, 586
B.C. Roy Award 425
B.D. Pimparkar 397, 602
Bertrand Dawson 5
B.G. Desai 549
B.G. Kher 273, 310
B.G. Parulkar 614
Bhajekar 271
Bhalchandra Bhatwadekar 41
Bhanu Gandhi XIV
Bharatpur Darbar 81
Bharti Kulkarni 588
Bhatjiwale 585
Bhau Daji 258
Bhau Daji Museum 278
Bimal Mody 599
Biography of pioneers 252–356
Bhaskar Balwantrao Yodh (1898–1971) 352–355

Bombay Medical Union 1883–1958 256–261
5th All India Medical Conference 258
All India Body of Medical Men 258
All-India Medical Association 258
Blavatsky Lodge, French Bridge, Chowpatty 256
Great Western Hotel, Bombay 256
Indian Medical Association 259
Society of Medical Professionals 256
Dr Abraham Solomon Erulkar (1887–1960) 280–284
Bene Israeli Jews 280
First batch of physicians appointed to Seth Gordhandas Sunderdas Medical College and King Edward VII Memorial Hospital 282
Guy's Hospital, London 280
Hindu Medical Association and the social service league 281
Lok. Tilak Home Rule League, Worker's 1917 281
Signature 280
Vice-President of the Indian Medical Council 283
Dr Ardeshir Pestonji Bacha (1881–1945) 252–254
Bellevue clinic 253
Bombay branch of the British Medical Association 253
Honorary Lieutenant Colonel, Indian Army Medical Services 253
Personal life 253
Dr Arthur E. de Sa (1910–1981) 266–268
Antonio Da Silva High School and the Elphinstone College in Bombay 266
Clementina Andrade 266
Craniostenosis and operations on the spine 267
Fellow of the Royal College of Surgeons of England 267
Jaswantsinhji Limbdi Gold Medal in Medicine 267
Lord Sandhurst Gold Medal for Pathology and Bacacteriology 267
Medicine and social responsibility 268
Nusserwanji Choksey Gold Medal in Medicine 267
Dr Atmaram Pandurang (1823–1898) 318–319
Dr Gopal Vinayak Deshmukh (1884–1963) 268–275
Common Hindu Law 272
Communal riots 272
Golf course at the Willindon sports club 273
Gun Sundari 269
Hindu Code Bill 272
London Hospital 270
London University 270
Manusmriti, Bhagwad Gita 269
National movement 271
Peoples Free Hospital 271
Relief to the Hindu women 272
Upanishads and Hindu Philosophy 273
World War I 271
Dr Habib Ismail Jan Mahomed M.D. (Lond.), F.r.c.s. (Eng.) (? - 1913) 296–297
Vaccination against the plague 296
Dr Jivraj Narayan Mehta (*see also* Jivraj Mehta) (1887–1978) 305–314
First licentiate in medicine and surgery examination 305
Narayan and Jamakben Mehta 305
Shri Sayajirao General Hospital 307
Tata Education Foundation 306
Twickenham 306
Dr Manchersha Dhanjibhai Dorabji Gilder (1882–1979) 284–287
B.D. Petit Parsee General Hospital, Bombay 285
Bombay Mutual Life Association society 286
Indian Temperance Association 286
Lady Hardinge Medical College and Hospital 285
Pandit Jawaharlal Nehru 286
Signature 284
St. George's Hospital 284
World War I 285
Dr Nathubhai D. Patel (1900–1970) 321–324
Acknowledgment 324
Dr Nilkanth Anant Purandare (1877–1964) 326–327
Dr Phiroz Cooverji Bharucha 1882–1952 254–256
Indian Medical Service 254
Parsee General Hospital 254
Personal life 255
Second Afghan War 256
Report on Plague in Borsad 1935 255
Assistant Director of Public Health 255
Dr Prafulla Kumar Sen (1915–1982) (I) 333–339
Cardiac surgery 335
Cultural attributes 336
Death 338
Early life 333
Medical education 333
Personal life 337
Some personal experiences 337
Dr Dipankar Dasgupta 337
Dr Nanasaheb Chaudhury 337
Sunil Pandya 338
Dr Prafulla Kumar Sen (1915–1982) (II) 340
Later life 347
My experiences 341–346
Poetry and painting 346
Recognition, honors 346
Rockefeller Foundation 340
Dr Purushottam Tulsidas Patel 325–326
Dr Ramchandra Gundopant Ginde (see also Ram G. Ginde) (1912–1974) 287–292
Death 292
Dr Penfield's visit to Bombay in 1957 290
Education 288
Family background 287
Family life 289
First blood bank at the K.E.M. Hospital 288
Honorary Judicial Magistrate 288
Library and patient records 291
Middle East Neurosurgical Society 291
Neurosurgery 289
Survey of the neurosurgical work at the K.E.M. Hospital over the 27 years from 1926–1953 289
World war II 288
Dr Rustam Nusserwanji Cooper (1893–1966) 261–266
A personal experience 265
History of medicine 265
Association of Surgeons of India 264
Astley Cooper's aphorism 262
Bai Jerbai Wadia Hospital For Children 264
Honorary Principal Medical Officer 264
Charak clinic at Marine Lines 264
Death 266
Northcote Nursing Home 266
Dr Cooper's signature 265
First spinal cord tumor 263
Jai Vakil School for Children 264
J.B. Petit School for Girls 264
Laminectomy 263
Parsee General Hospital 264
Personal touches 266
Golf 266
Golf club in Chembur 266
The first batch of teachers 262
Dr Rustom Jamshedji Katrak (1899–1987) 297–299
A.P. Bacha's Bellevue Nursing Home 298
Myelography 263
Personal life 299
Dr Vithaldas Ladhabhai Parmar 1894–1976 320
Dr V.R. Khanolkar (*see also* V.R. Khanolkar) 299–305

Acting Dean 304
Bombay University 303
Dr Khanolkar Farewell Fund 303
Conclusions 304
Conferences and Associations 303
Journal of the Indian medical Association 304
Essays and opinions 304
Graham Legacy Committee 300
Indian Cancer Research Center (I.C.R.C.) 300
Initial years 300
Khanolkar at G.S.M.C. 301
Medical artists department 301
Memberships 304
Microbiology 302
Museum 302
Other activities 303
Research on anemia 302
Tata Memorial Hospital (T.M.H.) 300
George Wittet (1878–1926) (*see also* George Wittet) 348–351
Gordhandas Sunderdas (1874–1902) 293–295
Mulji Jetha and Co 293
Sunderdas Mulji 293
Hansa Jivraj Mehta (1897–1995) 314–315
King Edward VII (1841–1910) 275–279
Alexandra 275
Buckingham Palace 275
Diary of Prince of Wales' visit 278
Dreadnought Building Campaign 279
Government House, the residence of the Prince of Wales (later Edward VII) in Bombay 276
Kala Ghoda 278
King Kristian IX of Denmark 275
Prince of Wales 275
Prince of Wales tour of India 1875-6 276
State reception of native Princes by the Prince of Wales at Parel, Bombay 277
Universities of Edinburgh, Oxford, and Cambridge 275
Matron Durga Mehta 315–318
Padma Shri Dr Vatsala Samant (1910–2010) 328–333
A letter of appreciation from Jawaharlal Nehru 331
Kamla Nehru Memorial Hospital 331
BJ Medical College 554
B.K. Bachhawat 583
B.M. Kandalkar 606
B.M. Nariman 559
B.N. Motiwalla 41
B.N. Purandare 378
B.N. Sircar 375
Borade 387
B.P. Banaji 23
B. Ramamurthi 585
B.R. Ambedkar Road 681
B.S. Shroff 12, 256
B.S. Singhal 292

C

Calcutta 82
Captain F.A. Khan 85
Captain R.E. Dadachanji 86, 558
Carsten Niebuhr 9
C.C. Merchant 44, 88
Celine Pereira 268
Centenary of healing II
Manoj Singrakhia II
Chakrabarti P 82
Chandrashekhar Deopujari 292
Chandrika Bhatia 422, 654
Charles Pinto 388, 398
Charusmita Modi 606, 607
Chaturbhuj Gordhandas Sunderdas 29, 294, 295
Chaturbhuj Morarji 294
Chaturbhuj Valabhdas 294
Chimanlal Setalvad 6, 23, 40, 285, 295, 561
Chronicle 1946–2025 357–546
Chuk Chukachuk Chakanachuk XXI
C.J.T. Pinto 593
C.K. Deshpande 392, 401, 583
Col Hamilton 262
Col R.A. Needham 83
Commodore Captain Joseph David Scott 280
Cowasjee Hormusjee 256
Cowasji Jehangir 8, 41
Cursetji 15
Cursetji and Master 13
C.V. Mehendale 579, 594
C.W.E. Arbuthnot 15, 19, 28, 47

D

Dadabhai Naoroji 40
Dadibai Deshmukh 275
Damodar R. SarDesai XIV–XVI
Archana Bindra XVI
Bhanu Gandhi XIV
Damodar R. SarDesai Prize XV–XVII
Ford foundation XV
Global Goan Award for Lifetime Achievement XV–XVII
Imperialism XV–XVII
National endowment for the humanities XV–XVII
Nationalism XV–XVII
Navin and Pratima Doshi Chair in Pre-Modern Indian History XV–XVII
Royal Historical Society (London) XV–XVII
Sanjay Bindra XVI
Sardar Patel Award XV–XVII
Sir William Wedderburn Prize XIV
Southeast Asia: Past and present and Vietnam: Past and present XV
UCLA XV
University of California, Los Angeles (UCLA) XIV
Darab Dastur 291
Dara Kooka 399, 604
Darshan Adulkar 607
Datta Samant 648
Dawood Habib 60
D.B. Master 12, 256
D. De Monte 23
D.D. Sathey 269
Decadal report (1946–1955) 371–380
Blood bank at the hospital 371
Displaced population 371–380
Expansion of departments during the decade 375
First batches of students at Seth GS Medical College 380
First five-year plan (1951-56) 371
How departments grew during the decade 375
Department of Anesthesiology 375
Cardiac anesthesia 375
Director of Anesthesia of AIIMS 375
Ether anesthesia 375
Indian Society of Anesthesiologists 375
Neuroanesthesia 375
Department of Cardiovascular and Thoracic Surgery 375
First repair of coarctation of aorta 375
Stenosed mitral valve 375
Department of Ear, Nose, Throat and Head-Neck Surgery 375
Otological surgery 375
Department of Neurology 375
Reserve Bank of India 376
Wilder Penfield at Montreal 375
Department of Neurosurgery 376
Department of Nursing 376
Department of Occupational Therapy 376
Mahatma Gandhi's Sabarmati Ashram 376
Philadelphia School of OT 376
Department of Pathology 376
Department of Physiotherapy 376
Department of Preventive and Social Medicine 376
All India Conference on Medical Education 376
Department of Psychiatry 376
Department of Radiology 377
Department of Urology 377
Illustrious achievements of the decade 378
Center at Haji Ali Barracks 379
Epidemic of poliomyelitis in Mumbai 379

Physical Therapy Training Center 379
Southeast Asia's first school for physiotherapy set up in 1953 379
Infrastructure added during the decade 375
Kurukshetra refugee camps 371
Milestones of the decade 377
Painful period of partition 371
Panditji visiting science exhibition during silver jubilee 380
Research Society 371
Significant developments 377
Beginning of the Department of Social Services 378
Blood Bank 377
Central Clinical Laboratory 377
Donations to the library 378
Setting up of King Edward VII Memorial Hospital & Seth G.S. Medical College Research Society 378
Setting up of the 'Past Gosumec's Society' 378
Silver jubilee of the twin institutions 371
The end of British rule 371
Vital statistics 371–373
Vital statistics for the hospital (1946–55) 373–374
Vital statistics for the medical college (1946–55) 374
Decadal report (1956–1965) 381–391
Clinical medicine 381
Expansion of departments during the decade 385
How departments grew during the decade 385
Department of Biochemistry & Central Clinical Biochemical Laboratory 385
Professor of Biochemistry and Nutrition 385
Department of Cardiology 386
Bulliet ECG machine 386
Rauwolfia serpentina 386
Rustom Jal Vakil Institute of Cardiology 386
Department of Cardiovascular and Thoracic Surgery 386
Department of Endocrinology 386
Department of Gastroenterology 386
Augmented histamine test 386
Department of Medicine 386
First facility in the country for upper gastrointestinal endoscopy 386
First full-time unit 386
GE clinic 386
Indian Society of Gastroenterology (ISG) 386
Department of Hematology 386
BARC and ICMR 387
Dialysis unit of nephrology 387
Glaxo Laboratories Ltd. 387
Tetanus unit 387
Department of Medicine 387
Department of Neonatology 387
Department of Pediatrics 387, 388
Department of Nephrology 387
Hemodialysis unit 387
Setting up the dialysis machine 387
Department of Neurology 388
Epilepsy clinics 388
Department of Obstetrics and Gynecology 388
Department of Pathology 388
Bombay Municipal Blood Center 388
Department of Pharmacology and Therapeutics 388
First radioisotope unit 388
Department of Plastic Surgery 388
Acute trauma involving hand and maxillofacial surgeries 389
Department of Preventive and Social Medicine 389
Department of Psychiatry 389
Department of Radiology 389
Department of Skin and Venereal Diseases 389
Department of Surgery 389
Cardiovascular Surgery 389
Gastroenterology Surgery 389
Neurosurgery 389
Pediatric Surgery 389
Plastic Surgery 389
Urology 389
Department of Urology 389
First kidney transplantation 389
Illustrious achievements of the decade 390–391
Making of the largest orthopedic center in the country 391
Seth Dhurmal Bajaj Orthopedic center 391
The Artificial Kidney Department 390
Alwall dialysis system 390
Artificial kidney 390
Infrastructure added during the decade 385
Journal of Postgraduate Medicine 381
Leprosy 381
Malaria 381
Milestones of the decade 389–390
Public health 381
Research Society 381
Significant developments 390
Expansion of the hostel for lady students 390
Setting up of the medical record department 390
Transplant 381
Vital statistics 381–383
Vital statistics for the hospital (1956–65) 383–384
Seth Dhurmal Bajaj orthopedic center 383
Vital statistics for the medical college (1956–65) 384–385
Decadal report (1966–1975) 392–400
Department of Nephrology 392
Emergency being declared in 1975 392
First human heart transplant 392
Golden Jubilee, twin institutions 392
How departments grew during the decade 396
Department of Anesthesia 396
The first Maharashtra State Conference on Anesthesia 396
Department of Cardiology 396
Department of Cardiovascular and Thoracic Surgery 396
Department of Chest Medicine 396
Intensive Respiratory Care Unit 396
Department of Forensic Medicine & Toxicology 396
Krishna Medical College, Karad 397
Laboratory attendant 397
Department of Gastroenterology 397
Gastric acid secretion 397
Malabsorption syndrome 397
Research laboratory in the Department of Medicine 397
Department of Neonatology 397
Department of Nephrology 397
Kiil dialyzers 397
Second cadaver transplant 397
The Cardiology Lab 397
Department of Nursing 397
Aruna Shanbhag 397
CMC college of Nursing, Vellore 397
Pediatric Nursing 397
Department of Obstetrics and Gynecology 397
Department of Pathology 397
CVTC laboratory 398
Department of Neuropathology 397
Effect of snake venom in kidney 397
ICMR grants 398
Transplant immunology 398
Voluntary blood collection 398
Department of Pediatrics 398
Well Baby Clinic 398
Department of Pediatric Surgery 398

