THE PUSE

Volume 27 October 2025



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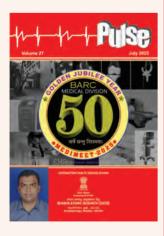
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संपादक की कलम से Pulse

प्रिय पाठकगण,

भापअ केंद्र स्थित चिकित्सा प्रभाग के ५० वर्ष पूर्ण होने के उपलक्ष्य में '' पल्स'' का यह विशेष अंक जारी किया जा रहा है। यह समय न केवल उत्सव मनाने का है बल्कि भविष्य के लिए अपने लक्ष्यों की परिकल्पना करते हुए गत वर्षों में हुए विकास को प्रतिबिंबित करने और उसका आकलन करने का भी है।

भापअ केंद्र की चिकित्सा सेवाएं वर्ष १९६२–६३ में जे.जे. अस्पताल से प्रारंभ हुईं। आज के भापअ केंद्र अस्पताल को जनवरी, १९७६ में एक अधिक औपचारिक एवं अवसंरचित आयुर्विज्ञान प्रभाग के रूप में शुरू किया गया। जे.जे. अस्पताल में २ कमरों और एक वार्ड से शुरू हुई भापअ केंद्र अस्पताल की यात्रा आज ३ अलग–अलग भवनों तक विस्तारित हुई है।



हमने इस श्रृंखला में एक लंबा सफर तय किया है। आज मुंबई में, हमारे १३ क्षेत्रीय औषधालयों के अलावा ट्रांबे, वाशी-ब्रिट और कल्याण-ईएचपीपीएल में तीन व्यावसायिक स्वास्थ्य केंद्र तथा एक अत्याधुनिक ३९० बिस्तर वाला मल्टी स्पेशियलिटी अस्पताल है। यह सतत विकास एवं विस्तार, हमारे विरष्ठों के समर्पण, प्रतिबद्धता और दूरदर्शिता के कारण संभव हुआ है, जिसके लिए, मैं अपनी कृतज्ञता व्यक्त करती हूं।

इस अंक में, आपको हमारे अस्पताल और औषधालयों की विभिन्न विशिष्ट इकाइयों के अध्यक्षों द्वारा उनके विभाग की प्रगति के बारे में रचित लेखों के पठन के साथ – साथ, हमारी इकाइयों और प्रभाग के कुछ पूर्व अध्यक्षों द्वारा रचित चिकित्सा सेवाओं के विकास एवं गति की यात्रा के वर्णन को जानने का सुअवसर भी प्राप्त होगा।

हम अपने अतीत का सम्मान करते हैं। हमें सीएचएस योजना के अंतर्गत रोगी के अनुभव में सुधार करते हुए उच्च गुणवत्ता वाली स्वास्थ्य सेवा प्रदान करना जारी रखने के अपने भविष्य के लक्ष्यों को भी अपनाना चाहिए। हमें बदलते जनसांख्यिकीय, बीमारियों और प्रौद्योगिकीय प्रगति के अनुकूल होने के बावजूद व्यक्तिगत संपर्क को भी बनाए रखना होगा। मैं आशा करती हूं कि यह विशेष अंक आपको हमारे अस्पताल के इतिहास से परिचित होने और इसकी विरासत से प्रेरित होने के लिए एक स्मारिका के रूप में कार्य करेगा।

डॉ. श्रीविद्या चेल्लम मुख्य संपादक, पल्स

अपनी प्रतिक्रिया/सुझाव pulse@barc.gov.in पर प्रेषित करें।

EDITOR'S NOTE Pulse

Dear Readers,

This special issue of Pulse commemorates 50 years of medical division, BARC. It is time to not only celebrate but also to reflect and assess our development over the years while envisaging our goals for the future.

Although medical services of BARC started in 1962-63 at JJ hospital, the current BARC hospital was commissioned in Jan 1976 with a more formal and structured Medical Division. From 2 rooms and a single ward at JJ hospital to having 3 separate buildings of our own, we have indeed come a long way. We are now a state-of-the-art 390-bed multispecialty hospital with 13 zonal dispensaries spread across Mumbai and three



occupational health centres at Trombay, Vashi-BRIT, and Kalyan-EHPPL. This stupendous growth and expansion have been possible due to the dedication, commitment and foresight of our seniors for which I express my gratitude.

In this issue, you will find articles from head of units of various specialties of our hospital and dispensaries, about the progress of their department while some of our former head of units and division have gone down memory lane, chronicling the journey of growth and evolution of our medical services.

As we honour our past, we must also embrace our future goals of continuing to deliver high quality healthcare while improving patient experience within the CHSS framework; to adapt to the changing demographics, diseases and technological advancement yet not losing the personal touch.

It is my hope that this special issue serves as a memento for all; to delve into our institute's history and be inspired by its legacy.

Happy reading!

02

Dr Shrividya Chellam Chief Editor, Pulse

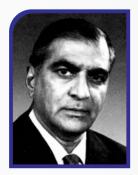
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Pulse

Leadership Legacy (As per available records)

DR. V.R. SHAH **Head, Medical Group** 1987



DR GOPALA AYENGAR Director, Bio-Medical Group 1962-1976



DR K SUNDARAM Director, Bio-Medical Group 1976-1986



Head, Medical Group 1988

DR. K.H. SAHIAR



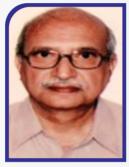
DR SMT K. MEHTA **Head, Medical Division** 1988-1989



DR S.M. SHARMA **Head, RMC and Medical Division** 1989



DR SMT USHA DESAI **Head, Medical Division** 1989-1997



DR B.J. SHANKAR **Head, Medical Division** 1997-2003



DRPTVNAIR Head, Medical Division 2003-2005



DR D K JAITLY Head, Medical Division 2005-2006



DR VASUDEV KARIRA Head, Medical Division 2006-2011



DR R K KULKARNI Head, Medical Division 2011-2014



DR SMT AMRITA MISRI Head, Medical Division 2014-15



DR P N JANGALE Head, Medical Division 2015



DR A V KULKARNI Head, Medical Division 2015-2016



DR KAUSTUBH MAZUMDAR **Head, Medical Division** 2016-2019



DR SMT A R KULKARNI **Head, Medical Division** 2019-2021



DR SMT S U NADKARNI **Head, Medical Division** 2021-Till Date



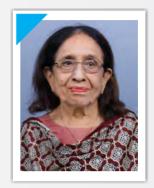
Medical Division - My Memoirs

Dr Usha DesaiFormer Head Medical Division

A quiet afternoon, I was relaxing as usual, reading my favourite author, when there was a call for me from my hospital, (the BARC Hospital), which is not too often these days. "Ma'am," I was told, "our hospital is completing 50 years this year, and we want you to write your memoirs of the Medical Division!" After spending 30 years or more with the Department of Atomic Energy, to me, the BARC Hospital, was almost a second home. It had been a very interesting journey and even today, I have the feeling that I have learnt a lot in all my years at the BARC. Presently, of course, as days go by, and time flies, memories tend to get hazy and perhaps may not be interesting to the younger generation.

As I recall, even at the time I joined this institution, I realised that this was no ordinary job. I knew that any medical system in such an institution, was not going to be the usual medical care. An independent India starting with nuclear science was still a new concept then, and required an eminent and exceptional scientist to draw the map of such an important project. Dr Homi Jehangir Bhabha, a nuclear physicist and scientist par excellence, with the help of the Government of India and a Prime Minister who had a vision of a modern India, made it possible. A totally new concept in India, the Department of Atomic Energy (DAE) was established to oversee India's Nuclear Energy program under the direct charge of the then Prime Minister Jawaharlal Nehru through a Presidential Order on the 3rd of August 1954. Homi Bhabha, who played a crucial role in its establishment, became Secretary to the Government of India.

What comes foremost to my mind about the Department of Atomic Energy is its founder Dr. Homi Bhabha. Whatever we have today, we owe to this great nuclear scientist. He was the one to recognise the importance of positive health in the area of nuclear science. The unique Contributory Health Service or CHSS as we call it, owes its existence entirely to Dr Homi Bhabha who recognised the need of a robust healthcare infrastructure to support the employees of DAE, recognizing the unique hazard associated with the nuclear Industry. He envisaged a comprehensive system that



Dr Usha Desai

extended beyond basic medical care, preventive measures together with addressing the unique risk associated with radiation exposure and other occupational hazards. More importantly, in order to ensure work safety and the wellbeing of the employees, he conceived of an Occupational Health Program that was to be the hallmark of the CHSS. He stressed a holistic approach to health that was not just curative, but together with preventive measures would lead to physical and mental wellbeing. Dr Bhabha's focus was not just on scientific advancement, but also on the wellbeing of workers working within the scientific community.

To begin with, the CGHS was launched in Delhi on July 1st 1954. Very soon, the BARC CHSS was set up. It was an internal system of BARC to provide health care to employees, their families and dependents. This is a testament to the vision of Dr Bhabha. One can soon realise that the primary difference between the internal CHSS and the CGHS is the uniqueness of the system for an establishment with its associated hazards wherein, long term monitoring is a requirement. It is perhaps also the reason that Dr Bhabha was actively involved in the establishment of the Tata Memorial Hospital in the then Bombay.

The Atomic Energy Establishment Trombay (AEET) as it was then known was renamed as the Bhabha Atomic Research Centre (BARC) after the death of its founder, Dr Homi Bhabha.

CHSS offers healthcare services through dispensaries and

hospital. Primary and emergency healthcare through zonal dispensaries, strategically located in various parts of the city, include treatment for chronic ailments and minor surgical procedures. Preventive services are conducted in all dispensaries as well as the hospital which includes immunisation, antenatal clinics and well-baby clinics. For more complex cases, patients are referred to the BARC Hospital for secondary and tertiary care. A 24 hour Casualty service and Ambulance Service is provided by the Hospital along with diagnostic services. Three occupational health centres look after the specific needs of employees with Trombay dispensary having a dental clinic. Prescribed medication is available through the pharmacies in the hospital and dispensaries.

There is no reference as to the dates when the first dispensary was started, but one can postulate that as the nuclear establishment was getting ready, the first occupational health dispensary must have started in Trombay. Some of our earliest doctors were, Dr V.R.Shah, Dr N.V. Apte, Dr J.P.Goyal, Dr Bambawale, Dr S.D Jaywant and Dr Gulvady. When I joined BARC in 1965, I remember that I was asked to report to Chembur dispensary to Dr Gulvady who was then the medical officer in charge. By then, we already had dispensaries at strategic points, near to residential areas such as Anand Bhawan (with Dr Kotwani, and later Dr Indira Ghatikar), Bandra (with Dr Sunoo Sheriar) and Chembur. OYC Dispensary (with Dr. Mayuri Khata) was with the main DAE office and the JJ dispensary (with Dr Kamlani and Dr Pradhan) was in the complex of Jamshedjee Jeejeebhoy hospital. This dispensary was later shifted to Matunga and is now in Mistry Nagar. Dr. Pradhan was later the first medical officer in charge of the Ghatkopar dispensary where she was followed by Dr Meena Iadhav.

I worked in Chembur Dispensary for about 5 years. Dr Gulwady as the medical officer in charge had a fantastic set of doctors and I joined them. By some chance, we all belonged to different specialties. Dr Sneh Raj who was seniormost was experienced in gynaecology, Dr Sunoo Sheriar in general medicine and Dr Easaw in paediatrics.

When I joined, I, along with Dr Easaw started the well-baby clinic. It was a casual friendly atmosphere and soon I also got to know our employees and their families. Knowing them personally makes a difference to any doctor patient relationship. As a doctor, I have realised how important this

relationship is in patient care. After 5 years, I was posted to Anushaktinagar dispensary as the medical officer in charge before I came to the hospital. Anushaktinagar dispensary then had a very heavy load but with the efficient team of doctors it was not difficult. Dr Lalchandani, Dr Leela Krishnamurthy, (who later was in the Hospital). Dr Jagasia, Dr Mudaliar, were all familiar names by then. Dr PTV Nair also joined the Anushaktinagar dispensary when I was the medical officer in charge. Very soon, a second dispensary was required in Anushaktinagar and was started (with Dr Zainie Chowdhury in charge). Andheri (with Dr Lalita Iyer) and Vashi (with Dr Dona Mudaliar) followed and soon there were more.

Before the Anushaktinagar Hospital

When I joined, the BARC Hospital was already functioning on the 4th and 6th floors of the main JJ Hospital building with a medical ward, surgical ward, separate for male and female. There was no separate ward for children and maternity cases were referred to referral hospitals/ nursing homes on our list. Dr N.V Apte was the physician and Dr Kini was the surgeon as well as chief of the Hospital. Soon we had Dr Narasimhan and later Dr Goyal also from the dispensary. Dr K Mehta, the gynaecologist also joined at the same time. There was a Pathology department with Dr K.H Sahiar as the head and Dr V.S Desai, Radiology with Dr K.K Chowdhury. Resident doctors were few and so for a time, all dispensary doctors, two at a time had to do night duties in the hospital. I still remember going on night duty with my little baby, and all her paraphernalia and going back in the morning. But I must say it was exciting. There was a very good nursing staff, who took pride in working. Sister Roshan Mistry, who became the Matron later was there right from the beginning.

Finally, the hospital in Anushaktinagar opened on the 16th of January 1975. Dr K Sundaram was the director of the Biomedical Group, Dr V. R. Shah, the Associate Director and Dr Goyal, the hospital in charge. Dr Leela Krishnamurthy who was with me in the dispensary and a gynaecologist, went to the unit of Dr K. Mehta. Dr Shankar was the chief surgeon. I went to the hospital and joined as head of paediatric unit. Dr Kasturi was with me in the paediatric unit. Psychiatric services were also offered with Dr Ghamat who was our first psychiatrist, followed by Dr Patkar and Dr Kaustubh Mazumdar. An essential service for the mental well-being of the employees and their

families, it was well equipped assisted by the social service section. A well equipped dental outpatient's department with Dr Sahukar, Dr Munim and Dr Turner, (the Trimurti, as we called them) was very popular with the beneficiaries. By then, we had regular and full-time resident doctors. Many of our residents continue to be in BARC hospital with some of them becoming the head of the division as well. The hospital services were gradually extended with orthopaedics and physiotherapy, ENT, ophthalmology. The ophthalmic unit with Dr Karira became very active. Dr Karira joined in 1982 and started Ophthalmic surgery, mainly cataract surgery in the year that he joined. A well-equipped ICCU had become a necessity and Dr PTV Nair being in charge was a blessing.