Department of Physiotherapy 398
Department of Plastic Surgery 398
Sir Harold Delf Gillies (father of modern plastic surgery) 398
Surgical technique for the treatment of trismus in sub-mucous fibrosis 398
Department of Preventive and Social Medicine 398
Committee report in 1974, the subject of preventive and social medicine gained further recognition 398
The First National Conference of Indian Association of Preventive and Social Medicine organized in 1972 398
Department of Psychiatry 398
Modified electroconvulsive therapy (ECT) 398
Department of Radiology 398
DMRD (for diagnostic radiology) 398
DMRT (for therapeutic radiology) 398
Image intensifier with a TV monitor 398
Department of Surgery 399
First sports medicine services 399
Illustrious achievements of the decade 400
Padma Bhushan to Dr P.K. Sen 400
Nilratan Sircar Oration 400
Padma Shree to Dr D.N. Pai 400
Director of Family Planning 400
Family Planning Program 400
Government of India 400
Vasectomies 400
Infrastructure added during the decade 395
Kiil dialyzers 392
Labor strikes 392
Milestones of the decade 399
Neonatology 392
Nuclear medicine 392
Significant developments 399
Additional responsibilities and decentralization for medical record department 399
Medical Record Department 399
New RMO Quarters 400
Staff Society taking charge of the Journal of Postgraduate Medicine 399
Sports medicine 392
Vital statistics 392–394
Vital statistics for the hospital (1966–75) 394–395
Vital statistics for the medical college (1966–75) 395
War with Pakistan in 1965 392
Decadal report (1976–1985) 401–413
Blood Bank 408
Burns ward for adult female patients 401
Expansion of departments during the decade 404
Gastroenterology 401
Golden Jubilee Celebration 410
Gosumec Alumni Association 409
How departments grew during the decade 404
Department of Cardiovascular and Thoracic Surgery 404
Camps at Amravati and Bidada (Kutch) 404
Extracorporeal technology 404
Training program 404
Department of Chest Medicine 404
City Hospital, Edinburgh and Institute of Occupational Medicine 404
Fiberoptic bronchoscopy 404
Indian Chest Society 404
Permanent network of air quality monitoring cells 404
Department of Ear, Nose, Throat and Head-Neck Surgery 404
Cadaveric temporal bone and micro ear surgery 404
Department of Endocrinology 404
Division of endocrinology and metabolic disorders 404
MNAMS (Endocrinology) 405
Puberty and Growth Clinic 404
Department of Gastroenterology 405
Fully-equipped endoscopy unit 405
Indian Journal of Gastroenterology (official organ of the Indian Society of Gastroenterology) 405
President of the Indian Society of Gastroenterology (ISG) 405
Department of Hematology 405
Department of Medicine 405
Department of Microbiology 405
Bacteriology laboratory 405
Emergency clinical microbiology laboratory services 405
Medical Council of India 405
Department of Neonatology 405
High-risk newborn OPD Services 405
Department of Nephrology 405
The Academy of Medical Sciences and National Board of Examinations 405
Department of Nursing 405
Pediatric nursing course 405
Department of Occupational Therapy 405
Fellow of the Academic Council by All India Occupational Therapist Association 406
Department of Ophthalmology 406
Department of Pathology 406
Hepatitis B vaccine 406
Madgaonkar Trust 406
Senior Scientific Officer 419
Shri Madhukar B. Madgaonkar Cancer Investigation and Immunology Laboratory 406
Department of Pediatrics 406
Genetic Clinic and the Pediatric Research Laboratory 406
Pediatric Chest Clinic 406
Department of Pediatric Surgery 407
World Congress of Pediatric Surgery 407
Department of Pharmacology and Therapeutics 407
Centbutindole, centbucridine, centchroman, centperazine, and curcumin 407
Training in computer applications in medicine 407
Department of Physiology 407
Department of Physiotherapy 407
Master's in Physical Therapy 407
Department of Plastic Surgery 407
Development of Deformities and Contractures 407
Microvascular surgery 407
Microvascular surgery in Japan 407
Department of Preventive and Social Medicine 407
Krishnan Committee Report by the Central Council of Health in 1985 407
Department of Psychiatry 407
Department of Sexual Medicine 407
Department of Skin and Venereal Diseases 408
Cryomachine 408
Electrocautery machine 408
Tissue processor 408
Department of Surgery 408
Department of Urology 408
First operative workshop with live demonstrations 408
PCNL and ureteroscopy (URS) 408
Percutaneous renal surgery (PCNL) 408
University of Minnesota and Mayo Clinic 408
Illustrious achievements of the decade 409

First National Plasma Fractionation Center in Asia 409
Bombay Municipal Corporation and the Ministry of Health, Govt. of India 409
Director General Health Services (Govt. of India) 409
Swedish International Development Agency (SIDA) 409
Setting up of the Malvani Urban Health Center 409
Comprehensive health services program started at Malvani 409
J.B. Shrivastava Committee Report in 1974 409
Infrastructure added during the decade 403
Library 409
Malvani Urban Health Center 401
Milestones of the decade 408
Pediatric chest clinic 401
Pediatric surgery 401
Plasma Fractionation Center 401
Sexual medicine 401
Urology 401
Vital statistics 401–403
Vital statistics for the hospital (1976–85) 403
Vital statistics for the medical college (1976–85) 403
Decadal report (1986–1995) 414–424
AIDS Surveillance Center 414
Archives section—Janus 414
Bombings in 1993 414
De-addiction Center 414
Department of Social Services 414
Expansion of departments during the decade 417
How departments grew during the decade 417
Department of Anatomy 417
Department of Biochemistry & Central Clinical Biochemistry Laboratory (CCBL) 417
CVTC Lab 417
Endocrinology Lab 417
Gastroenterology Lab 417
Lab no. 44 417
Medicine and surgery 417
Department of Cardiovascular and Thoracic Surgery 417
ICU with state-of-art monitors, ventilators, and blood gas analyzer 417
Indian Oil Corporation 417
Department of Chest Medicine 418
First British Council Course on Advances in Respiratory Medicine 418
Department of Dentistry 418
Hormone Assay Laboratory, Bai Vijkorbai Mayaram Khakhar Foundation 418
Department of Endocrinology 418
Department of Gastroenterology 418
Diplomate of the National Board (DNB) in Gastroenterology 418
DM (gastroenterology) 418
Esophageal laboratory with manometry facilities 418
pH studies 418
Services in anorectal manometry 418
Department of Neonatology 418
DM (neonatology) 418
Level III Neonatal Intensive Care Unit (NICU) 418
Level II Neonatal Care Unit 418
Mother-neonatal Intensive Care Unit (MNICU) 418
Palanpur Samaj Kendra Charitable Trust 418
Department of Nephrology 418
DM degree in Nephrology 419
Nephrology Janus meeting 419
Department of Nursing 419
ICU Nursing Course 419
International Course for Pediatric Nursing 419
National Neonatal Nursing Workshop 419
Nurses Welfare Society 419
Nurses Welfare Society in collaboration with Shree Ambika Yog Kutir, Thane, started Yoga classes 419
Nursing Management Workshops 419
SNA (Student Nurses' Association) 419
Department of Ophthalmology 419
Argon laser machine 419
Argon laser therapy, cryosurgical apparatus, vitrectomy machines 419
Department of Orthopedics 419
Spine OT complex 419
Department of Pathology 419
British Council Scholarship 419
Immunology Laboratory 419
Neuropathology 419
Tissue typing for cadaveric transplants 419
Department of Pediatrics 420
Department of Pharmacology and Therapeutics 420
Ayurvedic Research Center 420
Clinical Pharmacology Division 420
Clinical pharmacology ward 420
Department of Physiology 420
Initial computer training 420
Department of Plastic Surgery 420
Cross forearm transplantation 420
Department of Preventive and Social Medicine 420
Mental health 420
Primary Health Care Program 420
Separate Social Service Department 420
Yoga teaching 420
Department of Psychiatry 421
Community Awareness Program 421
Drug De-addiction Center of Excellence 421
Geropsychiatry consultation 421
Geropsychiatry Liaison Services and a Psychoeducational Program 421
Suicide Counselling Clinic 421
Department of Skin and Venereal Diseases 421
Hansens' Clinic 421
SLR camera 421
Special binocular microscope 421
Department of Surgery 421
Annual Conference of the Maharashtra Chapter of the Association of Surgeons in India 421
Indian National Association for the Study of Liver conducted their annual scientific meeting 421
International Workshop on Laparoscopic Cholecystectomy 421
Laparoscopic Program 421
Illustrious achievements of the decade 423
KEM hospital becomes the Zonal Center of Excellence 423
KEM hospital as a Zonal Center of Excellence (COE) for microsurgical recanalization project in collaboration with UNFPA and AVSC 423
Setting up of the AIDS Surveillance Center 423
Infrastructure added during the decade 417
Medical Education Technology (MET) cell 414
MEDLINE 414
Milestones of the decade 421–422
Riots in 1992 414
Significant developments 422
Audiovisual section 422
Beginning of Shidori 423

Engineering Department 422
Establishment of the Diamond Jubilee Society Trust (DJST) 422
Independent Social Services Department 423
Janus 423
Medical Education Technology cell 422
Medical Record Department 422
National Plasma Fractionation Center (NPFC) 423
Vital statistics 414–416
Vital statistics for the hospital (1986–95) 416
Vital statistics for the medical college (1986–95) 416
Decadal report (1996–2005) 425–436
Centralized emergency medical services area 425
How departments grew during the decade 428
Department of Cardiovascular and Thoracic Surgery 428
Heart valve mela 428
Newer anticalcification strategy for tissue valves study 428
Surgical treatment of chronic atrial fibrillation 428
Workshop on vascular surgery conducted by the department with Japanese collaboration 428
Department of Chest Medicine 428
Intervention bronchology services 429
National environment health profile and comparative health risk assessment project funded by the Ministry of Environment and Forest, New Delhi for the Environmental Pollution Research Center 429
Polysomnography (sleep study) 429
Pulmonary function test laboratory 428
Department of Dermatology 428
Electrical dermabrader 428
Immunoperoxidase techniques 428
Ultraviolet therapy, dermoscopy, and pulse therapy 428
Department of Ear, Nose, and Throat (ENT) 431
Oncology Clinic 431
Department of Emergency Medical Services 429
Triage area 429
Department of Forensic Medicine and Toxicology 429
Poison Information Center 429
Postgraduate courses (M.D. forensic medicine & toxicology, diploma in forensic medicine - D.F.M.) 429
Recognized in 1998 for studies in Ph.D. (applied biology) 429
Department of Gastroenterology 429
Chair, Research Committee, Asia Pacific Association of Gastroenterology 429
Studies in Ph.D. (applied biology) 429
Department of Microbiology 429
Polymerase chain reaction (PCR) test started to detect extra pulmonary tuberculosis 429
Department of Neonatology 429
Humane neonatal care approach 429
Kangaroo Mother Care Program 430
Neonatal care and lactation management 430
Department of Neurology 431
A comprehensive epilepsy care center and epilepsy surgery 431
Department of Neurosurgery 431
Department of Nursing 430
Child survival and safe motherhood (CSSM) modular training for nursing teachers 430
Child-to-Child Program 430
Practical nursing sessions conducted for MBBS students 430
Department of Obstetrics and Gynecology 431
Department of Occupational Therapy 431
Department of Orthopedics 432
Western India Regional Orthopedic Conference (WIROC) 432
Department of Pathology 430
American Biographical Institution 430
Distinguished leadership 430
Laboratory started for estrogen receptor (ER) and progesterone receptor (PR) studies 430
Parikh foundation, renovate and upgrade ward No. 2. In 2002 430
Vice president, president of Indian Association of Pathologists & Microbiologists 430
Department of Pediatrics 430
Department of Pharmacology and Therapeutics 430
Rational use of drugs in collaboration with W.H.O. started in 1998 430
Department of Physiology 430
Department of Preventive and Social Medicine 431
Adolescent girls' initiative' for non-school going adolescent girls 431
Preparation of valuable audio-visual educational material 431
School AIDS Awareness Program 431
Department of Psychiatry 431
Access services in the field of mental health 431
Department of Surgery 431
donation of Rs. 10 lacs from the Abhyudaya Co-operative Bank 431
Department of Urology 431
Chronic peritoneal dialysis 431
Illustrious achievements of the decade 433
A pioneering Medical Education Technology (MET) cell 433
The art of teaching medical students 433
First department to have M.D. in hematology in Maharashtra 433
Infrastructure added during the decade 428
Milestones of the decade 432
Significant developments 432
Blood Bank 432
Recognition of Aavishkaar 432
Upgradation of the library 432
State Bank of India, a CD Net with 14 CD-ROM drive towers 432
Vital statistics 425–427
Vital statistics for the hospital (1996–2005) 427
Vital statistics for the medical college (1996–2005) 427
Decadal report (2006–2015) 437
Expansion of departments during the decade 441
How departments grew during the decade 441
Department of Anatomy 441
A handbook of the department of anatomy 441
Audio-visual demonstration of dissection 441
E-modules on surface living anatomy and electron microscopy cytology 441
Department of Biochemistry 441
Best Teacher in MUHS Award 441
Certificate course in good clinical laboratory practices for workers in laboratory