I must make a special mention of the social service section that we had in the hospital. In addition to being a part of the psychiatry department it was a very active, interactive unit adding a new dimension to treatment and patient welfare. Miss Ahmed was the first head of this section, followed by Mrs Indira Lalchandani.

One of the first thoughts when I took up the post of head medical division was occupational health. That was the vision of Dr Homi Bhabha, positive and preventive health measures with regular monitoring and I was keen to give it the importance it deserved. In this, I had a lot of help from my colleague Dr S.S Ali. Today, occupational health is an important part of the CHSS, as also a partner in the Radiation and Safety Division. This could not have happened without the help of Mr SV Kumar who later was the chairman of Atomic Energy Regulatory Board (AERB). Personally, visiting almost all centres of the DAE, I initiated a platform for occupational health, which has since developed into a professional body and has given a new meaning to occupational health in DAE. At the IAEA in Vienna, I have been associated with many publications in relation to health and radiation protection. Today occupational health units of medical division, BARC and DAE units have a regular interaction. There are now three occupational centres at Trombay, Vashi and Karjat. Dr Bongirwar and later Dr Hemant Haldavnekar have been taking a keen interest.

A genetic lab was started in the hospital that was necessary for occupational health as well as for neonates as and when required. Dr K Sundaram had earlier discussed with me about a genetic lab and I had visited the laboratory at Kollam where there were studies going on.

Together with the social service section, I as a paediatrician was involved with differently abled children and we started a special school in Anushaktinagar that still continues. Today BARC hospital has state of art equipment and all facilities for secondary and tertiary services. Medical science is fast changing from one day to another and the hospital with its staff needs to keep pace with the changes. But there is also another aspect that needs to be seen in a closed community hospital like ours. And that is, a doctor patient relationship. We cannot forget the vision of Dr Homi Bhabha that the CHSS is meant for employees working in the division, for their families and their dependents and that it goes beyond medical care, with mental well-being as important as physical well-being. A good doctor patient relationship is an important aspect of any medical care system. One may have postgraduate teaching, undergraduate teaching, but what is more important is the realisation that this system is meant first and foremost for the employees. Let me repeat that the vision of Dr Bhabha was not just on scientific advancement, but also on the well-being of workers working within the scientific community.

LET US CONTINUE WITH HIS VISION.

P.S. Everyone in the Medical Division has his/her contribution to the growth of the Division but I have mentioned names of only those who were pioneers in starting a particular area of work/ project or an assignment during the period I was in service.



Occupational Health Centre: Inception and Beyond.

Dr Pratap Bongirwar

Former Head OHCs & Dispensary Services, Medical Division, BARC

Occupational Health Centre (OHC) of BARC is essentially constituted by Trombay Clinic along with Vashi Industrial Dispensary at BRIT in Vashi & a small OHC located in conjunction with EHPPL at Kalyan. Trombay dispensary came into being in its present location of A Block, 1st floor when Modular laboratories of BARC got commissioned in 1968. Prior to this it was originally located at AEET's (The Atomic Energy Establishment Trombay, as BARC was then known before Jan. 1967) south site, near Uranium Metal Plant.

Right since its inception it has been entrusted with the mandate of doing occupational health work for employees which mainly entailed conducting Initial Medical Exam (IME) for assessing fitness of new recruits, Periodic Medical Exam (PME) of our employees in terms of assessing their health status or continuing fitness to do the job they were assigned to do in the perspective of work related health hazards that they were exposed to in the course of their work & early detection of chronic diseases if any like diabetes, hypertension etc. for their proper control & reference to our hospital for future advice & follow up. Additionally, statutorily it maintains a record of treating all injuries which occur while on duty. All medical emergencies while at work are first referred to Trombay dispensary for clinical stabilisation & referred to our hospital if required in an ambulance which is 24 hours specially stationed at dispensary for the purpose. It also regularly works in conjunction with industrial hygiene & safety section of BARC in matters related to accident prevention programme, hearing conservation programme & some specified investigations related to domain of occupational health including participating in annual training programme conducted by them. Services of medical social worker are also available for our employees wherever needed for counselling in the context of their problems of addiction such as alcoholism, substance abuse, psychiatric illnesses etc.

Basic pathological investigations required for medical examinations are also done at attached pathology laboratory for our employees in addition to collection of blood for further specialised investigations if required at BARC hospital. Dental unit also is functional at OHC to attend to dental problems of our employees.

Occupational Health Advisory Committee of Atomic Energy Regulatory Board (AERB) has inducted doctors from Trombay Clinic for their active participation in occupational health related work of all DAE units. BARC's occupational health work & related issues however are under the jurisdiction of BARC Safety Council (BSC) since the year 2000.

Radiation workers & their protection from radiation are



Dr Pratap Bongirwar

collaboratively carried out in conjunction with radiation safety system division of BARC. Overexposure investigation committees of BSC & AERB for radiation workers also have members of Trombay dispensary to participate in their deliberations & for clinical assessment of genuine or non-genuine cases of overexposure including conduction of specialised test of cytogenetic dosimetry (chromosomal aberrations) at mod labs. OHC also has 'Personnel Decontamination Centre' (PDC) on the ground floor which is well equipped to deal with cases of radioactive contamination if any. It also stages demonstrations cum training session not only for our doctors but also for visiting delegates who often visit BARC in different contexts. PDC works in tandem with Emergency Preparedness & Response Centre (EPARC) of BARC which is a nodal centre for radiation emergencies in our country. Our flagship training programme was of course 'Planning, Preparedness & Response to Radiation Emergencies for Medical Officers' which was started by doctors at Trombay dispensary since 2001 on an annual basis which is now spread across all NPCIL sites with help from Govt of India's Ministry of Health & Family Welfare for doctors from district level medical officers in capacity building mode. Doctors from Trombay dispensary have actively collaborated with National Disaster Management Authority (NDMA) in their meetings & preparation of guide books for handling radiation emergencies. Central Labour Institute (CLI) at Sion has often requested our doctors to deliver lectures for their nationally recognised Associate Fellowship in Industrial Health (AFIH) course conducted annually.

At international level too doctors from OHC have participated in IAEA meetings & in WHO coordinated Radiation Emergency Medical Preparedness Assistance Network (REMPAN) training programmes. Thus, with multifaceted activities in regular force, OHC has been an ideal facility in the service of BARC employees.

As for me, reminiscing my years at Trombay clinic I feel privileged to have worked in one of the best OHCs of our country.



Growing Together: The Psychiatrist, Psychiatry Department and B.A.R.C. Hospital

Dr Shobha Patkar

Former Head, Department of Psychiatry, BARC Hospital

The Background

The B.A.R.C. Hospital was earlier situated on the 3rd floor of J. J. Hospital (Main building) housing the consultants in the small partitioned rooms with basic indoor facilities.

I, Dr Shobha Patkar had cleared my M.D. (Psychological Medicine – Psychiatry) in October, 1974 from J. J. Hospital and just joined in August, 1975 as a consultant in Medical Division. Then psychiatrist's consulting room was situated in a tiny corner. The J. J. Hospital Psychiatry OPD (where I worked during 3 years of post-graduation) was right across. I was in the same campus still, a matter of comfort for me. The psychiatry department was run by Dr Gamat who had already proceeded on pre-retirement leave.

Since I was alone for many years working in psychiatry department, the story of departmental progress is connected deeply to my own working career. Please understand, the reality then and now regarding my profession made me write the interwoven story of mine and the department together.

Year 1976 - Month, January

Hospital speaks to self – I am so excited to enter my own home in Anushakti Nagar next week. J. J. Hospital 3rd floor has kindly offered me a shelter for so long. I now dream of housing big departments of surgery, medicine and gynaecology with added obstetrics unit and a spacious indoor facility. I am eager to see more and more healing hands.

The psychiatrist i.e. I speak to myself – I am so excited to start my consultancy as a psychiatrist in such a prestigious organisation (B.A.R.C.).

My knowledge was fresh, my teachers were around and I was under the vigour of youth. I was sure that I was not going to face any problem ever. In fact, I was planning to start some of my dream projects.

Finally, the hospital shifted to Anushakti Nagar and so also, I (January, 1976).

The hospital – The walls and windows started dancing with



Dr Shobha Patkar

fresh air in and out. The new building looked grand and constantly heard word of praise every now and then. The obstetric ward was opened and so also the labour room. The newborn's cry delighted the moms and the air around. The soul of the hospital was smiling to self.

MY WORK AND MY TEAM BUILT A COZY HOME

Me and psychiatry department – I was the head and the tail of the department because I had no medical assistance. Luckily, the social service department head, Miss. Ahmed, a royal personality offered a full-time social worker (Mrs. Indira Lalchandani) for help. From the administration department, a personal assistant was appointed and matron offered a helper.

The OPD started in full swing and as the time passed by, me and my staff, both started learning and bonding with each other and our patients too. I was blessed with a P.A. who had already learnt by heart the patient's name and corresponding number of his psychiatric file. My helper could easily identify emergency patient in the waiting room and would order the staff including myself to attend to him urgently. Without the assistant and even a resident, I did have a tough time even for taking a half day leave. I remembered, me and my social worker literally had to take alternate half-days to attend to exam preparation of our kids. For a casual leave my work was entrusted to Dr. Jageshia, a medical consultant who had some experience of dealing with psychiatric patients.

Anyway, we all had built a cozy home for each other in our OPD.

The Hospital

The joy of the hospital building was enhancing everyday with addition of the consultants, residents and so on. The trees had started growing and so also the staff in all the departments.

FOOLISH ME, A MILESTONE IN MY CAREER AND AN EYE OPENER

Once I was referred an indoor case from obstetric ward. I suggested that the patient should stop breast feeding in order to start my medication.

The consultant who referred the case was quite senior and asked me to show the reference supporting my advice. I gathered 2-3 references and shared the story with my teacher. He got angry with me and said, "you are a consultant and no more a student. As a consultant you have to give advice/opine/discuss and stop there. You are not going to show the references here after for your opinions and advice."

My teacher's words taught me to be upright and confident. The direction he gave, was a turning milestone in my career and I learnt to execute moral rights towards myself and my patients.

The hills and trees seen through the windows of my room sent the breeze in my ears. The whisper soothed me and said this is an experience. Just treasure it.

JUST AND FAIR

I did not know that the treasure of my personal experiences was going to be heavier and heavier.

An explanation was sought from the Prime Minister's Office regarding 4 scientific officer's suicide attempts which had taken place in a preceding year. The letter was forwarded to me. Luckily, all these patients had psychiatric files and each one of them was treated by experts on our panel. With the help of these references, I could narrate the necessary professional details in my reply to Head Medical Division.

My teacher's advice kept me upright without knowing that many storms were waiting ahead.

Once, the administration office said that since my indoor patients in the medical ward were creating trouble, they needed to be discharged as early as possible. I met Dr V. R. Shah our head, medical division and explained my difficulties. He assured me of his support

There was risk of suicide and violence if I discharged them without professional arrangement for required care ahead. The impact of the letter from Prime Minister was fresh enough for me to retain my patients in B.A.R.C. hospital and allow me to make external arrangements.

My teacher Dr Allen D'Souza had his private nursing home which catered to violent and suicidal patients whereas my colleague Dr Bharat Shah owned a private nursing home for milder cases. Both of them agreed for empanelment of their nursing homes and my patients continued to receive proper care thereafter.

Oh! Rejection again.

Those days there were 2 anaesthetists.

Giving ECTs for 8-10 patients, consumed almost the entire day of the anaesthetist so they suggested that ECT should be given in Casualty where the anaesthetist could attend to other cases in between.

My running between my OPD and casualty made me tired. After some days they requested me again to start giving ECT in my OPD as my patients might give infections to casualty patients. The reality was otherwise. But I continued to be upright and welcomed the suggestion smilingly.

WEEPING HEART

But my heart was not smiling. It got withered from repeated rejections of my patients and my profession 'PSYCHIATRY' as a discipline in 'medicine'.

I never had imagined that some medical colleagues would treat my patients and profession with ignorance. At one end, my colleagues in private practice were forcing me to resign from a job which was paying salary of 3 figures and giving lot of accountability and responsibility.

Was I right or wrong?

I took the challenge of continuing the job to make my department recognised and respected.

THE SHINING OF SUN RAYS

Luckily in B.A.R.C. we could rehabilitate our employees specially class 3 and 4. The social workers had established a working rapport with the A.P.O.s of the various departments. So, within official limits the leave was organised in a such way that one could feed the family in cases of long absenteeism of psychotics and alcoholics.

In Trombay dispensary a social worker used to conduct A.A. (Alcoholic Anonymous) group meetings.

In cases of high-grade employees, I personally used to meet head of units or at times the heads of division to make them understand my patient so that together we could decide an alternative strategy for his welfare. These all activities made a positive impact in creating awareness about 'psychiatry' as medical discipline.

Every year, we had two or three cases from training school displaying violent behaviour or suicidal attempt etc. As a psychiatrist we were easy with issuing fitness certificate to the class 3 and 4 employees. For training school candidates, we were never keen for issuing fitness certificates since they were supposed to be future scientific officers. They were going to be pillars for making and running the reactors and taking high strategic decision for our research organisation. The head of the training school used to think otherwise.