medicine 441
Department of Cardiology 441
Live workshops conducted by specialists from France and Germany respectively 441
WhatsApp care group 441
Department of Chest Medicine 441
Pulmonary function testing training workshop in collaboration with GAIL (India) 441
Rhino manometer 441
Department of Clinical Pharmacology 441
1st South Asia Chapter Conference on "Contemporary Issues and Challenges in Drug Development" 442
South-West Zonal Center for Adverse Drug Reactions (ADR) 441
Vigflow software for pharmacovigilance of the world health organization 442
Department of Dermatology 442
Chief editor of the Indian Journal of Dermatology, Venereology, and Leprology 442
Pioneered the branch of dermatopathology 442
Department of Ear, Nose, and Throat 442
Hear for all 442
Department of Endocrinology 442
Gestational diabetes mellitus OPD for pregnant patients 442
Type 1 diabetes OPD for comprehensive care of type 1 diabetes patients 442
Department of Gastroenterology 442
Liver intensive care 442
Department of Gastrointestinal (GI) Surgery 442
Liver transplant OPD 442
Liver transplant program 442
Radio-frequency ablation of liver tumors 442
Department of Medicine 442
Certificate course in intensive care medicine 442
Department of Microbiology 442
Genexpert system for the rapid detection of tuberculosis and multi drug resistant tuberculosis 442
Department of Neonatology 443
Collaborative center for facility based newborn care 443
In-house hearing screening at discharge for NICU-graduates 443
Nitric oxide therapy 443
Department of Nephrology 443
Interventional Nephrology Unit 443
Department of Nuclear Medicine 443
Radionuclide ward 443
Department of Nursing 443
Diploma in general nursing and midwifery 443
Mayor's Award 443
Department of Obstetrics and Gynecology 443
Ethical Skills Workshop 443
Department of Orthopedics 443
OPD services for patients with cerebral palsy 443
Department of Pathology 443
International CME in Surgical Pathology and Cytology 443
Department of Pediatrics 443
DOTS, a treatment strategy for pediatric tuberculosis initiated 443
Free antiretroviral therapy (ART) to HIV-infected children 443
Pediatric Neurology Outpatient Clinic 443
Department of Pharmacology 443
Kishore Vaigyanik Protsahan Yojana (KVPY) Scholarship 443
Department of Physiology 444
Postgraduate degree course in human physiology, retrospective from April 1969 444
Department of Physiotherapy 444
Department of Plastic Surgery 444
Cadaveric flap dissection workshop in collaboration with the department of anatomy 444
Camp Karma for children who were burn survivors 444
Comprehensive Cleft Clinic 444
Department of Preventive and Social Medicine 444
New rural health training center established at Pise-Panjrapur 444
Telemedicine facility 444
Department of Psychiatry 444
raining program on "De-Addiction" 444
Department of Transfusion Medicine 444
Postgraduate course (M.D. transfusion medicine) 444
The Bombay Municipal Blood Center 444
Department of Urology 444
Advanced laparoscopic program along with a reconstructive surgical program 444
Laparoscopic donor nephrectomy 444
Renal transplant successfully on a patient HIV positive 445
Illustrious achievements of the decade 447
Rising to the challenge of Swine Flu 447
Service during the 2006 bomb blast in Mumbai 447
Infrastructure added during the decade 440
Milestones of the decade 445–446
Research and publications 446
Vital statistics 437
Vital statistics for the hospital (2006–15) 439
Vital statistics for the medical college (2006–15) 439
Decadal report (2016–2024) 448
COVID-19 pandemic 448
Glomerular Clinic 448
How departments grew during the decade 451
Department of Biochemistry 451
Recognition to start MD in biochemistry 451
Department of Cardiology 451
24-hour ambulatory ECG Holter monitoring system and Wi-Fi enabled ECG machines 451
National Conference of the Cardiological Society of India in Mumbai in 2018 451
Optical coherence technology (OCT) system 451
Department of Cardiovascular and Thoracic Surgery 451
License for starting heart transplants 451
Department of Chest Medicine 451
New course DM pulmonary medicine 451
Serum Institute/Oxford vaccine in a little over 100 participants 452
Workshop on Pulmonary Function Tests at National Conference on Pulmonary Diseases (NAPCON) and a CME on Allergy and Immunological Disorders 451
Department of Clinical Pharmacology 452
Department of Community Medicine 452
Mobile based app 452
Palliative care services 452
Department of Dentistry 452
Indian Dental Association (IDA) 452

Department of Dermatology 452
Department of Ear, Nose, and Throat 452
Baha attract program for children without ears (anotia, microtia) 452
Department of Forensic Medicine 452
Department of Gastroenterology 452
Endoscopic Ultrasound (EUS) Mentorship Conference 452
Intervention for hepatology and a workshop on spiral enteroscopy 452
Department of General Surgery 452
ELSA 452
Multidisciplinary solution to rare and not so rare breast and thyroid issues 452
Department of Hematology 452
Hematology Day Care Center 453
Multi-disciplinary team for hemophilia care 453
Department of Medicine 453
Study on the use of Itolizumab in patients with COVID -19 453
Department of Microbiology 453
Department of Neonatology 453
Mazgaon Dock Shipbuilders Ltd 453
Metabolic screening program for neonates 453
Department of Nephrology 453
Dr V.N. Acharya division of interventional nephrology 453
Glomerular nephritis registry 453
Department of Neurology 453
Department of Neurosurgery 453
Department of Nuclear Medicine 453
Department of Nursing 454
Department of Obstetrics and Gynecology 454
CMEs on "Thromboembolism in Pregnancy " and "Myomectomy" 454
Department of Occupational Therapy 454
Management of child with a diagnosis of ADHD at home 454
Department of Orthopedics 454
Department of Pathology 454
Department of Pediatrics 454
Department of Pharmacology and Therapeutics 453
PHARMATECH 2017—Frontiers in Pharmacology 453
Department of Physiotherapy 453
Medscape national awards 2017 for "Excellence in Physiotherapy Patient Care, Education and Research" 453
Department of Plastic Surgery 453
Department of Psychiatry 454
Workshops for BEST staffers on stress management 454
Department of Radiology 454
Department of Surgical Gastroenterology 454
MUHS Fellowship in Hepato-pancreato-biliary Surgery (HPB) 454
Department of Transfusion Medicine 454
Editor of Asian Journal & Transfusion Science (AJTS) 454
Illustrious achievements of the decade 456
Excellence in transplant surgeries 456
Fighting COVID-19 pandemic 456
Infrastructure added during the decade 451
Liver clinic 448
Lupus clinic 448
Milestones of the decade 454
Pediatric Ophthalmology Clinic 448
Pharmacogenetics Outpatient Clinic 448
Pre-dialysis Clinic 448
Research and publications 455
Second heart transplant 448
Vital statistics 448–449
Vital statistics for the hospital (2016–24) 450
Vital statistics for the medical college (2016–24) 450
Deepak Parikh 421
Deepu Banerji 580
Deodutt Bendre 594, 599
Deopujari CE 292
Deoraj Jethabhai Gosar 293
Deval 396
Devkumar Sahu 585
Dev Pardanani (*see* D.S. Pardanani)
D.E. Wacha 9
D.G. Mody 406
Dhangauri Narayan Shenvi 675
D.H. Deshpande 398, 579
Dinshaw Wacha 6, 41
D.K. Karanjawala 408
D.M. Gagrat 253
D.N. Bahadurji 8, 29, 295
D.N. Pai 400
D.R. Bardi 253
Dr Dastur with the team at the KEM hospital 581
Dr Dimmock 270
Dr Eddie P. Bharucha (*see* E.P. Bharucha)
Dr Gilder 555
Dr Nadgir 269
Dr Pardhi 270
D.S. Dadhich 290
D.S. Pardanani 408, 611, 614
Dynaneshwar Kurle 630

E

E. Austen 18
Editorial in the Times of India (23 January 1926) welcomed 'the new hospital' 33–34
Edulji Madon 297
Edward Jenner 265
E. Merck 61
Empress Farah Diba 263
E.P. Bharucha 256, 290, 376, 388
Ernest Borges 268, 283
Ernst Grote 583

F

Farokh Udwadia 617
Feil 287
Fernandes 626
Fernandes Joy 299
First person account by Dr Nireshwalaya Rangappa Suvarna (1901-2001) 111–117
Acknowledgments 116
Admission to Seth Gordhandas Sunderdas Medical College 111
Dr. Jivraj Mehta's Arrest and change in policies 115
Opening ceremony of the hospital 112
College day celebrations 114
Hostel and messes 113
Teachers and studies 113
Sports and tennis 111
F.J. Ginwala 41
Formative years (1925–42) from the lens of annual reports 44–46
Dr Sunil Pandya's remarks 44
Bennett Coleman & Co 46
Donations 45
Esquire 44
Examination results 45
Financial stringency 44
Indian Research Fund Association (IRFA) 45
Jam-e-Jamshed 46
Kaiser-i-Hind 46
Newspaper 46
Scutum 44
Social survey of newly admitted students 45
The Bombay Times and Journal of Commerce 46
The Lightfoot Refrigeration Company Limited 45
The Times of India and the Illustrated Weekly of India 46
Womens' hostel 45
Foundation day XIX
Framji Cowasji Mehta 46
Framroze E. Dinshaw 256

F. Saher 375
F.W. Stevens 39

G
Gajendra Sinh 290
Gallery 686–690
Gandhi R.K. 268
Gangabai G. Sunderdas Scholarship 267
Gaurishankar Chhitarmal Mithaiwala 681
G.B. Parulkar 396, 401, 414, 425, 621
G.D. Kapur 561
Geeta Bhave 405
General Hogel 271
Genesis 3, 20
  A brief history of parel and its government house 9
  Affiliation of the new medical college to the University of Bombay 23
    A.G. Viegas 24
    Capt S.L. Bhatia 23
    Diploma in Ophthalmology (D.O.) 24
    Major Duggan 24
    Professor Nadgir 23
    Ranina 23
    Sir Cowasji Jehangir hall 23
  APPENDIX "B" donations, & c. 25
  Appointment of staff 21
    A.S. Erulkar 21
    Banaji and Billimoria 23
    B.B. Yodh 21
    B.P. Banaji 23
    D. De Monte 23
    Girdharlal T. Mody 23
    G.M. Kurulkar 23
    G.V. Deshmukh 21
    J.S. Nerurkar 23
    Jivraj Mehta, Chief Medical Officer for the state of Baroda 21
    K.F. Nariman 23
    L.D. Dhavle 23
    M.D.D. Gilder 21
    Mohanlal M. Desai 23
    Naoroji M. Dumasia 23
    N.A. Purandare 21
    N.C. Gangriwala 23
    N.J. Bandorawala 23
    P.C. Bharucha 21
    Phiroze C. Sethna 23
    P.T. Patel 21
    R.B. Billimoria 23
    R.M. Mistry 23
    R.N. Cooper 21
    R.P. Ratnagar 23
    Shri Joseph Baptista 21
    Sorab Cowasju Hormusji 23
    Staff members selected for KEM Hospital and Seth GSMC 22
    V.A. Desai 23
    V.L. Parmar 21
    V.R. Khanolkar 21
  Architectural plans for the hospital 11
    Bombay Bacteriological Laboratory 12
    Florence Nightingale's notes on hospitals 11
    King's College Hospital in London 12
    School of Tropical Medicine 12
    Sir Basil Scott (chief justice, high court of Bombay) 12
    Sir Bhalchandra Krishna 12
    Sir Herbert Stanley Reed (editor, the Times of India) 12
    Sir Jamsetjee Jejeebhoy 12
    William Alfred Pite 12
    W.L. Graham (Barrister, non-official member, Legislative Council, Bombay) 12
  Atmaram Pandurang Tarkhad 3, 13
  Bertrand Dawson 5
  Bombay Medical Union 12
    Arthur Road Infectious Diseases 16
    B.S. Shroff 12
    C.W.E. Arbuthnot 15
    D.B. Master 12
    G. V. Deshmukh 13
    Habib Jan Mahomed 14
    Improvement trust 14
    Jehangir Cursetji 12
    K.F. Nariman 15
    K.N. Bahadurji 13
    Major Hamilton 15
    Major Taylor 15
    M.B. Velkar 15
    P.T. Patel 15
    Purshotamdas Mangaldas Nathoobhoy 14
    Royal Commissions 13
    Rustam Cooper 15
    Sir Bhalchandra Krishna 13
    Sir Chunilal V. Mehta 14
    Sir Nasarwanji Choksy 13
    The British Medical Journal 13
  Bombay Presidency 3
  Bombay Presidency King Edward Memorial Association 6
    Adelaide 6
    Bermuda 6
    Birmingham Children Hospital 7
    Bombay 6
    Dinshaw Wacha 6
    Executive committee 6
    Gaya 7
    Governor of Bombay 6
    Habib Ismail Jan Mahomed 7
    Karnal (Haryana) 6
    Kuala Lumpur 6
    M.A. Jinnah 6
    Mangaldas Nathubhoy 7
    Medical relief committee of the corporation 7
    Parel 7
    Parel government house 7
    Perth 6
    Poona 6
    Rajabally V. Patel 7
    Setalvad 6
    Sholapur 6
    Singapore 6
    Sir Bhalchandra Krishna 6
    Sir Currimbhoy Ebrahim Entertainment Fund 7
    Sir Dinshaw Petit 6
    Sir Dorabji Tata 6
    Sir Sassoon J. David 6
    Sir Vithaldas Thackersey 6
    The Falkland Islands 6
    The Hospital (Anonymous 1910) 6
    The Lalkaka Memorial Fund 7
    Wellington, New Zealand 7
  British army 3
  Construction of college and hospital 16
    A.G. Viegas 19
    Autopsy room 18
    Casualty medical officers' bungalow and quarters 20
    Central administrative block 17
    Cold room 18
    Dispensary 18
    E. Austen 18
    Jan Mahomed operation 17
    J. J. Hospital 18
    K. A. R. Medical College 16
    Lady Hardinge Medical College 16
    Laundry 18
    Maternity block 18
    Mortuaries 18
    Mr. Arbuthnot 19
    Ophthalmic Department 18
    Sir Ratan Tata 16
    Tata Engineering Company 19
    The male students' hostel 20
    The Seth Jamnadas Lalubhai Pathology Museum 20
    William Moore 18
    X-ray and electrical departments 18
  Cost and sources of funds 20
    Governor of Bombay, Sir Leslie Orme Wilson 21
    Late Seth Runchhoddas Vithaldas Shroff 20
  East India Company 3
  European teachers 3
  Funds for the medical college 8
    Bignonia suaveolens 9
    Bombay Bacteriology Laboratory 10
    Bombay Medical Union 9
    Carsten Niebuhr 9
    Cowasji Jehangir 8
    D. E. Wacha 9
    D. N. Bahadurji 8
    Haffkine Institute 10
    Jesuit Church and Convent 9
    Messrs. Payne and Co. 8
    Mountstuart Elphinstone (1819–27) 10
    Panchkalshis 9
    Parali Vaijnath Mahadev 9