We decided to approach higher authorities. Now, I had support of my colleague who joined as psychiatric consultant.

Myself and my colleague made a presentation to convince the need for prerecruitment analysis for the trainees. In the meeting, a lot of resistance came with a force. Our presentation solved some queries and our genuine involvement in the organisation was palpable by then. The director Dr. Anil Kakodkar supported our project whole heartedly and the project is continued till date.

This kind of team work helped me to get sanction for the

appointment of another psychiatrist. In a course of time Dr Dore, Dr Banhatti and Dr Chand Nair etc. joined the department, worked for 2-3 years and left for better prospects abroad. Then Dr Kaustubh Mazumdar joined and worked till his retirement. Meanwhile Dr Shobha Nair joined who is currently the head.

We also got an opportunity for major participation in foundation of 'Kilbil' a daycare centre for kids as well as establishment of rehabilitation centre for mentally challenged children. My colleague Dr Mazumdar used to play a key role in annual day function. The department of psychiatry had gathered the desired recognition and respect. With a smiling heart I retired from my service with full satisfaction.

Now, my department is busy with additional work (a project with the students of schools in Anushakti Nagar). Recently, my colleague Dr Shobha Nair was honoured with the post of President of Bombay Psychiatry Society.

I know for sure that loyalty to the profession, working upright with integrity and using contacts at all levels for professional needs (never for personal needs) are the ways to achieve anything for welfare of mankind.

My sincere thanks to the editorial team of 'PULSE' for including me to narrate the history of the Hospital and Psychiatry Department.



Celebrating 50 yrs of Physiotherapy Department

Dr Neera Chaddha

Former Head, Department of Physiotherapy, BARC Hospital

Celebrating 50 yrs of physiotherapy department is a testament of dedication, perseverance and a commitment to improve lives of our beneficiaries. It's a time to recognise achievements and impact made on countless beneficiaries. Physiotherapy is a health care profession concerned with human function improvement and maximising physical potential. It has a long and evolving history with advancements and techniques practiced over last 50 yrs. It is a specialised field that uses various equipments to help patients recover from injuries, improve their strength, and enhance their mobility. Every year equipment was added to the department.

Treadmills are invaluable tools offering a controlled environment to assess, treat, and rehabilitate patients with mobility and musculoskeletal issues. They allow for precise adjustments in speed, incline, and resistance, enabling therapists to tailor exercise protocols to each patient's needs and capabilities. By simulating various walking or running conditions, treadmills help patients regain strength, improve balance, and enhance functional mobility in a safe and measured manner. They also enable to monitor patients' gait patterns and biomechanics, facilitating real-time feedback and adjustments to optimise rehabilitation outcomes. 2. Stationary Bicycle

Stationary bikes offer a low-impact solution to improve cardiovascular health, increase muscular strength, and enhance joint mobility. or physiotherapists, these bikes provide a versatile modality to design individualised treatment plans, catering to varying levels of patient ability and recovery goals. They enable therapists to effectively prescribe and control exercise intensity and duration, allowing for the safe progression of activity levels. For patients' stationary bikes are an excellent option for rehabilitation, particularly for people with lower limb, back, or weight-bearing restrictions, as they reduce strain on joints while promoting improved circulation and muscle tone.

Resistance bands offer versatility, portability, and



Dr Neera Chaddha

affordability in crafting effective rehabilitation programs. These bands come in varying strengths and lengths, enabling to customise resistance levels precisely to a patient's capabilities and progress. For patients resistance bands facilitate functional, movement-based exercises that mirror daily activities, improving strength, flexibility, balance, and coordination. They are particularly beneficial for those who need a lower-impact alternative to weights or machines.

Exercise balls, also known as stability balls, are multifaceted tools in physiotherapy that offer unique benefits for therapists and pats. They are designed to engage multiple muscle groups simultaneously, promoting strength, balance, and proprioception. They provide a versatile platform to develop individualised treatment plans, as they can be used to challenge patients in varying positions, from sitting to planking, and for diverse exercises, from core strengthening to flexibility work. These balls introduce an element of instability that encourages the engagement of stabilising muscles, which is key in preventing re-injury and improving functional movement patterns. They are also lightweight and portable, making them an excellent option for clients to continue their rehabilitation exercises at home, empowering them to take charge of their recovery journey. Balance boards challenge and improve an individual's stability, proprioception, and coordination. These boards

offer a dynamic and adjustable platform to safely assess and

address deficits in a patient's balance and functional movement, crucial components in recovering from various injuries or surgeries. They enable to progressively increase the difficulty of exercises, helping patients regain confidence and control in their movements.

For patients, they provide a fun and engaging way to improve their strength and stability. Regular use can lead to enhanced core strength, better posture, and reduced risk of falls, making balance boards an integral tool for clients of all ages and fitness levels in their journey towards improved health and independence.

Pedal exercisers are compact and portable devices designed to offer a convenient and efficient way to engage in low-impact cardiovascular and resistance exercise. These tools are invaluable for aiding in rehabilitating patients with lower extremity weaknesses or mobility limitations, as they allow for a controlled and focused approach to building strength and improving circulation without requiring significant space or setup. These can be used while seated, making them an excellent option for clients with balance issues or those who cannot stand for prolonged periods. Furthermore, they are practical for home use, empowering patients to maintain and progress in their rehabilitation journey and enhancing their independence and overall quality of life.

Hand grippers are specialised tools designed to improve hand and forearm strength, which is essential for many daily activities. They provide a straightforward and measurable way to assess and progress a pat's grip strength, an important aspect of overall hand function. They enable to prescribe specific exercises to help patients regain strength after injuries, surgeries, or conditions like carpal tunnel syndrome or arthritis. For patients , these are a portable and convenient tool that can be incorporated easily into daily routines, promoting consistent engagement with their rehabilitation plan. Regular use can lead to improved hand function, increased dexterity, and reduced pain, empowering individuals to regain the ability to perform essential tasks with ease and confidence, thereby enhancing their quality of life.

Parallel bars are a fundamental tool in rehabilitation settings, designed to provide stability and support while patients practice walking, balance exercises, and functional movements. These bars offer a safe and controlled environment to assess and progress a patient's mobility, balance, and weight-bearing status after an injury or surgery. They enable therapists to stand alongside pats offering guidance, adjusting alignment, and providing physical support during this critical recovery phase.

Cuff weights are versatile and effective tools used in our physiotherapy dept to add resistance to various exercises, targeting specific muscle groups and functional movements.

These weights are invaluable for tailoring rehabilitation programs to individual patient needs, allowing for precise strength training progression as pats regain function. The design of cuff weights makes them easy to securely attach to wrists or ankles, enabling focused and controlled movements during exercise routines. They provide a comfortable and efficient way to intensify exercises without needing to grip a weight, which is especially beneficial for those with hand or grip strength limitations. Regular use of cuff weights can improve muscle tone, joint stability, and functional mobility, empowering patients to progress steadily towards their recovery and health goals.

Balance discs are versatile, inflatable tools that add an element of instability to exercises, thereby stabilising muscles and promoting proprioception. They are instrumental in crafting targeted rehabilitation programs that improve balance, core strength, and functional mobility. These discs allow therapists to incrementally increase the challenge of exercises, meeting patients at their current ability level and progressing as their strength and stability improve. For patients, these discs are a compact and accessible means to continue balance training at home. They can reduce the risk of falls, improve postural control, and enhance performance in daily activities or athletic pursuits.

Pulley systems are a staple in rehabilitation settings, offering a unique and effective way to improve range of motion, strength, and functional ability. These systems enable the application of controlled, consistent resistance to various exercises, allowing for precise tailoring of rehabilitation programs to each client's needs and capabilities. These allow therapists to isolate specific muscle groups, facilitate active-assisted movements, and modify exercise intensity in real time, ensuring that each session is as effective and safe as possible.

Ankle and wrist weights add resistance to exercises, enhancing strength training and rehabilitation programs. They enable precise tailoring of resistance to each client's needs and capabilities, allowing for the progressive strengthening of specific muscle groups without bulky equipment. They can be particularly effective in retraining functional movement patterns by adding load to activities that mimic daily tasks.

Ultrasound machines in physiotherapy utilise sound waves to promote tissue healing, reduce inflammation, and alleviate pain. They are invaluable for precisely targeting specific treatment areas, enabling the delivery of controlled and focused therapy that penetrates deep into the tissues without causing discomfort. The adjustable settings on these machines allow therapists to tailor the treatment to each patient's unique condition and tolerance, enhancing the effectiveness of each session. Ultrasound therapy can offer significant relief from pain and accelerate the healing process, often without the need for medications. It is a non-invasive and typically pain-free treatment option, making it a comfortable and appealing choice for many patients.

Electrical stimulation devices use electrical currents to stimulate muscles or nerves to relieve pain, reduce inflammation, and promote healing. They offer a targeted, customisable approach to treatment, enabling precise control over the intensity, frequency, and duration of stimulation, which can be tailored to each patient's unique condition and tolerance. These devices allow therapists to activate specific muscle groups, improve muscle tone, and facilitate muscle re-education following injury or surgery. Electrical stimulation can provide significant pain relief and accelerate the healing process, serving as a non-invasive, drug-free treatment option for clients. Regular electrical stimulation as part of a comprehensive treatment plan can empower patients to regain function, reduce reliance on pain medications, and progress more rapidly towards recovery.

Heat packs relax tight muscles, increase tissue extensibility, and enhance blood circulation to a specific area. They are invaluable for preparing patients for manual therapy or exercise, as they help to soften and relax the targeted muscles and connective tissues, making subsequent treatments more effective and comfortable for the patient. These enable therapists to optimise the conditions for successful stretching, mobilisation, and strengthening exercises. They are easy to use and can significantly alleviate discomfort associated with arthritis, muscle spasms, and chronic soft tissue injuries.

In conclusion, the field of physiotherapy is constantly evolving with new technologies and equipment which enhance treatment options offered at our hospital.



Medical Division Turns 50

Dr Chitra Bongirwar

Former MOIC, Dispensary Services

The CHSS dispensaries under BARC were established to provide comprehensive healthcare services to employees of DAE and their dependant family members. The first dispensary started at OYC (Old Yacht Club, DAE Headquarters) to cater to the health related needs of our employees.

Multiple dispensaries have been established to serve employees across various regions. namely Anushaktinagar East, West and Mandala dispensaries, Vashi, Ghatkopar, Dombivali, Mistry Nagar, Anand Bhavan, OYC, Bandra and latest addition in Kharghar which became operational in July 2014. It was also equipped with lab and radiology facilities.

I have myself worked in various dispensaries as Medical Office Incharge and retired as over-all-Incharge of dispensary services.

My role was to shoulder various responsibilities in addition to routine care services to ensure smooth functioning like overall supervision of day to day functioning, monitoring routine activities of all the staff (overseeing the work of pharmacists, nurses and other staff) to ensure smooth operation and adherence to protocols, check pharmacy inventory by monitoring and controlling the use of medicines, their timely supply, providing assistance to monthly indent process, scrutinising the medical bills, LES claims and forwarding them after initial workup and attending LES committee meetings for its settlement, managing various maintenance and safety related issues, monitoring staff attendance and maintaining various registers and records. But, later on after computerisation it became easier as maintaining hard copies was not required.

Other responsibilities included participating in the implementation of health awareness programme,



Dr Chitra Bongirwar

preventive health measures with the help of different clinics e.g. well baby clinic, antenatal clinic etc. and promoting health education to the community by arranging health talks and displaying of health awareness posters as well as referring the patients to our hospitals to various departments as per need.

A major role was played by our Medical Social Worker (MSW) attached to all dispensaries. They played a crucial role in ensuring patients receive comprehensive care, addressing psychosocial needs in addition to their medical treatment in collaboration with healthcare professional, assessing and guiding the social and emotional needs to patients, checking on the treatment compliance, connecting them with resources whenever necessary, providing support to the patients and their families to cope with various challenges.

I have myself worked in Deonar East, Deonar West, Chembur and Mistry Nagar dispensaries as Medical Officer Incharge. It has been an absolute pleasure and honour in having served this esteemed organisation in the several capacities for a period of 34.5 yrs out of the 50 years of its Medical Division's existence.



The Journey of Department of Anaesthesia

Dr Pratibha Toal

Department of Anaesthesia, BARC Hospital

The journey of the department of anaesthesia is a testament to evolution, dedication and the quiet yet profound impact of working behind the scenes. Our work forms the cornerstone of modern surgical care, ensuring pain-free procedures and enabling seamless recoveries, an essential contribution that speaks volumes about our dedication and expertise.

The story began in 1973 at JJ Hospital on a modest scale under the leadership of Dr Khare. Back then, the department operated in one wing, catering to both routine procedures and emergency surgeries for BARC Hospital. Dr Khare's precision laid the foundation for what would become a pioneering branch of medical care.

Over the years, a succession of exceptional leaders carried the torch forward; Dr Madhavi Pillai, Dr Dilip Kumar Jaitly, Dr Ragini Suchak, and Dr Snehalata Tavri. Each brought unique insights and advancements, shaping the department's ethos and expanding its horizons. Since 2012, myself, Dr Pratibha Toal, have had the privilege of leading this team.

The department initially operated with only four consultants. Recognizing the growing demands, two additional consultants were approved in 2002. Today, we are a team of six consultants, Dr Shrividya Chellam, Dr Kajal Dalal, Dr Pritee Bhirud, Dr Sheetal Chiplonkar, Dr Jalpa Kate and myself, working seamlessly to provide cutting-edge anaesthesia and pain management.

Our evolution is evident in the services we provide. From general and regional anaesthesia to ultrasound-guided nerve blocks, we cater to acute and chronic pain management. The transformation of our facilities mirrors this growth. Initially confined to a single pre-anaesthesia evaluation room in the old hospital building, we expanded to a larger space in 2011 to accommodate a dedicated chronic pain OPD. By 2023, we moved to a state-of-the-art new building, boasting separate rooms for routine pre-anaesthesia check, chronic pain patients and a skill lab.

The establishment of our dedicated chronic pain OPD has



Dr Pratibha Toal

enabled us to treat over 80 patients monthly, reducing the need for external referrals.

Our services extend to remote locations for procedures such as electroconvulsive therapies, CT scan, endoscopies etc. ensuring safe and effective care even in unconventional settings.

Our journey has been marked by several milestones that reflect both growth and innovation. In 1996, we began providing anaesthesia for paediatric dental procedures, a challenging endeavour given the remote location and the vulnerability of our young patients. Today, paediatric anaesthesia has become a recognized subspecialty, with a dedicated expert on our panel.

The introduction of labour analgesia in 2011 was a transformative moment, revolutionizing pain management during childbirth.

Our equipment journey tells its own tale of progress. Starting with two old Boyle's machines in 1993, we acquired advanced Dräger machines in 1997 and added more lowflow and electronically driven models over the years. In 2017, we procured portable ultrasound machines for operation theatre regional anaesthesia and SICU procedures. With the advent of MRI, we also procured an MRI-compatible anaesthesia machine. Today, our arsenal includes high-end anaesthesia machines, ultrasound devices, and equipment for advanced procedures like radiofrequency ablation and regenerative therapies like PRP and growth factor therapy.

During the COVID-19 pandemic, our foresight in acquiring High-Frequency Nasal Oxygenators (HFNOs) played a crucial role in patient care, and these devices remain part of our routine arsenal. Also, installation of a liquid oxygen tank in 2016 proved invaluable during covid pandemic, ensuring uninterrupted oxygen supply during the time of crisis. We started with high pressure jumbo oxygen cylinders way back in 1994 and got our 6KL low pressure liquid oxygen tank in 2016 with PESO license for storage of oxygen.

Additionally, we have the latest target-controlled infusion pumps, sequential compression devices, multipara monitors, nerve stimulators, defibrillators, all generations of supraglottic devices like laryngeal mask airways, fibreoptic laryngoscope, video-laryngoscope and the list goes on. Most of the newly launched devices are there in our armamentaria. We take care to avoid cross infection by using disposable item which are invasive.

The department has also embraced advancements in critical care. In 2012, we opened a two-bedded surgical ICU, which will soon expand to nine beds. We have 2 intensivists on our panel.

Education and training are integral to our mission. Since 1996, we have run a DNB program, which has nurtured the next generation of skilled anaesthesiologists. We conduct final exams for post-graduate degree as well as diploma course. Our consultants contribute as examiners, hospital accreditors, and trainers, conducting CPR workshops for diverse audiences.

Through conferences, publications, and awards, the department continues to contribute to the broader field of anaesthesia. Today, with the team of 6 consultants, 13 resident medical officers, and 3 postgraduate resident medical officers, the department of anaesthesia stands as a multifaceted unit providing services across OPDs, OTs, and academic domains.





Department of Anaesthesia-Consultants and Resident Doctors



Anaesthesia Workstations



Radiofrequency Ablation Machine



Portable Ultrasound Machine



Anaesthesia Workstations



Target Controlled Infusion Pumps

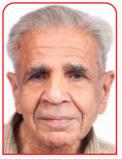
The journey of the Department of Anaesthesia is one of relentless progress, guided by a commitment to innovation and unwavering patient care. As we look to the future, our story continues to unfold, driven by a shared vision of excellence that has guided us every step of the way.

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Peek into the Past



From left standing- Dr D. K. Jaitly, Dr B. J. Shankar, Dr D. Joshi From left sitting- Dr A. Misri, Dr R. Suchak, Dr L. Krishnamurthy, Dr D. Chugh, Dr P. V.Toal, Dr S. Tavri



Dr Khare



Dr Madhavi Pillai



Dr Diana Chugh



Dr D K Jaitly



Dr Snehlata Tavri



Dr Ragini Suchak



A Chronical of Surgical Excellence: The Journey of the Department of Surgery

Dr Satish Mishra

Department of Surgery, BARC Hospital

Introduction

It is with immense pride and a sense of accomplishment that I present this comprehensive overview of the department of surgery at BARC Hospital. Our journey has been marked by unwavering commitment to excellence in surgical care, education, and research. This document encapsulates our milestones, challenges, and aspirations as we continue to serve with dedication and innovation. BARC Hospital, serves as a premier medical facility catering to the healthcare needs of employees of the Department of Atomic Energy (DAE) and their families. The department of surgery stands as a cornerstone of the hospital, offering a wide spectrum of surgical services and playing a pivotal role in patient care, medical education, and research.

Historical Background

Established in alignment with the inception of BARC Hospital, the department of surgery has evolved significantly over the decades.

Our journey started in 1963 at JJ hospital, Mumbai with Dr V M Kini heading the department. He catered to general surgery and orthopedics requirements of our beneficiaries. In 1969, Dr T V Garud, FRCS, took over as head of the department. He was soon joined by Dr B J Shankar and Dr (Mrs) Saroj Damani, and Dr Ali. In 1971 Dr B J Shankar took over as head, surgery unit. In 1976, BARC hospital was shifted to its current location at Anushaktinagar. Under a progressive leadership of Dr B J Shankar, the Department of Surgery started the prestigious DNB Surgery post graduate training program in 1983. It gave a boost to the department and improved overall patient care. In 1997, a dynamic team of surgeons- Dr Nobhojit Roy, Dr Anita Gadgil and Dr Murari joined the Department. Initially focusing on general surgical procedures, the department expanded its scope to incorporate various surgical specialties, adapting to the advancing medical landscape and the growing needs of the community it served. Dr B J Shankar started endourology



Dr Satish Mishra

work, Dr Murari started the concept of electronic medical records for the department, Dr Nobhojit Roy started the laparoscopy work, and Dr Anita Gadgil started GI endoscopy under mentorship of leading experts. Dr Nobhojit Roy headed the Department till 2017, followed by Dr Anita Gadgil till 2023, and Dr Satish Mishra is the current Head of the Department. The department continues its journey in terms of spectrum of services, capacity building, surgeries in niche areas and improvement in overall patient care.

Surgical Services We Offer

The department offers a comprehensive range of surgical services, both emergency and elective:

- 1. Laparoscopic Surgeries: Cholecystectomy, hernioplasty, appendicectomy, colorectal surgery, nephrectomy, diagnostic laparoscopy, lap orchidopexy, gastric reflux surgery.
- 2. Endourology: Holmium Laser Enucleation of Prostate (HoLEP), Transurethral Resection of Prostate (TURP), Ureteroscopy, Percutaneous Nephrolithotomy (PCNL), Retrograde Intrarenal Surgery (RIRS).
- 3. Oncosurgery: Modified radical mastectomy, breast conservation surgery, head and neck oncosurgery, colorectal and gastric oncosurgery, radical nephrectomy, transurethral resection of bladder tumors (TURBT), hepatectomy, Whipples Surgery for pancreas cancer.

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- 4. Proctology: Treatment of hemorrhoids- piles banding, sclerotherapy, lateral sphincterotomy, stapler hemorrhoidectomy, suture hemorrhoidopexy (Chivate Procedure), pilonidal sinus.
- 5. Wide range of Plastic and Pediatric Surgery: Skin grafting, flap rotation, cleft lip, cleft palate, hypospadias, orchidopexy, herniotomy.
- 6. GI endoscopy: Esophago-gastroscopy, sigmoidoscopy, colonoscopy, esophageal band ligation for bleeding esophageal varices, endoscopic sclerotherapy.
- 7. Urodynamics Study: Uroflowmetery to objectively evaluate maximum urine flow rate per minute, cystometry to check the bladder pressures to understand complex urological problem, Pelvic Floor Muscle Training (PFMT) for treating pelvic floor dysfunction.
- 8. Diabetic Foot services: Specialized services for prevention and management of diabetic foot ulcer: Assessment of diabetic neuropathy, blood supply, plantar pressures, offloading footwears, onychomycosis, corn and callus management, debridement, tendon chasing, charcot foot management, amputation. Angiography and revascularization is outsourced.

Statistics: 2024

Surgery OPD: 27758; Super specialty Urology OPD: 440 Indoor Admissions: 2127; Bed Occupancy rate: 80 %

Number of Major Surgeries: 1170; Number of minor Surgeries: 1560

Spectrum: Laparoscopic Surgery: 140; Endourology: 554; GI Endoscopy: 736; Colo-proctocology: 68; Breast Oncosurgery: 33

Infrastructure and facilities

The department boasts state-of-the-art facilities, including:

- 1. 60 beds for indoor admission, including isolation rooms.
- 2. Well-equipped surgical ICU.
- 3. State of the art Central Sterile Supply Department (CSSD).
- 4. Six Modern Operation Theatres-Equipped for both open and minimally invasive surgeries.

Operation Theatre Major Equipment and Facilities

a. Endourology and Laser Surgeries- 100 watt Holmium Laser for HoLEP, Thulium Fiber Laser for Laser

fragmentation of stones in ureters with minimal retropulsion, Bipolar Plasmakinetics cautery for TURP, State of the art C arm for X ray navigation during endourological procedures, High definition camera and monitor system for high quality vision during endo urological surgeries, Rigid and flexible ureteroscopes for retrieval of ureteric stones (URS), Pneumatic lithoclast and percutaneous nephrolithotomy for key hole surgeries for hard and large kidney stones (PCNL).

- b. Laparoscopy- State of the art 3-D high-definition laparoscopic camera system, high end monopolar and bipolar cautery as energy source, Harmonic dissector for a range of laparoscopic procedures.
- c. Microscopic Surgeries- High end operating microscopes for microscopic dissection and fine surgeries under magnified vision.
- d. Advanced and automated OT tables, OT pendants and high-end ceiling OT lights.
- 5. DNB Training- DNB discussion room equipped with overhead projector, electronic board, manikins for laparoscopy training.
- 6. GI endoscopy- Equipped with State-of-the-art diagnostic and therapeutic high-definition GI endoscope with narrow band imaging facility, automated endowasher and sterilizer, modern facility for general anesthesia and high end electrocautery.
- 7. Advanced Urodynamics lab for uroflowmetry, cystometry, PFMT & biofeedback.
- 8. Minor operation theatre equipped with high end ceiling OT light, advanced automated OT table and state of the art cautery machine.
- 9. Diabetic foot clinic- Equipped with biothesiometry, plantar pressure studies, monofilament test and patient training modules.

Human Resource

The department comprises a dedicated team:

- 1. Faculty- Four (Dr Satish Mishra, Dr Jayesh Kalbhande, Dr Shachi Lokur, Dr Bharath Sabarish) trained and qualified from high volume centers with a rich surgical and teaching experience ranging from 5 to 25 years.
- 2. Visiting Senior Urologist (Dr V K Subramanium)– Urology super-specialty services
- 3. Resident Medical Officers- Six DNB students

undergoing post graduate training in general surgery, selected by PG-NEET.

4. Senior Resident- Three Postgraduates (MS or DNB qualified) senior residents.

Key Achievements and Recognition

- 1. Department is accredited by National Board of Examinations in Medical Sciences (NBEMS), Ministry of Health and Family Welfare, for DNB Post-graduate training in General Surgery. Till date, 70 surgery residents have qualified as surgeons under our mentorship.
- 2. Capacity building at primary care level for breast cancer screening.
- 3. Capacity Building at primary care for diabetic foot risk assessment.
- 4. Collaborated in cancer screening training and capacity building programs of MoHFW.
- 5. Collaborated with experts in development of "Standard Treatment Guidelines on Diabetic Foot" for India.
- 6. Implementation of Safe OR (operation room), infection control practices, CAUTI bundle.
- 7. Collaborated with department of radiology and pathology of BARCH and published Atlas of Breast Cancer and Detection –under International Agency for Research on Cancer (IARC).
- 8. More than 100 publications in national and international journals.
- 9. Recognition as WHO Collaboration Centre for research in surgical care delivery in Low to Middle Income Countries (LMIC).

Response to Public Health Challenges

During public health crises like COVID-19, the department:

- 1. Maintained essential surgical services.
- 2. Implemented rigorous safety protocols
- 3. Collaborated with other departments for resource management

Challenges and Lessons Learnt

The department addressed shifting and relocation to new hospital building with resource constraints, technological advancements, workforce training and development, challenges in procurements.

Vision and Way Forward

The Department of Surgery aims to:

- 1. Expand services and specialties- Cardiovascular Thoracic Surgery (CVTS) surgeries, Video Assisted Thoracoscopic Surgeries (VATS), Endoscopic Retrograde Cholagio-Pancreaticography (ERCP) for biliary stones, Flexible Ureteroscopy and Retrograde Intra-renal Surgeries (RIRS), basic neurosurgery.
- 2. Cathlab services- (a) Digital Subtraction Angiography (DSA) for peripheral limb vessels and revascularization in diabetic foot (b) Endovenous LASER Treatment for varicose veins.
- 3. Foster research and innovation in field of diabetic foot offloading device, low-cost advanced prosthesis, low-cost negative pressure wound therapy.
- 4. Upgrade infrastructure and technology at par with established standard of care.
- 5. Empanelment of eminent experts for highly specialized surgeries for optimal utilization of hospital infrastructure, evolving niche areas in surgical sub-specialties, controlling CHSS expenditure while providing the standard of care, continuity of care, manpower training, overall upgradation of facilities and enhancement of DNB institutional ranking to attract merit.