plague 10
Portuguese occupation of Bombay 9
Prince of Wales (later King Edward VII) 10
R.D. Sethna 8
Sir Bhalchandra Krishna 8
Sir Ibrahim Rahimtulla 8
Sir James Fergusson 10
Sir Philip Wodehouse (1872–1877) 10
Sir Richard Temple (1877–1880) 10
Sir Seymour Fitzgerald (1867–1872) 10
S. M. Edwardes 9
Viscount Falkland (1848–1853) 10
William Hornby 10
Gokuldas Tejpal Hospital 4
Government of Britain 3
Grant Medical College 3
Indian Medical Service (IMS) 3
Introductory remarks by Mr. Baptista 30
Dr. Ernest Borges Marg 31
Dr. S.S. Rao Road 31
Ground plan of the King Edward Memorial Hospital 31
Current ground plan 32
Hospital Avenue Road 31
King Edward Road 31
Parmar Guruji Marg 31
The operating theater at Bombay's new hospital 32
K.N. Bahadurji 5
Legislative Council 5
Materia medica 4
Medical schools in Calcutta and Madras 3
Members of the corporation for the city of Bombay 4
Milestones (1907–1942) 35–36
Native opinion 1885 4
Native physicians 3
Need for scholarships and prizes 24
Patients' Help Society 25
Permanent scholarship 24
Sprue and anemia 25
Obstetrics and Gynecology 4
Opening ceremony of the hospital 28
Barrister Kaka Joseph Baptista 29
Chaturbhuj Gordhandas Sunderdas 29
D.N. Bahadurji 29
Honorable Sir Ibrahim Rahimtoola 29
Imperial Legislative Council 29
Indian National Congress 29
Kavasji E. Dadachanji 29
K.N. Bahadurji 29
Legislative Assembly 29
Phiroze C. Sethna 29
Rao Bahadur A.K 28
Sir Dinshaw E. Wacha 29
Sir Leslie Wilson 28
Sir Stanley Reed 29
Opening of the hospital 26
Bombay's first municipal general hospital 26
First batch of students with staff (1925) 26
Hospital Avenue 27
King Edward road 27
Queen Alexandra 5
Queen Victoria 5
Secretary of state 3
Seth Gordhandas Sunderdas' Estate 6
Chimanlal Setalvad 6
Gangabai 6
Gordhandas Sunderdas Mulji 6
Karsandas Dharamsi 6
Messrs. Mulji Jetha and Company 6
Sir Narayan G. Chandavarkar 6
Sir Pherozeshah Mehta (*see also* Pherozeshah Mehta) 6
The Times of India 6
Sir Jamsetjee Jejeebhoy Hospital 3
Sir Luke Fildes 6
St Clair Thompson 5
Y.G. Nadgir 4
George Coelho 285
George Du Boulay 582
George Orwell 283
George Wittet 15, 19, 262, 348–351, 677
Ghanshyam Rao 666
G.H. Nerurkar 602
Girdharlal T. Mody 23
Girija Rao 607
Girish Vyas 388
Gita Nataraj 619
Glafcos Clerides 283
Global Goan Award XV
G.M. Jadhav 92
G.M. Kurulkar 23, 44
G.M. Phadke 565
Gopalkrishna (1979) 598
Gopal Krishna Gokhale 281
Gordhandas Sunderdas Mulji 6
Governor's Hospital Fund 557
Grant College Medical Society 258
Grattan Geary 38
G.R. Gode 375
G.R. Talwalkar 285
G.S. Talwalkar 375
G.T. Mody 406
Guha Ramchandra 287
Gulserene Dastur 263, 636
Gundopant Ramchandra Ginde (*see also* Ram G. Ginde) 287
G.V. Deshmukh 13, 15, 21, 41, 47, 58, 85, 262, 285, 289, 573
Gymkhana and its Activities 659–672
Aavishkaar: When it all Began 660
Abbasi Mustansir 664
An inter-collegiate event 662
Aniruddha Chandorkar 662
Annual College Week 662
Co-chair of the gender and rights advisory panel and member of the scientific & technical advisory group of the human reproduction program of WHO at Geneva 662
Cultural department 662
IIT Bombay's Mood Indigo, St Xavier's Malhar and IIT Delhi's Rendezvous 662
Rajesh Parikh and Prakash Nadkarni 662
RRDD 662
Saifee Plumber 660
Vice Admiral M.P. Awati, Commander-in-Chief of the Western Naval Command 664
Vice-president of RRDD Dr J.B. Dharani 664
ADVAIT 665
Showcasing Marathi culture 665
State-level open drama competition 665
Apurvai 666
Celebration of Marathi culture, drama, and dance 666
Ascension 666
ASPIRE 667
A.S.P.I.R.E (Association for Support and Propagation of Innovation, Research and Education) 667
Objectives 667
Official student research wing of Seth G.S. Medical College established in March 2020 667
Confluence 668
Confluence opened, August 2014 668
Undergraduate National Medical Conference 668
Departments under Gymkhana 659
Events 659
GOSUMAG 669
The GoSuMag (derived from Gordhandas Sunderdas Magazine) is the annual students' magazine 669
Larynx: The voice of our institution 669
Inaugural editor-in-chief of the larynx 669
Sports offered 659

H

Habib Ismail Jan Mahomed 7, 296
Habib Jan Mahomed 14
Hamid 376
Hamilton Bailey VI
Hansraj Pragji Thackersey 80
Harsha Chawda 591
H.B. Clayton 47, 58
H. DeSa 92
H.M. Dastur (*see also* Homi M. Dastur) IX, 388, 594

Helen Willard 376
Hemanshi Shah 591
Hemant Deshmukh 448
Henry C. Bockus 397
H. Hargreaves 560
H.H. the Thakore Saheb of Limbdi 81
Himanshu Doshi 422
Hirabai Manchersha Nanavati 287
Homi Darasha Gandhi 44, 85
Homi M. Dastur (*see also* Department of Neurosurgery, H.M. Dastur) IX, 262, 388, 574, 575, 584, 586, 594
Homi Mody 41
Hoosenally M. Rahimtoola 58
Hopkins J Castell 279
Hosi Bhathena 599
Hostels 673–676
  Details of RMO Quarters 676
  Details of undergraduate student boys' hostel 674
  Details of undergraduate student girls' hostel 675
  Hostel procurement journey of Seth G.S. Medical College and KEM Hospital, Parel 673
    For Boys: Main boys' Hostel, Boys Hostel Annex., Naigaon Hostel, UGPG Boys' Hostel, Elphinstone Hostel, Vignahartha Boys Hostel 674
    For Girls: UGPG Girls' Hostel, Sewree Hostel, Mazgaon Hostel, Anchor Hostel, Vignahartha Girls' Hostel 674
  RMO Quarters 675
H.P. Thackersey 41
Hugh Owen Thomas 297
H.W. Pia 583

I

Ibrahim Rahimtoola 29, 41,42
Ilona Bubelis 579
Indian Council of the British Empire Leprosy Association 92
Ind. J. Urol 614
Indo-Pakistani war 595
Institutional bodies 616–634
  Academic committee 616
    UCLA-KEM 616–620
    UMASS-KEM 616–620
  Department of Medical Education (DOME) 616
    Advanced Center for Medical Education & Research (ACMER) 616–620
    Department of Medical Education 616–620
    Established in 1993 616–620
    Objectives 616
      Commission for Foreign Medical Graduates (ECFMG) 617–621
      FAIMER, Philadelphia as a center for its regional institute (GSMC-FAIMER Regional Institute) 617–621
      GSMC-KEMH-NMC nodal center to conduct the revised basic and advance Courses in MET 616–620
      National Medical Council (NMC) 616–620
  Dr Manu VL Kothari Chair and division of Medical Humanities 617
    Journey of Dr Manu VL Kothari Chair and division of Medical Humanities 617
      Annual Volume Reflections 617–621
      Archives 617–621
      Ascension, a step above, the annual conference of the chair and division 618–622
      Chair of medical humanities 617–621
      Chairperson 618–622
      Gosumec Alumni Association 617–621
      GOSUMEC Foundation USA 618–622
      History of medicine 617–621
      Janus 618–622
      Manusmriti 617–621
  GSMC-MUHS international chair in bioethics unit and students' wing 618
    Aims and objectives 618
    GSMC MUHS UNESCO bioethics unit 618–619
    Steering Committee 619
      The steering committee of GSMC MUHS UNESCO bioethics unit 619
    Students wing 619
      Bioethics Bulletin called INARCH 619–623
      World bioethics day celebrations 619–623
  Hospital Infection Control Committee (HICC) 619
    Biomedical waste management and handling rules 620–624
    Established in March 1990 619–623
    Hepatitis B preventive vaccines 620–624
    HIV 620–624
    Hospital Infection Society, India 620–624
    President of the International Society for Chemotherapy 620–624
    Sodium hypochlorite 620–624
    The COVID-19 pandemic 620–624
    The First Indian Conference on "Hospital Infection- It's Prevention and Control" 620–624
  Institutional Animal Ethics Committee (IAEC) 621
    Breeding and research on animals 621
    Committee for the Control and Supervision of Experiments on Animals (CCSEA) 621
    Committee for the purpose of Control and Supervision of Experiments on Animals (CPCSEA) 621
    Established in the year 1996 621
    The Central Animal House 621
  Institutional Committee for Stem Cell Research (IC-SCR) 622
    Department of Health Research, Ministry of Health and Family Welfare, Government of India 622–623
    National Apex Committee for Stem Cell Research and Therapy (NAC-SCRT) 622–626
  Institutional Ethics Committees (IEC) 621
    History 621
      Committee for Academic Research Ethics (CARE) 621
      Constituted the ethics committee on 6th Jan 1987 621
      Department of Health Research (DHR) 622
      Ethics Committee for Research on Human Subjects (ECRHS) 621
      Forum for Ethical Review Committees in Asia and the Western Pacific region (FERCAP) 621–622
      IEC-I, IEC-II and IEC-III 622
      NABH (National Accreditation Board for Hospitals & Healthcare Providers) (Constituent Board of Quality Council of India) 622
      Strategic initiative for developing capacity in ethical review (SIDCER) 621–622
      Total reviewed projects till 16th Dec, 2024 622
  National Plasma Fractionation Center (NPFC) 623
    CDSCO West Zone, Mumbai Central 625
    Consultant M/S Elomatic 625
    FDA norms 624
    Greenfield project 625
    Hospital Infrastructure Committee (HIC) of MCGM 625
    Human albumin 625
    Human intravenous immunoglobulin IP 625
    JSSP (Janani Shishu Suraksha Program) 625
    MJPJAY (Mahatma Jyotiba Phule Jan Arogya Yojana) 625

M/s. Clean Air Projects Pvt. Ltd. (CAPL) 624
M/s. GE healthcare, Sweden 624
NACO 624
Pandit Madan Mohan Malviya Centenary Municipal Hospital (Shatabdi Hospital) at Govandi 624
PBCF (Poor Box Charity Fund) 625
Research Foundation for National Blood Transfusion Services 623–627
The objectives of project 623
The Swedish International Development Agency (SIDA) 623–627
Patient Education Center 625
Breastfeeding week 625
Camera and printer, donated 626
Community Medicine Department in 2003 625
Diamond Jubilee Society Trust (DJST) 626
Eye Donation Day 625
Geriatric Day (on Hypertension and Diabetes) 625
Malaria and Dengue during the monsoon 625
Savitribai Phule Gender Resource Center 625
TB Day 625
WHO Day 625
Redressal Forum 627
Forum for redressal of patients' grievances 627
Primary purpose 627
Procedure 627
Tata Institute of Social Sciences 627
Regional Resource Center-Western Region, National Medical College Network (NMCN) 628
National Knowledge Network (NKN) 628
NMCN activities 628
Seth G.S. Medical College Multidisciplinary Research Unit [GSMC-MRU] 628
Central sector scheme of the Department of Health Research (DHR) 628
Infrastructure 629
Mandate 628
Local Advisory Committee (LAC) 629
Purchase Committee (PC) 629
Research Advisory Committee (RAC) 629
National Medical Commission 628
Telemedicine 629
History 629
ISRO launched a telemedicine pilot project 629
How Does it Work? 630
67 districts and sub-districts 630
Government of Maharashtra through DMER and national health mission 630
Provisions for satellite infrastructure 630
Women's Grievance Cell 630
AKSHARA 632
Establishment of the Savitribai Phule Gender Resource Center (SPGRC) 631
AKSHARA, SNEHA, Stree Mukti Sanghatana, and Lawyer's Collective 632
Counselling Center for Violence Survivors 632
Gender Resource Center of the Country 632
Library for women and girls 632
Making Mumbai a women friendly city 632
Savitribai Phule Gender Resource Center (SPGRC) of BMC 632
History 630
64 Internal committees (ICs) 631
Executive health officer Dr Karande 631
Vishakha guidelines 631
Internal Complaints Committee (Women's Complaints Committee) 633
Lawyers' collective 633
NGOs that work closely with SPGRC 632
SNEHA 632
SPGRC and the main internal committee 633
Stree Mukti Sanghatna 633
Ismail Jan Mahomed 296

J

Jack Russell 256
J.A. da Gama 257
James Bull 576
Jamnadas Mehta 23, 41
Jamshedji Cowasji Patel 294
J.A. Sharma 94
Jasmine Seth 598
Jayashree Sharma 605, 606, 607, 623
Jayesh Vira 669
J.B. Kinmonth 601
J.B. Mama 253
J.B. Shrivastava 398
J.C. Lisboa 256
J.C. Patel 386, 387
J.E.B. Hotson 89
Jehan Daruwala 263
Jehangir Cursetji 12
Jerbai and Jamshedji Katrak 297
Jeroo Ranji 266
J.H. Grant 38
Jim Evans 595
Jinabhai L. Desai 555
Jivraj Mehta XXII, XXIII, XXVI, XXVII, 13, 14, 16, 21, 24, 28, 36, 44, 45, 47, 49, 58, 77, 82, 85, 92, 115, 116, 136, 176, 182, 194, 201, 214, 216, 262, 285, 296, 298, 301–304, 306, 308–311, 313–318, 324, 326, 328–333, 353, 379, 410, 457, 474, 491, 510, 600, 657, 684
J.J. Cursetjee 256
J.L. Desai 558, 599
J.M. Meher-Homjee 253
J.M. Vazifdar 253
J.N. Duggan 253, 285
J.N. Tata Scholar 284
John Hunter 265
Johns Hopkins University 562
Jordon Lloyd 270
Joseph Abraham Solomon Erulkar 283
Joseph Baptista 41
Jose Tharail 598
Journal Publications 567–569
Indian Journal of Medical Ethics (IJME) 569
Alumni 569
Forum for Medical Ethics Society (FMES) 569
National Bioethics Conferences (NBCs) 569
Journal of Postgraduate Medicine (*see also* JPGM) XX, 300, 314, 362, 364, 365, 377, 388, 399, 420, 431, 445, 454, 464, 567, 568, 585, 651
Abstracting partners 568
Bioline 568
Journal website 568
JPGM (Print ISSN 0022-3859, E-ISSN 0972-2823) 568
MEDLINE 568
National Library of Medicine 568
Noteworthy features and achievements 568
Open access 568
Research Society 567
Silver jubilee 567
Staff Society of S.G.S.M.C. and K.E.M.H. 568
J.S. Nerurkar 23, 558
Juhi Jotwani XXII
Julie Jose 607
Justice Daver 295
Justice K.M. Javeri 83
Justice Russell 294
J.U. Yajnik 38
Jyotiben VI