Acknowledgement

We are grateful to former Associate Director Dr D K Aswal for constant support, frequent review meetings and overcoming the obstacles in recent relocation of our services to new hospital building. We thank all heads of medical division, past and present, for a constant support throughout the journey. Head medical division Dr S U Nadkarni and medical officer Incharge Dr Pallavi Bhandarkar have provided a valuable guidance and support in our recent journey and enhancement of facilities on a large scale, despite limited resources. We appreciate the highly energetic head of Biomedical Unit, Dr Anand Raman, Shri Arnab Jana and the enthusiastic BMEU team for the inhouse development of a highly efficient patient call-bell system, facilitation of equipment purchase, evaluation and repairs. We are thankful to Head CSS/ESG, Shri Naushad Ali and his team for a continuous support in infrastructure development and IBS mobile network, computer section for a continuous support and evolution of

Hospital Information System. We appreciate colleagues in other departments in BARC Hospital for an interdisciplinary collaboration, diagnostic and therapeutic support and guidance. The administrative staff, nursing staff, OT technicians, subordinate staff and the cosmetic maintenance department under Shri Babar have provided a very valuable contribution in this ongoing journey of our patient care. We are indebted to patients and their families for their trust, testimonials, criticism and impact stories.

Picture Gallery











VIDEOENDOSCOPY FACILITY

NEW OPERATION THEATRE



Pathology Unit Over the Years

Dr Susan CherianDepartment of Pathology, BARC Hospital

Laboratory medicine is a cornerstone of modern healthcare, with the majority of medical decisions relying heavily on laboratory reports. Accordingly, pathology services have been an integral component of the medical care provided to CHSS beneficiaries since the inception of the scheme.

In the early years, a dedicated wing at JJ hospital catered to BARC patients and included an emergency laboratory located on the 3rd floor, alongside other BARC OPDs. This lab operated round the clock with a team of six technologists, under the leadership of Dr Lawande.

In addition, the main pathology diagnostic facility was located in the Richardson Cruddas building, adjacent to JJ hospital. This center offered comprehensive pathology services, including histopathology, and was headed by Dr K. H. Sahiar. Further, two dispensary-based pathology laboratories supported the CHSS system: one at the OYC Dispensary, overseen by Dr Sakrikar, and another at the Chembur dispensary, led by Dr Desai. The OYC laboratory primarily handled pre-appointment medical examination investigations, while the Chembur lab performed routine CBC and urine tests for local dispensary patients.

With the commissioning of BARC Hospital in 1976, the pathology unit was formally established, encompassing the disciplines of biochemistry, hematology, clinical pathology, microbiology, blood bank, and histopathology. At that time, Dr K. H. Sahiar, Dr Desai, and Dr Sakrikar formed the founding team of pathologists, with Dr Sahiar serving as the head of the pathology unit. He was later designated as the head of the medical division.

Leadership of the unit progressed as follows:

Dr Desai served as head of the pathology unit from 1986 to 1991.

Dr R. K. Kulkarni succeeded him, leading from 1991 to 2012, and also served as head of the medical division from 2011 to 2014.

Dr Susan Cherian has headed the Pathology Unit from May 2012 to the present.

In its early days, pathology investigations were performed



Dr Susan Cherian

manually using basic tools such as test tubes, colorimeters, and spectrophotometers. Technologists prepared reagents in-house, manually pipetted samples, and sterilized reusable glass syringes. Over time, technological advancements transformed operations. The availability of vacutainers, ready-to-use kits, reagents, calibrators, quality control sera, and high-throughput automated equipment revolutionized diagnostic services.

Today, the pathology unit provides uninterrupted 24×7 diagnostic services, encompassing a wide range of investigations critical for disease detection, severity assessment, prognosis, and therapeutic monitoring. Cancer screening and diagnosis are carried out through advanced procedures such as diagnostic FNAC, frozen sections, and immunohistochemistry.

In 2024, the unit processed over 1.4 million investigations across multiple disciplines

Biochemistry

Clinical Pathology

Hematology

Chemiluminescence

Histopathology

Cytopathology

Immunology

Microbiology

Blood Bank

Molecular Genetics

The Blood Centre, licensed by the FDA, prepares and stores various blood components. The unit also runs a DNB (Pathology) training program accredited by the National Board of Examinations (NBE) since 2007.

All sections participate in robust External Quality Assessment Schemes (EQAS). The department is staffed by:

- 4 Pathologists
- 5 DNB Residents
- 2 Postgraduate Residents
- 40 Medical Laboratory Technologists

The faculty actively contributes to the academic

community through publications and presentations at both state and national conferences. In addition, research in human genetic disorders is conducted within the Molecular Genetics Section, supported by 2 training school officers and 1 medical laboratory technologist.

Acknowledgment

Inputs for this historical overview were provided by Mr. Rajesh Parikh and Mrs. Anuradha Parikh, medical technologists who served at the JJ Hospital pathology unit from 1970 to 1976 and continued their service at BARC Hospital until their retirement.







Psychiatry Department: Journey of 50 Years

Dr Shobha Nair

Department of Psychiatry, BARC Hospital

The Department of Psychiatry was founded along with the Medical Division. The initial outpatient department was started at Sir JJ Hospital Mumbai. BARC Hospital was constructed after which the outpatient Department of Psychiatry was established on the first floor in the main building next to the Medical OPD. Currently, the department consists of the HOD Dr Shobha Nair along with two other consultants, Dr Aditi Chaudhari and Dr Saumitra Nemlekar, Clinical psychologist Smt. Divya Ramadas, Psychiatric Social Worker Mr. Shejy Joseph along with senior residents and DNB residents.

In the year 2015, the Center for Behavioral Sciences was established at room no. C 106 next to the Pathology Department on the first floor. Occupational Therapy services commenced in 2019. Center for Behavioral Sciences includes the clinical psychologist, the occupational therapists Dr Anagha Gamare and Dr Bhagyashree Chavan and the child guidance clinic.

The Head of Department also heads the Medical Social Work Section.

At the time of initiation of the department, the Head of Department was Dr M.B. Gamat.

The other HODs with their tenure are as follows

1.Dr S.V. Patkar from 1975 to 2008.

2.Dr K. Mazumdar from 2008 to 2018. It is a matter of pride that Dr Mazumdar also went on to serve as Head, Medical Division from 2016 to 2019.

3.Dr Shobha Nair from 2018 till date

Some of the other Psychiatrists who have worked at the Department for shorter time frames include Dr Geeta Dore, Dr Chand Nair, Dr Banhatti and Dr Vani Kulhalli. The clinical psychologist Mrs. Ashwini Kolekar was working part time in the department up to 2010.

Clinical Services

The out-patient department has been in existence since the inception and currently has a footfall of 11500+ visits per year. Advances in pharmacotherapy has revolutionized the field of mental health and we have kept ourselves updated with the latest evidence-based medicines. Similarly, the inpatient services have grown in strength over the years. Until 2011, fewer patients were admitted in-house and most



Dr Shobha Nair

patients were referred to Disha Nursing Home, Chembur and Sarvodaya Hospital Ghatkopar for rehabilitation. However, since the allocation of a dedicated male psychiatry ward at ward 3B and a few female psychiatry beds, all psychiatry acute care is managed in house at BARC hospital with over 300 admissions each year.

The department along with indoor care facility also provides electro-convulsive therapy to individuals with severe mental health conditions who have not responded to medications. The sessions are conducted thrice a week in those who need the care. It is a highly effective and safe form of treatment done under anaesthesia. Its availability inhouse adds to the provision of comprehensive care in treating those with the most recalcitrant and resistant forms of illness.

Child Guidance Clinic Services

Dr Shobha Nair has been instrumental in planning and setting up the child mental health services after her training in Child and Adolescent Psychiatry from National Institute of Mental Health and Neuro Sciences (NIMHANS), Bengaluru in 2002. The Child Guidance Clinic (CGC) caters to the mental health needs of children from birth and through their adolescence. Currently around 150 children are seen in the clinic per year. After the allocation of a dedicated space, the Centre for Behavioural Sciences was established in 2015. It offers comprehensive management of Childhood Autism. A multi-disciplinary team of Psychiatrists, Psychologist and Occupational Therapists work together for thorough evaluation and assessment for each child.

Dementia Clinic

With the change in demography and increase in geriatric population the department also runs the Dementia Clinic to cater to the mental health needs of older population. This includes a structured protocol-based assessment for dementia and other late onset psychiatric disorders in the geriatric age group.

Consultation Liaison (CL)

The department has been providing CL services to the outpatients and in-patients at the hospital. This includes on going care for diagnosed cases as well as new referrals.

Community services

School Mental Health Services have been established in 2023 in collaboration with Atomic Energy Education Society (AEES) in all the six schools and junior college in the campus. The clinical psychologist and the social worker visit the educational institution by weekly rotation with the aim to provide mental health services at the level of school itself. This has received a tremendous positive response from the children, parents and teachers alike and we have seen over 200 referrals since inception.

The department also conducts periodic support groups for patients and family members with different mental illness.

We are regular faculty for programs organized by Administrative Training Institute (ATI); invited speakers at different for a on topics related to mental health organized by different units of DAE.

Preliminary Aptitude Test (PAT) Trainees

The department is also involved in the initial medical examination and psychiatric fitness for the newly appointed trainee scientific officers. This is a detailed process of over 100 trainees each year. The in-depth evaluation includes detailed personal interview, psychological assessments (Personality tests and Projective Tests) and focused group discussions. We have also introduced follow ups with an aim to increase help seeking behavior, provide care for those with mental health needs and decrease stigma.

Academics and Research

The department is accredited with the DNB Post Graduate Program in Psychiatry by the NBE, New Delhi since 2011. All consultants are recognised guides and examiner for DNB. We have annual intake of 2 DNB psychiatry students for two years and 1 seat for the year subsequent. The department has trained 13 DNB psychiatry residents till date and 5 residents are pursing the course at the moment. Our department has been recognised as a teaching institute by Bombay Psychiatric Society (BPS) and we have started

hosting and participating in clinical meets of BPS since 2018.

The department has been academically involved in research and has published over 11 articles in indexed journals. We have also presented over 20 papers and posters at various conferences. In 2021, 'Study of Depression in Schizophrenia: Prevalence and Clinical Correlates' won the Dr LP Shah Award at the Annual Conference of the Bombay Psychiatric Society held at Mumbai in April 2021. In 2022 our paper on 'Comparative study of Psychiatric Morbidity and Stressful life events in patients with Dyspepsia' won the Dr SS Jayaraman Indian psychiatric society south zone branch award. Later this paper was also nominated for the Bombay Psychiatric Society, Society Silver Jubilee Award at the Annual national conference of the Indian Psychiatric Society in February 2023. In the same year our paper on 'Psychiatry Services during Covid 19 pandemic – a study from the patients and caregivers' perspective' won the Best Free Paper Award at the Annual Conference of Indian Psychiatric Society - Western Zonal Branch 2022 at Goa.

Collaborations

TISS MA Psychology PG students are placed for field work in the department every year. Dr Shobha Nair was co-guide for a PG student from International Institute of Population Sciences. Dr Aditi Chaudhari was guide for a BARC staff nurse pursuing MBA from a institute in Jaipur.

Participation and Engagement in Professional bodies

Dr Shobha Nair has been actively participating as faculty, chairperson and moderator at Bombay Psychiatric Society (BPS), Western Zonal Branch of the Indian Psychiatric Society (IPS-WZB) Indian Association for Child and Adolescent Mental health (IACAM) and Indian Association of Biological psychiatry (IABP). For the Bombay Psychiatric Society, she has been the Hon. Secretary for the year 2011-13, Vice President 2024-25 and assumed charge as President, BPS 2025-26.

To summarize the journey of psychiatric services in BARC hospital over a span of 50 years –

- ·From a single psychiatrist to 3 consultants
- ·Service delivery department to a full-fledged teaching department
- No resident doctors to 13 DNB psychiatrists from our department
- ·Limited hospitalizations to over 300 admissions annually
- ·Regular external referrals for acute care to nearly 100% inhouse care
- ·No speciality services to dedicated child guidance, school mental health and dementia clinics.



Department of Radio-Diagnosis: Continuing its Stride to Progress

Dr Surita Kantharia

Department of Radiology, BARC Hospital

Introduction

The department of radio diagnosis renders multimodality imaging services, primarily for diagnosis of diseases. It is an integral adjunct department to the clinical specialities, aiding in reaching a diagnosis, post treatment follow-up and surveillance and also for screening.

Mission Statement of the Department

- 1.To provide accessible, high quality, diagnostic imaging and image guided intervention services to the community ethically and compassionately.
- 2. To be an equal partner with the clinical departments and provide prompt and accurate diagnostic support to improve the clinical outcomes.
- 3.To provide high quality education for post graduate and allied health care professionals with a focus on practical hands- on training and research, whose outcomes impact the patient population at large.
- 4. To live up to our mandate of being a trustworthy centre for imaging to the community.

Department History

The department started its services in 1976 when the BARC hospital was commissioned. Dr K K Chaudhary was the first head of the radiology department. Dr Ambujama was also posted then in the department of radio-diagnosis. Other radiologists, Dr Jayaram and Dr Moorjhani also served for short tenure. In April 1994, Dr Subhash Narang took over the reins from Dr K K Chaudhary and served



Dr Surita Kantharia

until August 2003. Dr Ajay Chaubey joined the department in September 1996, and succeeded Dr S Narang later as the head, until his superannuation in January 2024. Since February 2024, Dr Surita C Kantharia is leading and nurturing the department, making a conscious effort to take it to next level and to offer protocolized services.

Infrastructure

The department has well-developed diagnostic facilities with multimodality workstations to facilitate reporting, digital radiography, portable radiography equipment, mammography, US, CT and MRI scan rooms, and a well-stocked departmental library. It is equipped with cutting-edge 128 slice multidetector CT scanning and 1.5T MRI imaging with spectroscopy and functional MRI. The department has:

1.Ultrasound equipment of the highest quality, including colour doppler, elastography and guided interventions.

List of Head of the Department

Sr. No	TENURE	NAME OF HOD
1	1 st HOD – in 1976	Dr K K Chaudhary
2	April 1994 - August 2003	Dr Subash Narang
3	August 2003-January 2024	Dr Ajay Chaubey
4	Feb 2024-Till Date	Dr Surita C Kantharia

- 2.State-of-the-art breast imaging facilities equipped with digital mammography machine (FFDM).
- 3.A state-of-the-art digital radiography unit for OPD and IPD patients.
- 4.DRX-ray portable units
- 5. Fluoroscopy and digital radiography

The department has three USG machines in the OPD and also portable USG for bedside imaging of IPD patients, services in intensive care units and for patients in OR.

Services Provided

A: Clinical

1.X-rays

Routine X-rays (OPD+IPD)

Emergency X-rays

Special X-ray

2.Ultrasound

Routine Ultrasound

Doppler+Contrast Ultrasound

Obstetric - Antenatal scan

Ultrasound Guided FNAC

Biopsy

Pigtail insertion

Pleural tapping

USG Guided Pus/Fluid Aspiration

Emergency USG

3.CT Scan

Routine

CECT

CT angiography

HRCT

Emergency CT scan

4.MRI

Routine

Contrast enhanced MRI

Emergency MRI

5. Mammography

B. Teaching and Training

Regular teaching and training sessions for residents and clinicoradiological meetings. There are number of national and international research publications and conference presentations

Present Faculty

Sr. No	FACULTY	DESIGNATION
1	Dr Surita C Kantharia	Head, Radiology Unit
2	Dr Shubhra Gupta	Consultant
3	Dr B Suprabhat S	Part-Time Consultant
4	Dr Ajay Chaubey	Part-Time Consultant
5	Dr Smeet Gandhi	Part-Time Consultant

OPD Schedule

- ·OPD: 6 days/week
- ·Emergency services are provided round the clock

Future Vision of the Department

The Vision of Radio - Diagnosis Department is – 'Enhanced patient care' and 'To integrate recent updates' into medical curriculum teaching for young medical professionals.

Timeline of land mark events of the department

YEAR	EVENT
2005	Commissioning of high- end ultrasound
2008	Change to digital and computerized radiography from manual
	processing
2010	Commissioning of mammography machine and starting of breast
	imaging
2012	Digital radiology replaced conventional radiology
2018	Commissioning of 128 slice CT scanner
2022	Commissioning of 1.5 T MRI

Department Gallery Radiologists and Staff



Dr Ajay Chaubey Head of the Department 2003-2024



Dr Surita C Kantharia Head of the Department 2024 till date



Dr Shubhra Gupta Consultant Radiologist

Department Members





State of Art Diagnostic Equipment



Digital Radiography Machine



Radiofluoroscopy Machine



1.5 T MRI Scanner



Xray on Wheels- Portable Radiolography Machine



128 Slice CT Scanner



The Journey of Orthopaedic Department

Dr Vijaykumar Sadulwar

Department of Orthopaedics, BARC Hospital

Since its inception in 1976, Bhabha Atomic Research Centre Hospital has significantly expanded its healthcare services. In 1995, Dr C. Prakash established the Orthopaedic Department under the supervision of late Dr B.J.Shankar, then Head, Medical division, marking a significant milestone for this government-run, multi-specialty training hospital. Over the years, the department has evolved from providing basic fracture care to delivering subspecialty-based, evidence-driven orthopaedic medicine, reflecting broader growth of healthcare delivery and medical education in India. This article outlines the key developments in infrastructure, clinical practice, academics, research, and patient care at the orthopaedics department.

The orthopaedics department, initially a modest setup with a single consultant, two small outpatient rooms, limited operation theatre space, basic instrumentation, and constrained ward facilities; has undergone remarkable growth. Today, the department boasts three full-time orthopaedic consultants, two postgraduate Resident Medical Officers (RMOs), and three approved Diplomate of National Board (DNB) residents, modular operation theatres equipped with laminar airflow, Digital radiography and Picture Archiving and Communication System (PACS) integration, dedicated units for orthopaedic trauma and elective surgeries, specialized orthopaedic nursing care wards, advanced services including spine surgery, arthroscopy, and arthroplasty.

The scope of clinical services has diversified significantly to meet the rising demand for quality orthopaedic care.

Trauma Care

Shifted from conservative management to early operative fixation and damage control orthopaedics.

Joint Replacement Surgery

Introduction of total knee, hip, elbow, and metacarpophalangeal joint (MCPJ) arthroplasty programs.

Spine Surgery

Establishment of a spine surgery division employing minimally invasive techniques and deformity correction.

Paediatric Orthopaedics

Dedicated clinics addressing congenital and developmental disorders.

Arthroscopy

Minimally invasive procedures for sports-related injuries, particularly around the knee and shoulder joints.

As a recognized DNB training centre under the National Board of Examinations (now National Medical Commission), the department has enhanced its educational impact through

- Regular academic programs, including Continuing Medical Education (CME) sessions and interdisciplinary symposia,
- Sub-specialty rotations for DNB students, a research-oriented approach, with student participation in national and



Dr Vijaykumar Sadulwar

international conferences.

- Integration of e-learning tools, simulation training, and digital case libraries into teaching.
- Consistent top rankings in the Government of India's Karmayogi Leaderboard in recent months.
- Contributions to the National Board of Examinations as faculty for conducting and hosting internal and external DNB Orthopaedics examinations.

The department has increased its academic research footprint, with multiple publications in peer-reviewed journals, reflecting its commitment to advancing orthopaedic knowledge.

Despite tripled patient load, the department has improved outcomes and patient satisfaction through:

- Standardized care protocols based on AIIMS, WHO, and NICE guidelines.
- Early rehabilitation and Enhanced Recovery After Surgery (ERAS) protocols.
- Regular screening for osteoporosis, disability certification, and provision of orthotics.
- Empanelment with corporate hospitals in Mumbai for extended orthopaedic care when needed.
- Despite its progress, the department faces challenges such as:
- Managing high patient inflow with limited resident manpower.
- Budget constraints in public-sector procurement.

The department aims to integrate artificial intelligence in diagnostics and further strengthen orthopaedic care to sustain its growth trajectory.

Over the past two decades, the Orthopaedics Department at BARC Hospital has undergone an extraordinary transformation. With a blend of clinical excellence, academic rigor, and patient-centered care, it stands as a model for public-sector orthopaedics in India. Continued support, innovation, and collaboration will ensure sustained growth and improved outcomes for future generations.



The Gynaecology Department: Pioneering Innovation and Care

Dr Vaishali Jadhav

Department of Gynaecology and Obstetrics, BARC Hospital

BARC Hospital, originally established within the premises of Grant Medical College and Sir J. J. Hospital, has undergone remarkable evolution over the decades and has emerged as a full-fledged referral centre renowned for its medical expertise and comprehensive care.

The gynaecology department since its inception in 1976 under the stewardship of Dr Mehta, has consistently remained at the forefront of innovation. Under Dr Mehta's leadership until 1987, the department was a pioneer in introducing laparoscopy to Mumbai, starting with diagnostic laparoscopy and laparoscopic tubal ligation procedures as early as 1979. Dr Mehta's vision inspired consultants to pursue advanced training in laparoscopy, laying the foundation for a tradition of excellence.

Subsequent department heads have each contributed to this legacy:

Dr Jaya Krishnan (1987-1995)

Dr L. Krishnamurthy (1995–2001)

Dr Amrita Misri (2001–2015)

Dr Nigamananda Mishra (2015-present)

Under their leadership, the department expanded its surgical capabilities. Diagnostic hysteroscopy was introduced in 2000, followed by advanced laparoscopic surgeries such as hysterectomy, cystectomy, myomectomy, and operative hysteroscopy. Today, equipped with cuttingedge 3D laparoscopy systems, the department offers minimally invasive surgeries with enhanced precision and significantly reduced hospital stays from the earlier 6-7 days to just 2-3 days greatly improving patient outcomes and satisfaction.





Dr Vaishali Jadhav

Expanding Frontiers in Reproductive Medicine

While infertility patients were initially referred to external panel hospitals, our department began offering Intrauterine Insemination (IUI) services in-house from 2015, yielding commendable success rates. Building on this foundation, the hospital is now preparing to introduce In Vitro Fertilization (IVF) to provide advanced reproductive care for couples not responding to IUI treatments.



A Network of Care

The gynaecology unit not only manages the main hospital but also oversees 13 zonal dispensaries across Mumbai. This network ensures wide accessibility and outreach, supported by state-of-the-art diagnostic and therapeutic technologies.

A Commitment to Scientific Excellence and Compassionate Care

With a legacy built on scientific rigor and an unwavering commitment to patient well-being, the department continues to be a beacon of medical an advancement and compassionate service in Mumbai's healthcare landscape. Some pictures of equipment in the gynaecology and obstetrics department.



New Labour Table



Colposcope



Gynaecology Examination Table



Old Labour Table



Ultrasound Machine



Through the Lens of Excellence: Journey of Ophthalmology Department

Dr Sayali Bhedasgaonkar

Department of Ophthalmology, BARC Hospital

The department of ophthalmology, BARC hospital, which is rooted in the ethos of clinical excellence, has over the years blossomed beautifully. From the foundation days we have walked a long path, the path paved with patience, perseverance, pride and purpose. The purpose to provide the best care and prompt treatment to our CHSS beneficiaries and to protect the gift of sight.

"Great things are done by a series of small things brought together." This famous quote by Vincent Van Gogh has been the heartbeat of the department of ophthalmology. What began as a modest corner of care has grown into a full-fledged center of excellence.

Our story began with a vision - quite literally. The ophthalmic care unit for the CHSS beneficiaries was established at Sir JJ hospital until the year 1976, when the BARC hospital building in Anushakti Nagar took shape and so did the department of ophthalmology occupying a compact space, staffed by two visiting consultants. It was a humble beginning, rooted in determination. A pivotal moment came in the year 1982 with the appointment of the first full-time ophthalmic consultant, bringing continuity and a deeper commitment to patient care.

Steadily expanding the footprint and impact, today, we operate from a modern facility in the annex building of the hospital, spanning 234 sq. mt and proudly house a 25-bedded indoor department.

The numbers speak louder than words; with over 25,000 ophthalmic consultations annually, around 1900 admissions and nearly 1200 major ophthalmic surgeries, multiple minor surgeries and procedures each year, the department is a dynamic hub of healing and hope. Every consultation, every surgery, every innovation has been a brushstroke in a larger masterpiece of care. The journey is not just about helping people see better, it's about seeing farther, together.

Our team, three full-time consultants, two part-time consultants, two postgraduate and five resident doctors, two optometrists and a dedicated support staff, works in harmony, united by a shared mission and enriched by the expertise. As Helen Keller said, "Alone we can do so little; together we can do so much." Our collective efforts reflect this truth every day.



Dr Sayali Bhedasgaonkar

The department offers OPD services six days a week, addressing a wide spectrum of ophthalmic anterior and posterior segment diseases. Even during the COVID-19 pandemic, the commitment never wavered. Through teleconsultation, it was ensured that no patient was left behind, proving that care can transcend walls when compassion leads the way.

The department has state of the art ophthalmic operation theatre providing surgical services five days a week, covering wide spectrum of diseases like cataract surgeries with phacoemulsification and foldable hydrophobic aspheric IOLs, autografts, strabismic, oculoplasty and glaucoma surgeries, intravitreal injections and implants, and multiple minor procedures.

To provide focused and specialized care for the patients, we have established dedicated clinics for retina, glaucoma, strabismus, pediatric eye disorders, and Retinopathy of Prematurity (ROP).

The Retina Clinic, equipped with cutting-edge tools like retinal LASER, optical coherence tomography, fundus fluorescein angiography and B-scan machines and availability of Anti VEGF injections and steroid implants make it possible to manage medical retina cases in-house, reducing referrals to panel hospital and getting us a triple victory- patients' comfort, enhancing the exposure for learning and easing financial burden on the organization. The clinic also plays a vital role in early diagnosis and ongoing monitoring of retinal diseases such as diabetic retinopathy and age-related macular degeneration, which are the leading but preventable causes of blindness. By integrating advanced imaging with personalized treatment

plans, we ensure comprehensive care that improves outcomes and preserves vision.

Called the "silent thief of sight," glaucoma requires early detection and consistent follow ups. The 'Glaucoma Clinic' is equipped with advanced diagnostics and therapeutics such as automated visual field analysis, applanation tonometry, pachymetry, OCT, gonioscopy, anti-glaucoma medications and LASER therapy. What distinguishes our approach is the proactivity, identifying early signs before symptoms appear and empowering patients with timely, informed care.

The department has a well-equipped strabismus work station including synaptophore. Pediatric clinic in the department focuses on early detection and management of childhood eye problems like squint, amblyopia, refractive errors, allergies etc. with precision, in a child-friendly environment. ROP clinics takes care of our preterm newborns with eye issues and the best attempts are carried out to save the sight of the angels.

Research and academic contributions are integral to our identity. With 17 publications to date, our department actively contributes to the scientific community. Since 2007, we have proudly served as a teaching center under the national board of examinations, for post graduate courses in ophthalmology. The department is an exam center for the final, centralized DNB examination. Academic activities like seminars, journal clubs, surgical workshops, and intra-departmental discussions are part of our routine.

With 22 successful budding ophthalmologists passing out, the department is not just a place of practice, it is a place of progress.

The department actively engages in community outreach through awareness videos and proactive screenings. Regular lectures on public platforms and in clinical meetings help us reach our goal of primary prevention in ophthalmology.

Our greatest motivation comes from the patients we serve. Their resilience, gratitude, and trust fuel our commitment to do more, to be better, and to reach farther. Reflections like the poem below remind us why we strive for excellence every day, they are not just words, but echoes of the lives we've touched and the vision we've helped restore.

"In your light, we found our way,

Through darkest night to brightest day.

You saw the pain we couldn't show,

And helped our inner courage grow.

Now every sight we hold so dear,

Is touched by you, forever near.."

Looking ahead, our vision is to expand services, enhance infrastructure, and deepen our academic rigor and clinical outcomes. We aim to offer the best in-house patient care, grounded in evidence and protocol based practices and driven by innovation. And through the lens of excellence, we continue to honor our past, lead in the present, and shape a future where every eye we treat sees not just clearly but confidently.