K

K.A.J. Lalkaka 376
Kamala V. Nimbkar 376, 378
Kamaxi Bhate 625, 629, 630

Karl D. Nolph 419
Karsandas (Dharamsi's son) 294
Kashinath Dikshit 305
Kashinath Trimbak Telang 38
Kate (Kitty) Eccles 280
Kautilya Mehta 588
Kavasji E. Dadachanji 29
K. Bhaskara 598
K.C. Gupta 420
Kenneth Till 582
Keswani N.H. 268
Ketan Desai 585
Ketayun Manchersha Gilder 287
Ketty Gilder 565
K.F. Nariman 15, 23, 41
K. G. Modak 558
Khan Abdul Gaffar Khan 282
Khan Bahadur H.C. Pastakia 559
Khimji Kuvarji 295
Kishore Gajibhiye 606
Kishore S. Budhwani 588
K.K. Datey 283, 396
K.L. Shah 404
K.M. Shah 375
K.N. Bahadurji 5, 13, 29, 257, 295
K.N. Ranina 56
K. Radhakrishnamurthy 430
K.R. Narayanan, President of India 425
K.S. Goleria 398, 584, 594, 595
K.S. Herlekar 92
K.S. Masalawala 298
K.S. Mhaskar 62
K.T. Dholakia 298, 313
Kurt Miller 612

L

La Citadelle 254
Lady Laxmibai Rajwade of Gwalior 271
Lalji Naranji 293
Lalji Narayan 295
Lawrence de Sa 266
Laxmanrao M. Bhongale 282
Laxmi Baxi 422, 654
L.D. Dhavle 23
Leela Irene 283
Leela Joshi 599
Lee Sidney 279
Legacy of Knowledge: Research papers and speeches 549–566
  A "New" blood-group character related to the ABO system 553
  Biography 554
    Dr Y.M. Bhende 554
      Dean of BJ Medical College and Sassoon General Hospital 554
      New blood group: the Bombay blood group 554
      Nuffield Research Fellowship 554
    Pharmacopoeia: 1936 554
  Dr Jivraj N. Mehta's address at the unveiling of Seth Jamnadas Lalubhai's Bust 555
    Curator 560
    Curatorship 560
    Deep X-ray therapy and Radium treatment 556
    Diapositives of skiagrams 558
    Executive Engineer of the Municipality 556
    Governor's Hospital Fund 557
    Medical Jurisprudence 558
    Medicolegal section of the Museum 558
    Messrs. Anna Balwant & Co. 559
    Messrs. Matubhai, Jamietram and Madon, Solicitors, 556
    Mohenjodaro and Harappa 559
    Police Commissioner 558
    Research Endowment Fund 557
    Rich civilizations of Greece and Rome, Babylonia and Egypt 559
    Skin and venereal section 558
    Sweden 560
    X-ray section 558
  Dr R.N. Cooper's presidential address on medical education (1944–1945) 561
    Patiala block 561
    Presidential address 561
      Anatomy and comparative anatomy course 563
      Bhore Commission 562
      Future of surgery in India 561
      General medical council of Great Britain 562
      Importance of a central library 562
      Johns Hopkins university 562
      London University 562
      Medical Council of India 562
      Physiology 563
    VIth annual meeting of the Association of the Surgeons, K.E. Medical University, Lahore 561
  Dr Vasant Sheth's speech at the farewell function 564
    Eagle's eyes 565
    Lady's hand 565
    Magnanimity 565
    Patriotism 565
    Sportsmanship and dexterity 565
    The technique of dissection-operation 565
  The nutritive value of Indian vegetable food-stuffs: Part V, the nutritive value of Ragi (*Eleusine coracana*) 549
  The Occurrence of a Phytin-splitting Enzyme in the intestines of Albino Rats 552
Lewis T 287
L.H. Athale 601, 603
Liladhar Vallabhdas Valji 294
Lila Irene Clerides 284
L.N. Vora 298, 299
London 595
Lopa Mehta VII, 617, 626
  Addendum XXVI–XXIX
    Author XXVII
    Copyright XXVII
    GOSUMEC Foundation USA XXVI
    Mandar Gupte XXVI
    Pravina Shah XXVI
    Publisher XXVII
    Sponsor XXVII
    Title XXVII–XXX
  Gratitude XXVIII–XXX
    William Blake XXVIII
  My journey of 62 years XVII–XXI
    Aavishkaar XX
    Academic activities XX
    Administrators XVIII
    Admissions XX
    Advait XX
    Aetcom module XX
    Annual reports XIX
    Apurvai XX
    Archives—Janus XIX
    Assistant professors XVIII
    Associate professors XVIII
    Autopsy XIX
    Bombay University XX
    Boys' hostel XVIII
    Campus XVIII
    Chuk Chukachuk Chakanachuk XXI
    Classroom or library seating arrangement XIX
    Coaching classes XX
    Conferences XX
    Coronavirus pandemic XIX
    Coronavirus vaccine XIX
    CVTC (cardiovascular thoracic center) XVIII
    Dean XVIII
    Deliveries XIX
    Department of Anatomy XXI
    Department of Medical Education and GSMC-KEMH MCI Nodal Center and GSMC-FAIMER Regional Institute XVII
    Dhobighat XVIII
    Diamond jubilee XIX
    Disasters, Mumbai XIX
    Dissection XIX
    Dr. Manu V L Kothari Chair and division of Medical Humanities VII, XIX, XXVI, 543
    Emergency XIX
    Epidemic XIX
    Examination pattern XX
    Exhibitions XIX
    Extracurricular activities XIX
    Flooding of the city XIX
    Foundation day XIX
    Golden jubilee XIX
    Gosumag XX
    Group activity XIX
    GSite XXI
    Guest lectures XX
    Gymkhana activities XX
    Handbook of GSMC-KEMH XIX

Heads of departments XVIII
Heritage building restoration work XIX
Honorary teachers to full-time teachers and full-time teachers XVII
Hospital bed strength XVIII
House posts XX
Humane doctors XXI
Humane service XXI
ICMR grants XX
ICUs XVIII
Imaging modalities XVIII
India entrance examinations XX
International and national visitors XX
Kalpdrum XIX
Katta XIX
Laboratories XVIII
Ladies' common room renovation XIX
Lecturers XVIII
Lectures XIX
Library building XVIII
Maharashtra University of Health Sciences (MUHS) XX
Main hospital building XVIII
MCI XVII
Medical education XVII
Medical practice XVII
Medical research XVII
MLT XXI
Mumbai University XX
Not for self but for all XIX
Nurses XVIII
Occupational and physical therapist practitioners and masters XXI
Offices XVIII
OPD services XVIII
Operation theaters XVIII
Orations XX
Orthopedic center XVIII
Pathology museum XVIII, XX
Platinum jubilee XIX
Practical examinations XX
Practicals XIX
Professors XVIII
Radiology sections XVIII
Registrarship XX
Residency XX
Residents XVIII
Riots XIX
Rose day XIX
Saree day XIX
Scientific papers XX
Seminars XX
Serial bomb blasts XIX
Service providers XVIII
Social media XX
Societies XVIII
Society XXI
Souvenirs XIX
Specialties XVIII
Specialization XX
Staff members XVIII, XXI
Super-specialization XX
Super-specialties XVIII
Tata Hospital XVIII
Teachers XVIII
Teaching pattern XX
The Journal of Postgraduate Medicine XX
Theory examination centers XX
Tie day XIX
Traditional day XIX
Trained nurses XXI
Treatments XVIII
Tutors XVIII
Undergraduate and postgraduate students XVIII
Unions XVIII
University awards XIX
University Examination XIX
Ward clinics XIX
WhatsApp XX
Workers XVIII
Workshops XX
Lord Salisbury 279
L. Rajgopal 567
L.R. Tairsee 41
Lt Col C.H.L. Meyers 253
Lt Col J. Morison 303
Lt Col K.G. Pandalai 264
Lt Col K.V. Kukdey 82

M

Macfarlane 581
Madhubala Joshi-Chinchalkar 644
Madjid Samii 580
Maharaja Syajee Rao 278
Mahatma Gandhi (see also M.K. Gandhi) 263, 285
M.A. Jinnah 6
Major A.F. Hamilton I.M.S. 15
Major David Semple 82
Major Duggan 24
Major E.C. Taylor I.M.S. 15
Major-General Sir Frederick Sykes 85
Major Hamilton 15
Major Sokhey 303
Major Taylor 15
Malini Nadkarni XXIX, 340, 348, 482, 528, 532, 599
Mandar Gupte XXVI
Mangaldas Nathubhai 278
Mangaldas Nathubhoy 7
Manish Deshpande 598
Manohar Joshi 589
Manohar Keswani 581
Manoj Mozamdar 598
Mansukhlal Chhaganlal 60
Manu Kothari V–VII, X, XXIX, 480, 483, 543, 585, 635, 648, 666
Cancer VII
Chair of Medical Humanities VII
Hamilton Bailey VI
Jyotiben VI
K.E.M. Hospital and Seth G.S. Medical College V
Medical practice VII
Sakwar VI
The Nature of Cancer VII
Marshall D'Souza 81
Masani 39
Mathew H.C.G 279
Mathuradas Gokaldas Madhavji 295
Mayank Doshi 422
M.B. Patel 253
M.B. Velkar 15, 41
M.D. Abraham 88
M.D.D. Gilder 21, 41, 45, 48, 58, 85, 255, 262, 267, 306
M.D. Shah 406
Medical departments: From foundation to future 570–615
Department of Dermatology 570–615
Establishment and overview of the department 570, 571
Dermatopathology 571
Fellowship in diagnostic Dermatology course 572
Indian Association of Dermatologists, Venereologists and Leprologists (IADVL), Mumbai 571
Maharashtra University of Health Sciences (MUHS) 572
Mycology lab 571
Outpatient Department (OPD) 571
Specialized dermatology clinics 572
Wards 17 and 18 571
KEM website 570
Present Scenario 572–617
Clinical dermatology, particularly in pediatric and geriatric dermatology 572
Cosmetology and HAIR 572
Dr R.J. Fernandez Award for the Best Dermatology Resident 572
Hair transplants 573
Intralesional radiofrequency 572
Platelet-rich plasma treatment and innovative treatment injectable platelet rich fibrin 572
Department of Neurosurgery 573–618
Clinical Research 579
Autopsy 579
Coroner's Act of 1871 579
Dr Dastur's principal contributions 580
Development of Neuroradiology 576
Dr Anil D. Desai 577
Epilepsy 577
Myelography 576
Schoenander skull unit for cranial radiology 576

Early neurosurgery operations in KEM Hospital (1925-1957) 573
Air myelography 573
Brain tumors 573
Cranial surgery 573
Dr Baliga's services to poor patients 574
First prefrontal leukotomy 573
Glioma 573
Head injuries 574
Hemilaminectomy 573
Intraspinal chondroma 573
Laminectomy 573
Meningioma 573
Suboccipital decompression 573
Trepanation 573
Trigeminal neuralgia 573
Tuberculoma 573
Establishment of the Department and its Pioneers 574
Dr Homi M. Dastur 575
Dr Ram G. Ginde (*see also* Ram G. Ginde) 574
Elected president of the Neurological Society of India 575
Letter sent to Dr Dastur by Dr A. V. Baliga 575
Montreal Neurological Institute 574
Wylie McKissock at Atkinson Morley's Hospital 575
Innovations 578
Bhabha Atomic Energy Research Center (BARC) in Trombay set up ISOMED, its gamma ray sterilization facility 578
Cerebrospinal fluid shunts 579
Ether 578
Hydrocephalus 579
Journal of Neurosurgery 579
Lyophilized dura 578
Skin at the site of surgery sterilized 578
Tincture iodine 578
Medical records 578
Neurosurgery before the establishment of the department 573
New equipment 577
Cryosurgery brain probe 577
Donation from the Lions Club 577
Echoencephalography 577
Ethylene oxide sterilizer 577
Overcoming early challenges 576
Emergency burr holes 576
Setting new standards 577
Stereotaxic surgery 577
Narabayashi's apparatus in Bombay 577
Journal: Neurology India 580–625
Jaslok Hospital 581
The department after Dr Dastur's retirement (1974-Present) 581–626
Development of procedures 581
Bone bank at the Queen's hospital 582
Craniostenosis 584
Deutsche Akademischer Austausdienst (DAAD – the German Academic Exchange Service) 584
Donation by the consulate of West Germany 583
Dr Anil Karapurkar 584
Dr Atul Goel 567, 585
Dr Ranjit Nagpal 583
Dr Sunil Pandya 582
Embolization of tumor feeders 584
FMR-FRCH 586
Frenchay Hospital in Bristol 582
Giessen 584
Giessen, Munich, Wurzbirg, and at Queen Square 584
Great Ormond Street Hospital for Sick Children in London 582
Indigenous liposomal amphotericin 583
Interventional neuroradiology 583
Lyophilized dura 581
M.Ch. in neurosurgery 583
Microneurosurgery 583
Mrs. Shakuntala Devi Amirchand prize 586
Neurodiagnost® X-ray unit 582
Newcastle General Hospital 582
OPMI 1 (Zeiss) 583
OPMI 6 583
Queen Square 582
Selective angiography 584
Some vignettes 586
Southern General Hospital in Glasgow 582
Sterile bone grafts 582
Surgery of craniostenosis and endovascular therapy of aneurysms, arteriovenous malformations, and occlusive arterial disease 585
Therapeutic arterial embolization 583
Tissue bank 582
University of Giessen, Germany 583
Workshop on Microneurosurgery 583
Organization of the department 581
Clinico-radiological-pathological research 581
Dr Ginde's personal library 581
Department of Pediatric Surgery 586–631
1967: The New Era Begins 587
Book: Practical Pediatric Surgery Vol.1 588
Old discharge card of 1970 (concept based on WHO) 587
1970–1980 588
3rd Asian Congress of Pediatric Surgery 588
Dr Waingankar 588
recognized for MS (pediatric surgery) 588
The World Congress of Pediatric Surgery 588
1980–1990 589
ICU and the OT Washing Area 590
OT complex 590
Seminar room 590
2000-Present: Snapshots 591
Disney-themed renovation of Ward 3 and ICU 592
Dr Sandesh Parelkar 592
Dr Sanjay Oak 592
Hemanshi Shah 591
The Birth Defect Clinic 592
The modular OT 593
The start of 3D laparoscopic surgeries in 2016 593
Ward 3 art redecoration by JJ school of art 592
Prior to 1967: Humble Beginnings 587
Department of Plastic Surgery 593–638
Beginning 593
Departmental library 594
Growth 594
Indo-Pakistani war 595
Management of hand and maxillofacial trauma 595
Nair Hospital 595
The building of a team 594
Sister Solomon 594
Speech therapist 594
The OT complex 594
Craniofacial surgery 594
Electric dermatome 594
Flash sterilizer 594
Individuals, leadership, and contributions 595–640
Academics 597
Middle ear function in cleft palate 598
Plastic moulding machine injuries 598
Study of electrical injuries 598
Tinospora cordifolia 598
Dr Charles J.T. Pinto 595
Dr Charles Pinto Center for Cleft Lip and Palate in Trichur, Kerala and an Association of Plastic Surgeons of India CME Program 595
Hole-in-One repair technique 595