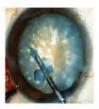






Infrastructure- Operation Theatre











BARC Dispensary Services: The Journey

Dr Mausumi Garain

Overall In-Charge, Dispensary Services, BARC Hospital

Primary healthcare forms the foundation of a resilient and inclusive healthcare system. Dispensary Services, as the first point of contact between the community and the health system, play a pivotal role in delivering accessible, and seamless care. It is here that the primary care physician provides holistic and preventive care for infectious as well as lifestyle diseases.

Under the aegis of BARC Hospital, an apex institution with a rich legacy, the network of primary care dispensaries has evolved significantly over the decades.

Inception of the Dispensary Services of BARC dates back to early 1950s. This article traces this journey based largely on the anecdotal reminiscences of its past medical and paramedical personnel who have shaped this path.

The Journey

Dr Homi J Bhabha laid the foundation of medical services in the then AEET (Atomic Energy Establishment, Trombay) to provide dedicated health care to the employees and their dependents. As nuclear research progressed, a growing need emerged for dedicated health services for DAE employees, especially to monitor radiation-related risks and the first dispensary was set up at AEET, nestled in a modest tin shed, offering Occupational Health Services. This unit eventually grew into today's Occupational Health Centre (OHC) at Trombay.

Dispensary Services started in the 1950s-60s to cater exclusively and comprehensively to the DAE employees and their families under the Contributory Health Services Scheme (CHSS). These dispensaries were strategically located to provide essential and accessible primary health care.

Old Yacht Club Dispensary, next to Parmanu Bhavan in Colaba was the first dispensary to come up in early 60s. It provided medical care to the employees of DAE and TIFR. Initial medical examination of new recruits, annual medical examination of the employees were also conducted along with primary healthcare. Dr J Goyal headed this unit, later joined by Dr Kotwani and Dr Khata to cater to the health care needs of the dependents of the employees. Presently



Dr Mausumi Garain

this Dispensary supports about 1500 registered patients.

During this time hospital services also started operating from the third floor of JJ Hospital. Dispensary doctors were allotted night duties here on rotation in the two indoor wards (Male and Female) which were overseen by Sister Roshan B. Mistry. A General OPD was run in this Hospital by esteemed doctors like Dr Pradhan, Dr Kamlani, Dr Punjabi, and Dr S Ali to manage routine cases. Later on, the General OPD doctors were shifted to the Dispensaries as they evolved. In 1975, the hospital found a permanent home in Anushaktinagar, significantly broadening its scope and infrastructure.

By mid to late 1960s, Dispensaries were established at Chembur, Matunga, Bandra, Ghatkopar, and Deonar in Mumbai.

Chembur Dispensary began in the DAE quarters at Postal Colony Road with a dedicated team of doctors such as Dr Gulwadi (in-charge), Dr Usha Desai, Dr Easaw, Dr Raj, Dr I. Ghatikar. Today, it serves over 4,400 beneficiaries.

While **Bandra** Dispensary was housed in the DAE quarters at Bandra, both Matunga and Ghatkopar Dispensaries functioned from rented places. Visionaries like Dr Soonu Sheriar, Dr Mohini Kamlani, and Dr Pradhan were the stewards of these Dispensaries.

Presently, **Matunga** and **Ghatkopar** Dispensaries are functioning from DAE quarters at Mistry Nagar and Ghatkopar respectively.

The **Deonar** Dispensary, established during 1965-68 in Anushaktinagar, rapidly became a hub of healthcare,

handling about 800 patients daily. It functioned from Dilwara building with Major Dr Sharma as its first medical officer in charge. Dr Usha Desai, Dr Leela Krishnamoorthy, Dr P Jagasia, Dr Lalchandani, Dr Indira Ghatikar, Dr P T V Nair, Dr Maya Bhatia were among the doctors who worked there in those days. The doctors worked in two shifts with additional night duties at J J Hospital along with Sunday duties in the morning, on rotation. This dispensary was relocated to its current location near Sahakari Bhandar in 1994 and now serves a bustling population of 18,500.

Anand Bhavan Dispensary, set up at the premises of DAE quarters at Anand Bhavan, Bhulabhai Desai Road, in early 1970s offered diagnostic facilities in Pathology and Radiology and weekly specialty clinics in Medicine, Surgery, Chest, OBG, Pediatric, ENT, Ophthalmology, Dermatology. Eminent doctors like Dr Goyal, Dr B J Shankar, D.r S B Damani, Dr P K Jayant, Dr Mehta, Dr Usha Desai, Dr V J Shah and Dr K L Shah, Dr Shivalkar, Dr Ashok Patel, Dr Shroff, Dr P T V Nair and, Dr A R Kulkarni offered their expertise as consultants at different times. Dr Irani was the first Medical Officer in-charge. The Dental Unit and Skin OPD are still operational here. This dispensary caters to about 1800 beneficiaries.

In 1976, a second unit - **Deonar East** Dispensary was inaugurated in Anushaktinagar, balancing the patient load with its twin, the Deonar West Dispensary. Dr Zainee Chowdhary led a team of compassionate doctors – Dr K Subbalaxmi, Dr Asha Damodaran, Dr Shanta Anand, Dr P R Bongirwar, to extend comprehensive primary care. Today, this dispensary serves about 11000 beneficiaries.

Vashi Dispensary inaugurated in 1988 from a leased place in Sector 6, shifted to a modern three storied facility in Sector 9 in 1993. Spearheaded by Dr Dona Mudaliar, this dispensary now serves about 7500 patients.

In January 1992, **Andheri** Dispensary started functioning from a leased premise of DCSEM at Sreepal Complex in Andheri East. Dr Lalita Iyer was the pioneering in-charge who worked with Dr C R Shah, Dr Pushpa Ajbani, Dr Maya Bhatia to provide comprehensive primary care to the beneficiaries. This Dispensary supports about 5500 patients.

Mandala Dispensary, the third in Anushaktinagar, was set up in 1999 to manage the increase in footfalls. Dr Pratima Vachharajani as its first in-charge supported by a team of dedicated doctors like Dr Shanta Anand, Dr Chitra Gaur,

Dr Kanchan Bantwal and, Dr Leelavati Patil, now cares for about 11800 patients.

In May 2005, **Dombivli** welcomed its Dispensary in a KDMC leased place. Spearheaded by Dr Chitra Gaur, this dispensary now supports about 5000 beneficiaries.

Kharghar Dispensary, inaugurated in July 2014 brought with it advanced facilities in radiology and dental care. Under the leadership of Dr Harry Ralte since inception, this unit now serves approximately 11000 beneficiaries.

Service Spectrum

From a single unit, the dispensary services have grown into a robust network of 13 primary care dispensaries. Over the years BARC dispensaries have transitioned into comprehensive mini-health centres offering a diverse array of services:

- Maternal and Child Healthcare, including antenatal and postnatal care
- Immunization programs, Well Baby Clinics, and school health checks
- Chronic disease management, especially for diabetes, hypertension, and cardiovascular conditions
- Geriatric care with focus on mobility, nutrition, and routine screening
- Health awareness campaigns and diet and lifestyle counselling
- Basic laboratory tests, ECG, and minor procedures
- Emergency care, triaging, and referral coordination with BARC Hospital

All Dispensaries are now equipped with pulse oximeter, glucometer, nebulizer, Oxygen cylinders and /or concentrators, suction machine, ECG machine, manual resuscitator and Defibrillator. Weekly pathology sample collection is available in all the units barring the colony based ones and Chembur Dispensary.

All patient care records are digitized since March 2007, with the introduction of HIMS. Patient referral, follow up, and liaising with BARC Hospital is seamless by virtue of this digitization.

Dispensary Services played a vital role during the COVID-19 Pandemic, handling diagnosis, treatment of mild cases, tele-consultations, and referrals. Dispensary doctors also served at the NBH Isolation Centre and contributed to the COVID vaccination drive.

For smooth functioning, the dispensaries are divided into two operational zones. Each zone is supervised by a Zonal Medical Officer (Zonal in-charge). The overarching leadership and coordination lie with the Over-all in charge ensuring synchronized clinical, logistical, and administrative operations.

Integration with Apex Hospital

One of the greatest strengths of dispensary network is its seamless integration with BARC Hospital. While managing primary and preventive care, they also act as referral points to specialized services. Online referral system, follow-up tracking, and cross-consultation mechanisms have improved the efficiency of patient navigation. This coordinated model not only reduces patient load at the tertiary level but also enhances continuity of care.

Achievements and Impact

Over the years, the Dispensary Services have made a measurable impact on the health indicators of our beneficiary community. The following are some key achievements: - Patient Footfall: Collectively, the 13 dispensaries manage a daily footfall of approximately 1500 patients, indicating trust and reliance among beneficiaries - Service Diversification: All the dispensaries offer NCD screening, antenatal checkups, immunization, and counseling services.

- Health Information Systems: Digitalization through platforms like HMIS has improved documentation and health data tracking.
- COVID-19 Response: During the pandemic, the dispensaries played a frontline role in screening, triaging, testing coordination, vaccination, and community awareness—demonstrating agility and resilience.
 Awards and Recognition: Some dispensary doctors have received academic recognition through award winning

research presentations in different conferences.

Challenges Faced

The Dispensary services have faced delays in staff recruitment and infrastructural constraints in older buildings, affecting patient comfort and storage efficiency. The growing burden of non-communicable diseases, and elderly care has required quick adaptation and staff upskilling. Explosion in the number of beneficiaries, increase in life expectancy, availability of plethora of advanced diagnostic modalities, and patients' increasing exposure to social media are throwing newer challenges to day-to-day dispensary practices.

The Present and Future

Today, all the 13 dispensaries function as modern primary care hubs, offering outpatient care, diagnostics, and preventive programs. Standard procedures and digital systems ensure consistent and coordinated service.

Looking ahead, Dispensaries aim to embrace medical advances, including AI, and adapt continuously to meet emerging healthcare demands while continuing to uphold the human touch that defines primary care.

Conclusion

From its inception under a tin shed to a sophisticated network of 13 vibrant primary health care centres serving over 80,000 beneficiaries, the evolution of BARC's Dispensary Services reflects a story of growth rooted in dedication, foresight, and commitment to community wellness. The base of the pyramid has been very strong and has helped the structure sustain itself. As we celebrate Golden Jubilee, we salute the countless healthcare professionals, administrators, and support staff who made this journey possible. Their contribution continues to uphold the ethos of primary care excellence in one of India's most mission-critical scientific institutions.

Acknowledgement

I express my heartfelt gratitude to Dr Usha Desai, Dr K. U. Jagasia, Dr P. Ajbani, Dr S. Ali, Dr I. Ghatikar, Dr C. P. Bongirwar, Mrs. Pramila Kamble, and Mrs. Bhagyashree Marathe. Their insightful inputs, especially regarding the early years of BARC's health care services, were instrumental in bringing this narrative to life. I am deeply grateful to our Head Medical Division Dr S U Nadkarni for entrusting me with the opportunity to document this remarkable journey and for her unwavering support, encouragement and insightful guidance throughout the process.



OVERALL IN-CHARGES OF DISPENSARY SERVICES: FROM THEN TO NOW (As per available records)



Dr Sayed Shaukat Ali 1995-Jun 1999



Dr Kanta U Jagasia Jul 1999-Jun 2001



Dr Asha Damodaran Jul 2001-Jan 2002



Dr Pushpa Ajbani Feb 2002-Jun 2005



Dr Pratima Vachharajani Jul 2005-Apr 2007



Dr Shobha Patkar May 2007-Mar 2008



Dr P R Bongirwar Jun 2008-Dec 2008



Dr Chitra Bongirwar Jan 2009-Jan 2010



Dr A V Kulkarni Feb 2010-Sep 2015



Dr V. Manjula Devi Oct 2015-May 2016



Dr Hemant Haldavnekar Jun 2016-Dec 2019



Dr Kanchan Bantwal Feb 2020-May 2024



Dr Rama Kumar Jun 2024-Jul 2024



Dr Mausumi Garain Aug 2024 till date



Half a Century of Smiles: Celebrating 50 Years of Dentistry at BARC

Dr Vanashree Saple

Department of Dentistry, BARC Hospital

This year, the dental department proudly commemorates 50 years of dedicated service, a remarkable journey that began in humble surroundings and has blossomed into a cutting-edge, fully digitized dental care system. From its origins at Sir Jamshedjee Jeejeebhoy (JJ) Hospital in 1966, this unit has consistently evolved, embodying a monumental shift in healthcare excellence and innovation

The Genesis of Care (1966-1976)

The dental unit's story commenced in 1966 with the arrival of Dr K. Munim (MDS,

Orthodontist) at JJ Hospital, followed shortly by Dr Porus Turner (MDS, Prosthodontist) in 1968, together forming the foundational core of dental specialists. A pivotal moment was the inauguration of Dental Anand Bhavan in 1966, the first dedicated dental dispensary that laid the groundwork for organized dental services. This early period also saw the commissioning of the modular laboratory in 1968, then India's second-largest diagnostic lab, integrating medical, pathology, and dental units to establish a truly multidisciplinary diagnostic infrastructure.

Establishing a Legacy (1976 Onwards)

In 1976, with the formal commissioning of BARC hospital, the dental department gained its first official head of unit, Dr S.K. Sahokar (MDS, Prosthodontist). He led a growing team that included:

- Dr M.P. Patel (MDS, Operative Dentistry)
- Dr K. Munim (MDS, Orthodontist)
- Dr Porus Turner (MDS, Prosthodontist)
- Dr Fernandis (BDS, General Dental Surgeon)

A significant figure in the department's early growth was Dr Fali Mehta (MDS,

Prosthodontist), who served as honorary chief dental officer. A close associate of Dr Homi Bhabha, Dr Mehta was instrumental in acquiring advanced imported equipment and materials, supported by other honorary specialists like Dr Fali Antia and Dr Modi, all of whom played crucial roles



Dr Vanashree Saple

in shaping the department's future.