Management of cleft lip and palate 595
Urethroplasty for hypospadias 595
Dr Chintamani V. Mehendale 596
Mr. Bodenham at Frenchay Hospital, UK 596
Temporomandibular joint ankylosis release under local anesthesia 596
Dr Kuldip Singh Goleria (see also K.S. Goleria) 595
Craniofacial surgery 596
Dr Tessier's experience 596
Hole-in-One Repair 595
Dr Roshani E. Rana 597
Expertise in vascular malformation 597
Müllerian agenesis and intersexuality 597
Dr Suresh R. Tambwekar 596
Controlling filarial lymphedema 596
Pioneer in microvascular surgery, introduced replantations and free flaps 596
Special heat chambers 596
Dr Vinita Puri 597
Aesthetic CME series 597
Cadaveric Flap Dissection Course 597
Hand Clinic 597
Maxillofacial Follow-Up Clinic 597
Workshops on Botox, fillers, and liposuction 597
Our Alumni 599
Harlem Hospital, New York 599
Plastic Surgery Camp at Chitrakoot 599
Vice-Chancellor of the University of Mumbai 599
Department of Radiology 599–644
1925-1935 599
Deep X-ray therapy apparatus 600
Dental radiography 600
Diathermy used for treatment of Gonorrhoeal complications 600
N.M. Wadia Deep therapy Institute 600
Radiology and electrotherapy 599
Ultraviolet radiation treatment 600
1935–1945 600
Arteriography 600
Deep X-ray therapy 600
Encephalography 600
Long and short-wave diathermy 600
Superficial X-ray therapy 600
Treatment with ultraviolet radiation 600
Ultraviolet therapy 600
Ventriculography 600
1945–1955 601
Galvanic & amp, and Faradic current treatments 601
1955–1965 601
200mA simple X-ray machine 601
J.B. Kinmonth, professor at University of London and the pioneer of the procedure of lymphangiography 601
Radiological equipment needed for angiocardiography 601
Special floating table-top of X-ray machine 601
Department of radiology and electrotherapy to department of imaging 599
Educational activities 604
Annual RSNA meeting in 1995 as an international visiting scholar 605
Equipment and locations 602
History of Department of Radiology 599
Later periods 602
The diploma in medical radiology and electrotherapy (D.M.R.E.) started at Bombay University in 1948–49 602
Other areas 603
Biplane DSA equipment for peripheral and Neuro applications 604
Community care program 604
Digital subtraction angiography 604
First institute in the country to do interventional radiological procedures 604
Multi-slice volume zoom CT scan equipment 604
One year fellowship courses 604
Portable X-ray facility 604
Ultrasonography 604
University Hospital at San Diego California 604
Department of Transfusion Medicine 605–650
Blood center and disaster management 608
Coombs crossmatch by gel technology 608
Thalassemia children 608
History of blood transfusion services 605
Blood center 605
First transfusion 605
Naval mutiny of 1945 605
Main functions of the department 607
MD immunohematology and blood transfusion 606
NABH accreditation of the blood center 607
Objectives and functions of the transfusion medicine department 607
Blood bank counselors 607
DMLT courses 607
Other technical and nursing staff 607
Paramedical staff 607
Role of the blood center during disasters 608
Handling of the COVID-19 pandemic 608
Setting up of the department 606
Post graduate course in transfusion medicine 606
Post graduate course – MD in immunohematology and blood transfusion 606
Department of Urology 608–653
Areas under clinical and academic urology 612–657
Andrology (male reproductive system) 613
Endoscopic urology 612
Endourology 613
Establishment of advanced photographic/documentation services 615
Documentation 615
General urology 612
Weekly uroradiology and once-a-month Uronephrology departmental meetings 612
Histopathology lab facilities for staff and postgraduate students 615
Inclusion of hands-on experience of ultrasound diagnostic technology in the postgraduate university teaching program in urology 614
Percutaneous renal surgical procedures (PCNL) 612
Katherinen Hospital, Stuttgart, West Germany 612
Live PCNL Audio-visual Workshop 613
Renal transplantation 613
Sexual medicine: Management of impotence and other sexual and sexual dysfunctions in men 613
5th National Conference of Sexology, New Delhi, 1989 organized by the IASECT 614
Sexual medicine in India the president of this association 614
Vice president of the Indian Association of Sex educators, counselors and therapists (IASECT) 614

1980–1991: The department after accreditation 611
Endo-urological procedures 612
Equipment required for microsurgery 612
Inauguration of department of urology (1980) 611
Japanese (Shimatzu) C-arm 612
Percutaneous renal surgical procedures (PCNL) 612
Shock-wave lithotripsy machine 612
State-of-the-art operation theater 611
Intra-Vas contraceptive device (IVCD or "male loop") 610
Microsurgical vas re-anastomosis (and vas epididymostomy) 610
Reviewing board of population reports published by the George Washington University Medical Center, Washington, D.C., USA 611
Technique of vas re-anastomosis 610
Yearbook of Obstetrics and Gynecology 610
Early years of urology 609
Examples of basic studies that were done in the field of urology 610
Momentous academic 'Encounter with Dr RN Cooper and first introduction to the idea of renal transplant 608
Annual Conference of the Association of Surgeons of India (ASI) in Madras 609
Diagnostic and operative endoscopy 609
Kidney transplantation program 609
Live donor program 609
Uniqueness of pioneering program of renal transplantation 609
Mehreen Mir 666
Melville Lewis 279
Messrs. Anna Balwant & Co. 559
Messrs. Mulji Jetha and Company 6
Messrs. S.F. Markham 560
M.G. Kher 58
M.G. Talwalkar 268
Mia Mohammed Chotani 41
Michael Sadlow 404
Milind Tullu 630
Miss Joshi 271
Mithibai Tehsildar 253
M.J. Shah 285
M.K. Dhirwani 386
M.K. Gandhi (see also Mahatma Gandhi) 83
M.K. Sobti 408
M.L. Kothari (*see also* Manu Kothari) 610
M.M. Bhatt 396
M.M. Mehta 601
M.N. Desai 58, 375
Models of skeletons and skulls 91
Mohanlal M. Desai 23
Mohenjodaro and Harappa 559
Moolji Thakersey 38
M.P. Bhagat 388
Mr. Amin Patel 643
Mr. Ashok Raje 598
Mr. Axel Axison Johnson 390
Mr. B.M. Nariman 559
Mr. Bodenham 596
Mr. Bryan Jennett 582
Mr Chandu Sanzgiri 268
Mr Chimanlal H. Setalvad 294
Mr. Claud Lobo 387
Mr Dhanjibhai Dorabji Gilder 284
Mr. D.N. Bahadurji 255, 561
Mr. Eric Peet of Oxford 593, 594
Mr G.D. Birla 263, 290
M.R. Girinath 418
Mr Gopal Krishna Gokhale 306
Mr. Graham Teasdale 582
Mr. Huw Griffith 582
Mr. Jacques 379
Mr. Jamietram Jivanram 555
Mr J.N. Tata 306
Mr. John Hankinson 582
Mr. Joshi 379
Mr J.R.D. Tata 256
Mr. Karandikar 461
Mr. Kirit Somaiya 644
Mr Kyle Patel 313
Mr. Laurence P. Lassman 582
Mr. Lindsay Symon 582
Mr. Logue 582
Mr Manubhai Mehta 307
M.R. Masani 41
Mr M.C. Chagla 272
Mr. McKissock 575, 576
Mr M.K. Gandhi 254
Mr Mohammed Ali Jinnah 254
Mr Morarji Desai 310
Mr Nadirshaw Edulji Dinsha 255
Mr. N.G. Wagh 654
Mr R.J. Tata 306
Mr. Robin P. Sengupta 582
Mr. Roddan 559
Mrs. Divekar 594
Mrs Dossibai J.R. Dadabhoy 44, 85
Mrs D.R. Javeri 656
Mrs. Ismail's daughter 379
Mrs. Kellock 379
Mrs Kitty Erulkar 283
Mrs. K. Rangan 654
Mrs McCarthy XXIII
Mrs. Minoti Chatterjee 654
Mrs. Page Mehta 379
Mrs Sarala Ginde 292
Mrs. S.B. Kolekar 654
Mrs. Sheth 594
Mr. T.K. Roddan 559
Mr Vaikunth L. Mehta 255
Mr. Valentine Logue 582
Mr Vijay R. Ginde 291
Mr W.G. Pedder 274
Mr. W.W. Patange 654
Mr Yeshwantrao Chavan 290
M.S.G. Joshi 298
Ms Meher Marfatia 261
Ms V. Radha 631
M.S. Waravadekar 603
M. Tayabali 584
Mukteshwar Prasad 375
Mulji Jetha 293
Municipal corporation presidents 37–43
Bazar Gate 39
Bhatia Baug 39
Chairman to president 39
Consolidation 38
Elphinstone circle 37
Eminent corporators 40
First municipal elections 38
Gothic style 39
Governor-general 40
Governor Mountstuart Elphinstone 37
His worship the mayor 39
Lord Ripon's despatch 39
Mayors 1931-1948 43
Municipal act III 38
Municipal bill 38
Municipal commissioner 39
Municipal corporation 38
Municipal corporation, standing committee 39
Presidents 1873-1932 41
Town committee 37
Vehar Lake 37
Muzumdar 585
M.V. Ingle 648
M.V. Patwardhan 92

N

Nagpur Improvement Trust 82
Nalinkant S. Vahia 376
Nandini Ramnath 636
Naoroji Furdunji 38
Naoroji M. Dumasia 23
N.A. Purandare 21, 45, 48, 58, 79, 85, 262
Narabayashi 577
Narandas Thakersey Mulji 294
N Aranji 295
Narender Kaushik 598
Narotam Morarji Gokaldas 295
National Honors 684–685
B C Roy Award 685
India Book of Records 685
Padma Bhushan 684
Padma Shree 684
Padma Vibhushan 684
Navazbai Bharucha 284
Navin and Pratima Doshi Chair in Pre-Modern Indian History XV
N.B. Kumta 406
N.C. Gangriwala 23
N.D. Mehta XXIII
N.D. Patel 285
N.H. Ghandy 306
N.H. Keswani 262, 267, 378
Nikit Kothale 666

Nilima Kshirsagar 425, 583, 606, 629, 640, 641
Nilratan Sircar Medical College 82
Nils Alwall 390
Nirmala Rege 626
Nitish Sancheti 638, 641, 669
N.J. Bandorawala 23
N.J. Gogtay 567
N.M. Pandya 81
N.M. Purandare 388, 567
NM Wadia Charities 557
N. Narayan 549
Norman Grant 582
Norman Guido 599
Noshir Wadia 290
Nowrosjee Wadia 677
N.R. Suvarna 81, 93
N.S. Vahia 376

O
Obstetric models 91

P
Padmaja Samant 617, 618
Padma Shastry 419
Pai XXIII
Palekar 387
Pandit Jawaharlal Nehru 286
Pandurang Atmaram 296
Pankaj Goyal 685
Panorama 679–682
A walk through time: From parel station to KEM hospital 680
Queensway and kingsway: The forgotten roads of Bombay 681
B.R. Ambedkar Road 681
Church of St. Mary's 681
Damodar Hall 681
Stepping into the rush: Parel railway station 680
The bridge that stands through time 680
The changing heartbeat of Mumbai: From mills to medicine 681
The final stop: KEM's gates 681
The white coats and the walls of healing 681
King Edward Memorial (KEM) Hospitals worldwide 681
Australia 682
Subiaco, Western Australia 682
Bermuda 682
Falkland Islands 682
India 682
Pakistan 682
Parel History 679
Bai Sakerbai Dinshaw Petit Hospital 680
Bombay Bacteriology Laboratory 679
Cancer Research Center 680
Cancer Research Institute (CRI) 680
Church and a priory 679
Durbar Hall 679
Haffkine Institute 679
Official residence for Governor 679
Plague research laboratory 679
Recorders Bombay Presidency 679
Shilaharas clan 679
Sir Dorabjee Tata Trust 680
Society for Prevention of Cruelty to Animals (SPCA) 680
Summer home for the Governor of the East India Company 679
Tata Memorial Hospital 680
Textile mills 680
William Hornby, the Governor of Bombay 679
Parali Vaijnath Mahadev 9
Parekh 396
Parsiana 297
Parvati Ramani 598
Pasteur Institute 82
P.B. Gajendragadkar 313
P.C. Bharucha 21, 45, 48, 255, 262
P.E. Bharucha 388
Peter Morrin 419
P.G. Kerkar 451
P.G. Sahasrabuddhe 41
P.G. Shukla 88
Pherozeshah Mehta 5–8, 38, 40, 217, 295, 561
Pherozeshah Merwanji Mehta 41, 42
Phiroze C. Sethna 23, 29
Pioneers of the departments 369–370
Departments 369–370
First head of department 369–370
Year of beginning 369–370
Piroja Cooverji Daroowala 90
P.K. Sen 262, 375, 400, 458, 587
P.M. Motiwala 46
P.M. Pai 414, 425, 620
Poornima Aiyer 599
Popat Prabhuram 556
Potpourri 547–684
P. Peterson 38
P.P. Karnik 263, 404
Prachi Gole 573
P. Raghavan 387, 458
Pragna Pai (*see also* P.M. Pai) 638
Prakash Kothari 614
Prakash Tandon 585
Prasad Bhange 452
Pratap M.B. Velkar 283
Pratibha Patil 588
Pravina Shah XXVI, 513, 532
Prince of Wales Gold Medal 80
Prince of Wales (later King Edward VII) 10
Priti Patil 607
P.R. Nayak 378
Prof. Anne Osborn 605
Prof. Boycott 301
Prof. Dev Pardanani (*see* D.S. Pardanani)
Professor Edwin Turkof, Vienna 597
Prof. Flenley 404
Prof. Khanolkar 557
Prof. Lewis 388
Prof. Mahashur 418
Prof. Manik Shahani 379
Prof. N.M. Purandare 387
Prof. Philip Abraham 429
Prof. P. Raghavan 386
Prof. P. Raghavan Oration 418
Prof. R.P. Koppikar 22, 126, 136, 227, 302, 369, 458, 559, 560
Prof T.D. Williams 620
Prof. V.R. Khanolkar (see V.R. Khanolkar)
P.T. Patel 15, 21, 262
Pune 554
Puri Kavita 268
Purshotamdas Mangaldas Nathoobhoy 14
Purushottam Upadhyaya 579
Pushpa Gupte 428, 572
P.V. Cherian 397
P.V. Cherian Trust 397

Q
Queen Alexandra 5
Queen Victoria 5

R
Raghavendra Row 285, 306
Raghunath Dadoba Shirwalkar (*see also* R.D. Shirwalkar) 92
Rahimtulla Mohamed Sayani 41
Rahul Kothari 649
Rajabally V. Patel 7
Rajni Khokhani 648
Ralph Cloward 582
Ramakrishna Umesh Kamath 675
Rama Malik VII, XI, XXIX, 462, 473, 498, 540, 544, 545
Ramchandani 407
Ramesh Khanna 419
Ram G. Ginde 262, 375, 376, 573, 574
Ramon Y. Cajal 289
Rana RE 593
Ranina 23
Ranjit Nagpal 581, 584
Rao Bahadur A.K 28
Rao Bahadur Manaji Rajooji Kalewar J.P. 79
Ratna Magotra 404, 417
Ravi Bapat 399, 626
Ravin Thatte 599
Ravi Ramakantan 604, 617, 626, 636
R.B. Billimoria 23
R.B. Redkar 409
R.D. Shirwalkar 77, 92, 93
Rebello 78
R.E. Dadachanji XXIII
Research Endowment Fund 557
R.G. Chitre 385
R.G. Dhayagude 80, 371, 376, 378, 567
R.G. Ginde (*see* Ram G. Ginde)
R.G. Shirahatti 425
R.H. Shroff 588

Richard Chard 428
Rich civilizations of Greece and Rome, Babylonia, and Egypt 559
Ridley Jane 279
R.K. Gandhi 398, 586, 587
R.K. Mhatre 558
R. Magotra 404, 417
R.M. Mistry 23
R.M. Sayani 38
R.N. Cooper (see also Rustam N. Cooper, Rustam Nusserwanji Cooper) 21, 45, 48, 58, 85, 262, 289, 561, 565, 573, 678
R.N. Khote 38
R.N. Ranina 39, 56
Roshan Jahan Shaikh 643
Royal College of Surgeons of England 287
R.P. Dwivedi 81
R.P. Jehangir 406
R.P. Koppikar 560
R.P. Ratnagar 23
R. Row 56
Rudolph Gumpinger 612
Rui Fernandez 572
Rupiya XXIII
Russell William Howard 278, 279
Rustam N. Cooper 15, 47, 51
Rustam Nusserwanji Cooper 92
Rustomji E. Dadachanji 54
Rustom N. Cooper 573, 574

S

Sadashiv Joshi 375
Sakshi Kasture 665
Sakwar VI
Salt Satyagraha 307
Sandeep Bavdekar 629, 630
Sanderson Edgar 279
Sandesh Parelkar 591
Sandip Mehendale 630
Sangeeta Ravat XXI, 448, 630
Sanjay Bindra XVI
Sanjay Nagral VII
Sanjay Oak 592, 606
Sanjay Pai 648
Santosh Raibagkar 599
Sarala Herekar 289
Sardar Patel Award XV
Sardar Vallabhbhai Patel 255, 263
Sarojini Naidu 41, 281
Satam Mrunmayee 283
Sathe 41
Satyavati Sirsat 598
Satyendra Singh 375
Savita Chandra 599
Sayajirao Gaikwad 306
S.B. Bavdekar 567
School of Tropical Medicine in Calcutta 92
S.D. Adrianwalla 406
S.D. Bapat 298
S.D. Bhandarkar 289, 386, 404, 602
S.D. Deodhar 602
S.D. Store 396, 429
Setalvad (*see also* Chimanlal Setalvad) 6
Seth Jamnadas Lalubhai 555
Seth Maganlal Hargowandas 555
Sethna 23
Seth Ranchhoddas Vithaldas Shroff 295
Seth Runchhoddas Vithaldas Shroff 20
S.G. Kinare 406
S.G. Vengsarkar 381
Shah Mulji Jetha 293
Sharad Iyengar 660
Sharad Panday 396, 580
Sharat Desai 571
Sharvari Khot 682
Shashikant Patil 607
Sheila D. Engineer 601
S.H. Gokhale 92
Shree Ambika Yog Kutir 419
Shri APJ Abdul Kalam 641
Shri Joseph Baptista 21
Shrikala 625
Shri Manmohan Singh 641
Shri Morarji Desai 571
Shri Sir Daulatsinhji 92
Shri S.S. Moolgaonkar 390
Siddhi Chikhalkar 572
Sidhawa 605
Singh Goleria K 593
Sir A. Lakshmanaswamy Mudaliar 264
Sir Bakahi Tek Chand 561
Sir Bartle Frere 37
Sir Basil Scott 12
Sir Bennet Hance 282
Sir Bhalchandra Krishna 6, 8, 12, 13
Sir Chimanlal Setalvad, *see* Chimanlal Setalvad
Sir Chunilal V. Mehta 14
Sir Cowasji Jehangir Hall 23
Sir Cusrow Wadia 264, 677, 678
Sir Dinshaw E. Wacha 29
Sir Dinshaw Petit 6, 256
Sir Dorabjee Tata Trust 680
Sir Dorabji Tata 6
Sir Dorab J. Tata 306
Sir Erskine Perry 257
Sir Frederick Sykes 678
Sir George Birdwood Memorial Lecture 312
Sir Herbert Stanley Reed 12
Sir Ibrahim Rahimtoola (*see also* Ibrahim Rahimtoola) 29
Sir Ibrahim Rahimtulla 8, 561
Sir James Fergusson 10
Sir Jamsetjee Jejeebhoy 12
Sir Jamshedji N. Duggan 253
Sir Leslie Orme Wilson 21, 28
Sir Luke Fildes 6
Sir Manmohandas Ramji 85
Sir Narayan G. Chandavarkar 6, 295
Sir Nasarwanji Choksy 13
Sir Ness Wadia 264, 678
Sir Norman Walker 83
Sir Nusserwanji Choksey 85
Sir Pherozeshah Mehta (*see* Pherozeshah Mehta) 295, 561
Sir Philip Wodehouse 10
Sir Phiroze Sethna 85
Sir Purshottamdas Thakurdas 85
Sir Ratan Tata 16
Sir Reginald Watson-Jones 297
Sir Richard Temple 10
Sir Robert Jones 297
Sir Sassoon J. David 6
Sir Seymour Fitzgerald 10
Sir Stanley Reed 29
Sir Steyning Edgerley 40
Sir Vithaldas Thackersey 6
Sir Walter Fletcher 82
Sir Walter Morley Fletcher 45, 309
Sir William Osler 635
Sir William Wedderburn Prize XIV
Sita Naik 406
S.J. Kumbhani 298, 299
S.K. Bakshi 375
S.K. Patil 41
S.L. Bhatia 23, 56, 282, 301
S.L. Silam 41
S.M. Edwardes 9
S. Mehta 567
Smita Bijur 419
S.M. Karandikar 407, 420, 621
S.M. Nadkarni 288, 289
Smriti Bajpai 668
S.M. Sant 397
Smt. Rajkumari Amrit Kaur 379
Sneha Khandekar 631
Snehalata Deshmukh 586, 587, 591
Solomon Abraham Erulkar 280
Some Milestones 361–364
Some Proud Moments 365–368
  Dr Indira Hinduja with first test tube baby Harsha Shah born in India 368
  Dr Sharad Panday holding the first heart transplanted in India 368
Sorab Cowasju Hormusji 23
Sorabji Shapurji Bengalee 38
Sorab K. Engineer 253
Sorab Nariman 253
Southeast Asia: Past and Present and Vietnam: Past and Present XV
S.P. Dandekar 441
S.P. Nadkarni 588
S.P. Niyogi 92, 549
S.R. Joglekar 264
S.R. Kamat 396
S.R. Moolgaokar 264
S.R. Parkar 421
S.R. Rege 404
S.R. Tambwekar 407
S.S. Arabia 306
S.S. Batliwala 58
S.S. Bhattacharya 396
S.S. Borwankar 591
S.S. Deshmukh (*see* Snehalata Deshmukh)
S.S. Tinaikar 407
Staff Nurse Waingankar 387
St Clair Thompson 5
St. Mary's 595
Subhash R. Naik (*see aslo* S.R. Naik) 405
Sudhir Deshmukh 588

Sudhir Karmarkar 598, 599
Sunanda Mahajan 572
Sunil Keswani 599
Sunil K Pandya 617
Sunil Krishnalal Pandya VIII–XI
Cervical spine X
Grant Medical College and J.J. Group of Hospitals IX
History and medical humanity X
Journal of Medical Ethics X
King Edward VII Memorial Hospital VIII
Medical History VIII
Medical Humanities VIII
Microneurosurgery X
M.S. General Surgery IX
Neuro-oncology X
Neurosurgeon IX
Neurosurgery IX
Sunil Kuyare 673
Sunil Pandya 569, 581, 649
Surendra Patil (2001) 598
Sushila Nayyar 285
Suvarna XXIII
S.V. Joglekar XXI, 378, 381, 388, 392
S.V. Punekar 408
Swarupa Bhagwat XXIX, 116, 457–460, 606, 607, 617
Symon 581

T

Tambwekar 597, 599
T. Blaney 38
Tehemton Udwadia 262
Tejas Vishwanath 572
Tembe 396
The art of administration of a medical college and teaching hospital by Dr. Jivraj Mehta 216–226
Common mess for the resident medical staff 221
Contact with other bodies 223
Cooperation of municipal authorities and officers 223
Economics in hospital administration 224
Hospital expansion 220
Internal administration 223
Nurses' home 221
Poor Box Charity Fund 221
Research facilities 222
Scientific meetings of the staff 221
Selection of junior medical staff 218
Seth G.S. Medical College 217
Student admissions 219
Teaching staff 218
The components of the art of hospital administration 225
The Larynx 638
The Nature of Cancer VII
Thomas Lightfoot 45
Those who made it possible 457–547
Alumni 534–538
Dr Farokh E. Udwadia 538
Dr Hemant Morparia 536
Dr Madhav R. Nanasaheb Chaudhary 534–536
Dr R.B. Patil 536–537
Dr Tehemton Udwadia 538
Dr V.V. Shah 537–538
Lt. Col. B.L. Raina 537
Current Dean 471–473
Dr Sangeeta H. Ravat (01.01.2022 to working) 471–473
Doctors, nurses, office staff, engineers and health workers 457
Gymkhana 545
Pradeep Shripad Gole 545
Medical social work 539–540
Daksha Javeri 539
Dr Vijaya Naik 540
Nursing 539
Durga Mehta 539
Office 540–544
Rama Malik 540–544
Doctors as Worshipers of Duty 541
Government Hospitals vs. Private Hospitals 541
My Journey with Great Deans 543
The Changing Role of a Secretary 541
The Essence of Secretarial Assistance 542
Office: Past Administrative Officer 544
Shubhangi Chavan 544
Past Assistant Dean 473
Dr Shashiprabha S. Satoskar 473
Past Deans 457–471
Dr Avinash Supe (16.01.2015 to 31.10.2018) 469
Dr C. K. Deshpande (23.9.1972 to 31.3.1984) 459
Dr G.B. Parulkar (1984 to 1989) 460
Dr Hemant Deshmukh (01.11.2018 to 31.12.2021) 470–471
Dr Jivraj Mehta (1.4.1925 to 20.8.1942) 457
Dr J.P. Padshah (23.9.1942 to 10.4.1943) 457
Dr Murar E. Yeolekar (04.07.2007 to 30.09.2008) 464–465
Dr Nilima Kshirsagar (1.6.2001 to 30.6.2007) 463
Dr R.G. Dhayagude (27.9.1945 to 8.10.1954) 458
Dr R.G. Shirahatti, Dean (1.6.1999 to 31.05.2001) 461–462
Dr R.P. Koppikar (11.4.1943 to 26.9.1945) 458
Dr Sandhya A. Kamath (1.10.2012 to 31.1.2014) 466–467
Dr Sanjay Oak (1.10.2008 to 30.9.2012) 465–466
Dr S.G. Vengsarkar (25.3.1955 to 31.12.1958) 458
Dr Shubhangi Parkar, Dean (23.01.2014 to 15.01.2015) 467–468
Dr (Smt.) Pragna M. Pai (1.12.1989 to 31.5.1999) 460–461
Dr S.V. Joglekar (1.1.1959 to 21.9.1969) 459
Dr T.H. Rindani (22.9.1969 to 22.9.1972) 459
Past office hawaldar 545
Maruti Angre 545
Past professors and heads of departments 474–534
Department of Anesthesiology 474–475
Dr Dattatraya (Bandu) B. Deval 474
Dr Meena Bhat 474
Dr Y.G. Bhojraj 474
Department of Biochemistry 475–476
Dr Bhimrao S. Kulkarni 475–476
Dr Geeta Phatarphekar 476
Dr Sucheta Dandekar 475
Department of Cardiology 477–478
Dr K.K. Datey 477
Dr Rustom Jal Vakil 477–478
Department of Cardiovascular and Thoracic Surgery (CVTS) 478–479
Dr Ratna Magotra 478
Dr Sharad Panday 479
Dr Sudhanshu Bhattacharya 478
Department of Clinical Pharmacology 479–480
Dr Urmila Thatte 479–480
Department of Community Medicine 480–481
Dr D.N. Pai 480
Dr Parimala S. Subramanian 480–481
Department of Dermatology. See History of department of dermatology in part III Potpourri 570–573
Department of Ear, Nose, and Throat Surgery (ENT) 483–487
Dr K.L. Shah 486
Dr Madhukar V. Ingle 483
Dr Milind V. Kirtane 483–486
Dr T.O. Shah 487
Department of Endocrinology 481–483
Dr Padmavathy S. Menon 482–483
Dr S.D. Bhandarkar (*see also* S.D. Bhandarkar) 481–482
Department of Forensic Medicine and Toxicology 487–488
Dr Walter Vaz 487–488
Department of Gastroenterology 488–490
Dr B.D. Pimparkar 490
Dr Philip Abraham 488
Dr Shobhana Bhatia 488–489
Dr S.R. Naik 489–490
Department of General Surgery 491–507

Annappa Vithal Baliga 491–495
Dr Anil Gvalani 505
Dr G.M. Phadke 506
Dr M.M. Pandya 506
Dr Rajaram Amrit Bhalerao 499–505
Dr Ravindra Dinkar Bapat (*see also* Ravi Bapat) 496–498
Dr R.D. Shirvalkar 507
Department of Medicine 507–511
Dr Aspi Golwalla 508
Dr F.D. Dastur 507
Dr Feroze M. Narielvala 509–510
Dr J.C. Patel 510
Dr K.G. Nair 509
Dr Murzban Darashaw Motashaw 508–509
Dr Raghavan 511
Department of Neonatology 511
Dr Simin F. Irani 511
Department of Nephrology 511–512
Dr Vidya N. Acharya (*see also* V.N. Acharya) 387, 511–512
Department of Neurology 512–513
Dr E.P. Bharucha 512
Dr Pravina Shah 513
Department of Neurosurgery See History of department of neurosurgery in part III Potpourri 573–586
Department of Obstetrics and Gynecology 513–517
Dr B.N. Purandare 515–516
Dr Madhukar Narvekar 514–515
Dr Nargesh D. Motashaw 514
Dr Shashank Parulekar 515
Dr Shirish Sheth 517
Dr Usha Krishnan 513
Dr Vinita Salvi (*see also* V.S. Salvi) 516
Dr V.N. Purandare 516
Department of Occupational Therapy 517–518
Dr Jayashree Kale 517
Dr Kamala Nimbkar 518
Department of Ophthalmology 518–520
Dr B.T. Maskati 519
Dr S.D. Adrianwala 518
Dr S.N. Cooper 519
Department of Orthopedics 520–521
Dr Kandarp T. Dholakia 520–521
Dr Laxmikant N Vora 521
Department of Pediatrics surgery (see also under History of pediatrics surgery in part III Potpourri 586–593) 524
Dr Snehalata Deshmukh 524
Department of Pathology 524–525
Dr Bhuvaneshwari Kandalkar 524–525
Dr Suman Kinare 525
Department of Pediatrics 522–523
Dr Madhukar Shah 523
Dr Mahrukh Joshi 523
Dr Maneck Bhagat 522–523
Department of Pharmacology and Therapeutics 526–529
Dr Nirmala Rege 526–528
Dr Rajaninath S. Satoskar 528
Dr Sharadini Dahanukar 526, 598, 621, 626
Dr Uttamchand Khimchand Sheth (*see also* U.K. Sheth) 528–529
Department of Physiology 529–530
Dr Anjali Joshi 530
Dr Batliwala 529
Dr Kashalikar 530
Dr O.P. Bhatnagar 529
Department of Plastic Surgery. See under History of department of plastic surgery in part III Potpourri 593–599
Department of Psychiatry 531–532
Dr N.S. Vahia 531–532
Dr Shubhangi Parkar 531
Department of Pulmonary Medicine & Environmental Pollution Research Center (E.P.R.C) 532
Dr S.D. Store 532
Department of Radiology See under History of department of radiology in part III Potpourri 532–533, 599–605
Dr Malini Nadkarni (*see also* Malini Nadkarni) 532
Dr Ravi Ramakantan 533
Department of Urology See also under History of department of urology in part III potpourri 606–612
Dr Dev Pardanani (*see also* D.S. Pardanani) 533–534
Video archives of the Dr MVL Kothari Chair and division of medical humanities 457
T.H. Rindani 392
T.O. Shah 93, 565
Tribhovandas Oghaddar Shah (*see also* T.O. Shah)
Tridipkumar Parmeshwar Shende 647
Trimurti Nadkarni 580, 585
Tushar Rathod 630

U

U.B. Narayan Rao 571
Uday Khopkar 428, 442, 572
U.K. Sheth VII, 388, 526, 528–529
Uma Asher 635
Umar Sobani 41
Unique legacy of GSMC and KEMH 635–647
7/11 Bomb blast disaster of 2006 641
Chief Minister of Maharashtra 641
Disaster management plan's (DMP) disaster drill 641
Honorable President of India 641
Honorable Prime Minister 641
Aruna Shanbag 641
A Brave Girl Aruna 641
Staff nurse 642
Vegetative state 642
Disasters Managed: Role Played by GSMC-KEMH 638
Communal riots of January 1993 638
Dog Kennel, Forgotten 647
Dr R.N. Chugh 644
Late Prime Minister Lal Bahadur Shastri 644
Nationalistic spirit 644
Physician 644
Refugee 644
Dr Roshan, Rise above challenges 643
Her story 643
Bharat Prerna Award 644
Bombay High Court 643
Introduction 643
Envelope on completion of 90 years 647
Envelope platinum jubilee: Day 1, first cover 647
Floods of 2005 640
26th July 2005 640
Heaviest rainfall 640
Interventional strategy adopted at the KEM Hospital 640
Essential drugs 641
Exclusive fever-OPD 640
Getting better, a documentary on GSMC-KEMH 636
Janus archives 635
An archive that lances into the past 635
Mahatma Gandhi's EKG 636
The first EKG machine imported in India (late 1930s) 636
Madhubala Joshi-Chinchalkar 644
Anesthesiologist in ESIS Hospital 644
A personal note on Madhubala Joshi-Chinchalkar by Dr Sunil K. Pandya 645
Indian research station 'Maitri' 645
Indian scientific expedition to antarctica by Government of India 644
Ministry of Earth Sciences 645
National Center for Antarctic and Ocean Research (NCAOR) 645
Polar woman 645
New film captures drama, death and amazing grace in a

reputed Mumbai public hospital 636
It's Getting Better and Worse 637
Never a Dull Moment 637
One death, many lives 637
Serial bomb blasts of 1993 638
Identification of patients 639
Other issues 639
Convenience of overworked staff 639
Handling media 639
Handling visitors 640
Rumor mongering 640
Security arrangements 639
Triage 638
Work distribution for managing teams 639
Silver jubilee stamp 647
Tokens of appreciation 646
Little gestures and big smiles keep KEM doctors going 646
Urmila Thatte 598, 621
Usha Ubale 631

V
V.A. Desai 23, 41
Vatsala Samant 51, 307
Venkatesh 598
Vibhakar Baxi 599
Viceroy Lord Ripon 38
Vidya Kharkar 572
Vijayalakshmi Ray 606, 625
Vikram Sarabhai 313
Vilasrao Deshmukh 641
Vinayakrao Deshmukh 275
Viscount Falkland 10
Vishvanath Narayan Mandlik 38
Vishvatej Gaikwad 666, 680
Vital Statistics: Year-on-Year Growth 359–360
Departments 359
Infrastructure expansion 359
Vithalbhai Patel 41
Vithal Chandavarkar 41
Vithaldas Thackersey 41
V.J. Lahiri 585
V.J. Patel 41
V.L. Napoo 41
V.L. Parmar 21, 58, 262
V.M. Divekar 396
V.N. Acharya 387, 620
V.N. Mandlik 41
V.N. Patwardhan 386, 552
Vora L.N. 299
V.P. Mehta 378
V.P. Mondkar 388
V.R. Bhalerao 409
V.R. Khanolkar 21, 22, 49, 77, 81, 88, 92, 118, 124, 126, 136, 147, 160, 176, 187, 219, 262, 282
V.S. Palekar 648
V.S. Salvi 567
V.V. Kale 405

W
Waingankar 588
Waldemar Mordecal Haffkine 679
Waravadekar 601
Wax models for the embryological section 91
W. Hale White 280
Wilder Penfield 289, 574
William Alfred Pite 12
William Blake XXVIII
William Cone 289, 291, 574
William Hale-White 296
William Henry Draper 37
William Hornby 10
William Moore 18
Wittet (see George Wittet) 15
W.L. Graham 12

Y
Yerwada jail 285
Yeshwant Doshi 422
Y.G. Nadgir 4, 56, 282
Y.M Bhende 388
Y.M. Bhende 376
Y.N. Ajinkya 94
Yusuf Meherali 41
Yuvraj Bhosale 673

Z
Z.J. Joseph 600, 601

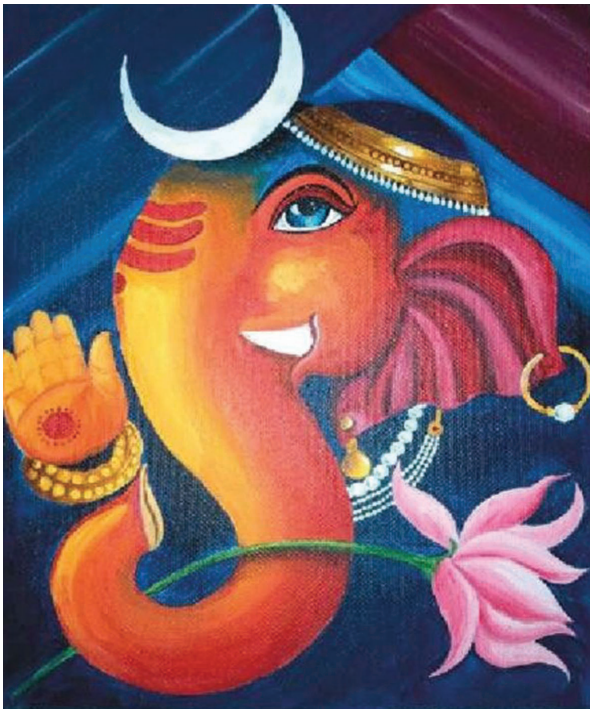
MAAKOLAM - KARTIGAI DEEPAM

Anushree Somanathan, BPTh-2020

STAIRCASE TO THE DREAM

Yash Malpekar, BOTh-2019

VIGHNAHARTA DAYANIDHI



Ruchita Shevekar, BOTh-2021

ANNALS OF
Seth Gordhandas Sunderdas Medical College and KEM Hospital [1925-2025]
Nationalism, Foundation, and Growth

A Century of Service. A Legacy of Humanity.

This centenary volume celebrates the extraordinary story of Seth Gordhandas Sunderdas Medical College and K.E.M. Hospital—institutions born during **India's Freedom struggle with the British**, and founded on the bold, nationalistic vision of establishing a hospital and medical college staffed entirely by independent Indian medical practitioners.

Seth G.S. Medical College, founded on **June 1, 1925**, and **K.E.M. Hospital**, inaugurated on **January 22, 1926**, emerged as symbols of self-reliance, public service, and excellence at a pivotal moment in India's history.

Drawing upon archival materials, historical records, and the lived experiences of generations, this volume traces their evolution from their founding during the movement for self-determination to their rise as one of the nation's most respected centres for medical education and patient care.

Across the last hundred years, the enduring motto—**"Not for Self but for All"**—has been upheld by teachers, students, physicians, nurses, and health workers whose dedication shaped these institutions and the millions of lives they touched.

For alumni, historians, and all who value the healing professions, this volume stands as a tribute to a century defined by knowledge, compassion, service, and the unwavering pursuit of excellence.

This volume is presented by **GOSUMEC Foundation USA**—established on January 7, 2023, in the service of students—and made possible through the generosity of the **Dr. D. R. SarDesai Endowment.**

BHALANI

Bhalani Publishing House
E-mail: publishing@bhalani.com
Web: www.bhalani.com
E-book: www.bhalanidigital.com

Also available as an e-book

ISBN: 978 93 81496 98 5
9 789381 496985

Dr. Lopa Mehta

Professor Lopa Mehta, Former Head of the Department of Anatomy, has been inseparably associated with Seth G.S. Medical College and K.E.M. Hospital for over six decades. Joining the institution as an under-graduate student in 1963, she went on to shape generations of students as a teacher, mentor, and academic leader.

A lifelong student advocate, she mentored generations of students who sought her guidance and friendship over several decades. Known for her intellectual rigor, clarity of thought, and deep empathy, her influence extended far beyond the classroom into academic leadership, institutional archives, and the preservation of GSMC–KEM's heritage.

Entrusted by Dr. Sunil Pandya with completing this centenary volume after his passing, Dr. Mehta carried forward his vision with scholarly rigor, deep institutional memory, and unwavering devotion.

Few individuals have shaped—or been shaped by—GSMC–KEM as profoundly as Dr. Mehta, whose life and work have touched over sixty-three of its hundred years.

ANNALS OF
Seth Gordhandas Sunderdas Medical College and KEM Hospital [1925-2025]
Nationalism, Foundation, and Growth

A Century of Service. A Legacy of Humanity.

This centenary volume celebrates the extraordinary story of Seth Gordhandas Sunderdas Medical College and K.E.M. Hospital—institutions born during **India's Freedom struggle with the British**, and founded on the bold, nationalistic vision of establishing a hospital and medical college staffed entirely by independent Indian medical practitioners.

Seth G.S. Medical College, founded on **June 1, 1925**, and **K.E.M. Hospital**, inaugurated on **January 22, 1926**, emerged as symbols of self-reliance, public service, and excellence at a pivotal moment in India's history.

Drawing upon archival materials, historical records, and the lived experiences of generations, this volume traces their evolution from their founding during the movement for self-determination to their rise as one of the nation's most respected centres for medical education and patient care.

Across the last hundred years, the enduring motto—**"Not for Self but for All"**—has been upheld by teachers, students, physicians, nurses, and health workers whose dedication shaped these institutions and the millions of lives they touched.

For alumni, historians, and all who value the healing professions, this volume stands as a tribute to a century defined by knowledge, compassion, service, and the unwavering pursuit of excellence.

This volume is presented by **GOSUMEC Foundation USA**—established on January 7, 2023, in the service of students—and made possible through the generosity of the **Dr. D. R. SarDesai Endowment.**

BHALANI

Bhalani Publishing House
E-mail: publishing@bhalani.com
Web: www.bhalani.com
E-book: www.bhalanidigital.com

Also available as an e-book

ISBN: 978 93 81496 98 5