A Century of Technological Strides

The BARC Dental Department has been at the forefront of adopting technological advancements, continuously enhancing patient care and operational efficiency:

- 1968-1982 Installation of hydraulic dental chairs marked the foundation of clinical operatory setups.
- 1975-1998 A significant transition from traditional IOPA X-ray films to digital RVG systems revolutionized diagnostics, improving speed and reducing radiation exposure.
- 1982-1994 The introduction of electric dental chairs with integrated ultrasonic scalers boosted operatory convenience and precision.
- 1984 BARC was among the first institutions to introduce a manual cassette-based OPG (Orthopantomograph) machine for panoramic imaging.
- 1994 Further upgrades to advanced electric dental chairs, featuring inbuilt endodontic systems and light-curing guns, streamlined restorative workflows.
- 2001-2008 The introduction and continuous use of physiodispensers supported the increasing demand for dental implant placements.
- 2004 RVG Radio Visio Graphy systems were upgraded from CCD to CMOS technology, offering compact size, low power consumption, and cost-effectiveness. Additionally, 7 more RVG units and X-ray machines were installed for immediate image capture and reduced exposure.



Intraoral periapical IOPA X-ray

- 2005–2011
- Comprehensive upgrades to the sterilization section included digitally programmed autoclaves, instrument washers, advanced ultrasonic cleaners, and heat-sealing machines introduced in 2011, all aimed at ensuring instrument sterility and patient safety.



Sterilization room



Instrument packing

- 2009
- A fully digital, automated OPG machine replaced the older manual model, further enhancing diagnostic capabilities.



Orthopantomogram
OPG Machine



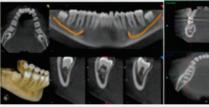
2D OPG View

- 2012-2020
- Older dental chairs were replaced with modern units boasting inbuilt endo motors, implant surgery compatibility, and enhanced ergonomic attachments. Dental Anand Bhuvan was also relocated, expanded, and renovated in 2012 with upgraded equipment like advanced sterilization equipment, ergonomic dental chairs, and digital x-ray machines.
- 2013
- The department embraced CAD/CAM (Computer-Aided Design and Manufacturing) systems for designing and manufacturing dental restorations and appliances, along with the addition of a wax 3D printer for prosthetic fabrication.



CAD/CAM Computer-Aided-Design and Computer- Aided- Manufacturing

The year also marked the introduction of the CBCT (Cone Beam Computed Tomography) system, providing high-resolution 3D dental imaging.







3D dental imaging

- · 2014
- The Dental Laboratory underwent a significant renovation, including the installation of 304-grade stainless steel furniture, integration of AHU (Air Handling Unit) systems, and the addition of dust extraction units for enhanced hygiene and safety.



BARC Hospital Dental Laboratory



Dental lab staff

• **2018**: Procurement of dental lasers (soft and hard tissue), enabling minimally invasive treatment techniques



Dental LASERs (soft and hard tissue)

• Recent Advances (2020–2025)

With rapid advances in digital dentistry, the department continued to modernize. In the year 2023, intraoral scanners and advanced resin-based 3D printers were introduced.

- 2020 Dental Modular Lab was renovated with upgraded equipment like advanced sterilization equipment, ergonomic dental chairs, digital x-ray machines and integrated compressor suction unit.
- 2023 Implementation of intraoral scanners and advanced resin-based 3D printers, transforming digital impression and modelling workflows.



Intraoral Scanner

Resin based 3D printer

· Continuous Room Expansion

Over the years, dental units underwent physical expansion from 2 rooms to 11 rooms along with spatial optimization to accommodate increasing number of patients, advanced equipment and ensure smoother workflow. In 2016, a new dental facility was launched at Kharghar with the latest technology and equipment Recently in 2025 dental lab at kharghar has been relocated, expanded and integrated with clinical setup to enhance patient convenience and comfort.

Modernizing for the Future

The department continues its commitment to modernization with rapid advances in digital dentistry. The staffing structure has also evolved to meet growing demands, now comprising seven full-time dentists, five part-time dental specialists, eleven dental lab technicians , five nurses, and eight full-time dental hygienists.

Looking ahead, BARC aims to remain at the forefront of global dental technologies while fostering in-house developments across administrative systems, technical equipment, and staff training.

A Legacy of Leadership in the Dental Department

The Dental Department has been shaped by a lineage of dedicated leaders:

- Dr. S.K. Sahukar (1976-1987): MDS, Prosthodontist
- Dr. K. Munim (1987-2001): MDS, Orthodontist
- Dr. M. Atre (2001-2016): BDS
- Dr. Mala Sankav (2016-2019): BDS
- Dr. Vanashree P. Saple (2020 onwards): MDS, Oral Medicine, Diagnosis & Radiology

A Commitment to Excellence

Over the past five decades, the dental department has truly transformed from a modest unit into a modern center of excellence in dentistry. This remarkable journey, characterized by continuous innovation, the dedication of its professionals, and a patient centric approach, underscores the department's unwavering commitment to delivering top tier oral healthcare. Currently, the department serves approximately 106,422 beneficiaries and manages a daily patient load of around 250 individuals. From the visionaries like Dr. Homi Bhabha and Dr. Fali Mehta to today's digital innovators, every step forward reflects a profound mission of quality, precision, and compassion. As we celebrate this significant milestone, we eagerly anticipate the next wave of advancements that will continue to shape the future of dental care.

Acknowledgements

The Dental Unit, BARC extends sincere gratitude to Dr. K. Munim, Dr. Porus Turner and Dr M. M Atre for their valuable inputs and guidance.



Dental Team



Journey of Department of ENT

Dr K. N. SalimathDepartment of ENT, BARC Hospital

The journey of the department of ENT began with a vision to provide comprehensive and specialized healthcare services for patients suffering from disorders related to ear, nose and throat as well as head and neck pathologies. Over the years, the department has grown in leaps and bounds, adapting to the changing healthcare landscape and incorporating the latest advancements in technology and treatment modalities.

Historical Background

In 1972, a small ENT unit was started in BARC wing in JJ Hospital, 3rd floor, main building as part of CHSS which then shifted to block A of BARC hospital in 1975. It was headed by Dr V. G. Shah and also guided by visiting ENT consultant Dr K. L. Shah.

- In 1994, the audiology and speech therapy unit started and is running smoothly under the guidance of Smt Harshada Tawde, a full time audiologist and speech therapist and one part time audiologist and speech therapist.
- In 1997, department shifted to its current place, block B of the hospital, headed by Dr Nalini Bhat, with Dr Pallavi Bhandarkar, ENT consultant and audiologist and speech therapist Smt Harshada Tawde being the other faculty.
- Department is accredited by National Board of Examinations in Medical Sciences (NBEMS), for DNB post-graduate training in otorhinolaryngology since 2007.
- After retirement of Dr Pallavi Bhandarkar in July 2025, Dr Lt Col K N Salimath (Retd) became the head of the department. Currently the department is having two full time ENT consultants, one full time audiologist /speech therapist and one part time speech and swallowing pathologist.

ENT And Audiology/Speech Therapy Services

The ENT (Otorhinolaryngology) department has evolved significantly over the years, transitioning from basic diagnostic and surgical care to a highly specialized field offering advanced medical and surgical interventions. The department has embraced subspecialties such as:

Otology - Dealing with ear disorders including hearing



Dr K. N. Salimath

loss, vertigo, facial nerve disorders and chronic ear infections.

Rhinology – Focusing on nasal and sinus problems, allergies, and endoscopic sinus surgeries.

Laryngology - Treating voice, airway, and swallowing disorders

Head and Neck Surgery – Managing head and neck tumours, thyroid disorders, salivary gland pathologies and facial reconstructive surgeries.

Paediatric ENT – Addressing ENT issues in children such as tonsillitis, adenoid hypertrophy, and congenital anomalies.

Audiology and Speech Therapy – Offering diagnostic and therapeutic support for hearing, speech and swallowing impairments in paediatric and adult age group.

Advanced Services

Today, the ENT department is equipped with sophisticated diagnostic and surgical tools such as:

- High-resolution microscopes and sophisticated drill systems for ear surgeries
- Endoscopic and powered equipment for minimally invasive nasal and sinus procedures
- Audiometric labs for hearing assessments
- Fibre-optic video laryngoscopy, stroboscopy and narrow band imaging for detailed nasal-pharyngeal -laryngeal examination
- Cochlear implant program for patients with profound hearing loss

These advancements have enabled quicker diagnosis, minimally invasive treatments, reduced recovery times, and improved patient outcomes.

Key Services

- Outpatient and Emergency Care -Management of ear, nose, and throat infections, foreign body removal, epistaxis management, acute airway obstruction management
- Surgical Services- Tonsillectomy, adenoidectomy, tympanoplasty and mastoidectomy, Functional Endoscopic Sinus Surgery (FESS), septoplasty, head and neck tumour excision, thyroid and salivary gland surgeries etc
- Audiology & Hearing Services -Pure tone audiometry, tympanometry, Otoacoustic Emission (OAE) and Brainstem Evoked Response Audiometry (BERA)screening, hearing aid trial and fitting, cochlear implant evaluation
- Speech and Voice Therapy -Voice rehabilitation pre and post-laryngeal surgery, therapy for speech delay or speech defects in children
- Swallowing therapy for neurological disorder patients
- Speciality clinics i.e. rhinology clinic, vertigo clinic and

thyroid clinic (run by ENT, surgery and medicine consultant jointly in ENT OPD)

Infrastructure and Facilities

- 1. Indoor admission for male, female and paediatric patients.
- 2. OPD area includes consulting /examination rooms, teaching room with temporal dissection lab
- 3. Minor operation theater equipped with microscope for ear procedures, fiberoptic flexible nasopharyngolaryngo-scope with stroboscopy and narrow band imaging for nasal and laryngeal cases diagnosis as well as evaluating post speech and swallowing therapy
- 4. Audiology and Speech therapy set up: Full-fledged acoustically treated double audiometry room providing facilities for pure tone audiometry, impedance audiometry, speech audiometry, hearing aid trials and speech rehabilitation, newborn hearing screening, occupational hearing conservation program. speech and swallowing therapy are conducted.
- 5. Common facilities shared are well equipped modern OT complex of 6 theaters with specialty equipment of ENT eg. High end operating microscope with teaching aid, state of the art endoscopic cameras systems with recording provision and modern CSSD





Human Resource

The department comprises a dedicated team:

- 1. ENT faculty 2 consultants (Dr K N Salimath, Head ENT dept and Dr Dhanashree Chiplunkar) trained and qualified from high volume centers with a rich surgical and teaching experience.
- 2. Full time audiology and speech pathologist Smt Harshada Tawde, experience of 30 years
- 3. Part time audiology and speech pathologist Smt Prachi Jadhav
- 4. Resident Medical Officers Three DNB students undergoing post graduate training in ENT, selected through PG- NEET.
- 5. Senior Resident 2 postgraduates (MS or DNB qualified) senior residents.

Academics

1. Department is accredited by National Board of Examinations in Medical Sciences (NBEMS), for DNB Post-graduate training in Otorhinolaryngology. Till date, 21 ENT residents have qualified as surgeons under our mentorship.

Response to Public Health Challenges

During public health crises like COVID-19, the department

- 1. Maintained essential surgical services.
- 2. Implemented rigorous safety protocols

3. Collaborated with other departments for resource management

Challenges

The department is involved at present in relocation of the department. Human resource constraints, constant advancement in Technology and keeping updated and procurement of the equipment remains challenging.

Vision and Way Forward

The Department of ENT aims to

- ·Expand services and specialties like neuro-otology evaluation of vertigo patients, swallowing disorders management, surgeries for obstructive sleep apnea, advanced techniques for speech and audiology therapy
- ·Empanelment of eminent experts for highly specialized surgeries for optimal utilization of hospital infrastructure, evolving niche areas in surgical sub-specialties, controlling CHSS expenditure while providing the standard of care, continuity of care, manpower training, overall upgradation of facilities and enhancement of DNB institutional ranking to attract merit.

The department's journey reflects a commitment to clinical excellence, academic rigor, and compassionate care. Through continuous training, research, and collaboration with multidisciplinary teams, it strives to remain at the forefront of patient care and medical innovation.



Journey of Physiotherapy Department

Dr Nutan Tiwari

Department of Physiotherapy, BARC Hospital

Celebrating 50 years of the physiotherapy department at BARC hospital is a milestone that reflects the department's evolution, achievements, and its continued impact on patient care and rehabilitation.

Physiotherapy is a vital branch of healthcare that focuses on optimizing physical function, promoting mobility, and enhancing quality of life. It plays a significant role across the spectrum of healthcare from prevention and treatment to rehabilitation and wellness. It is effective in treating both acute and chronic pain conditions such as back pain, arthritis, and fibromyalgia. Techniques like manual therapy, exercise, and modalities such as ultrasound and TENS can reduce pain and improve function without relying heavily on medications.

Rehabilitation After Injury or Surgery

After injuries like fractures, sprains, or surgeries (e.g., joint replacements), physiotherapy helps patients regain movement, strength, and function. It accelerates the healing process and reduces the risk of complications or reinjury.

Preventing Disease and Injury

Physiotherapists assess movement patterns and identify risk factors that could lead to injuries. Through targeted exercise programs and education, they help prevent musculoskeletal injuries and conditions like falls in the elderly.

Chronic Disease Management

For conditions such as diabetes, heart disease, stroke, and chronic obstructive pulmonary disease, physiotherapy is crucial. It helps patients improve endurance, reduce symptoms, and maintain independence.

Improving Mobility and Movement

People of all ages with mobility limitations, due to age, illness, or injury, benefit from physiotherapy. Techniques are tailored to restore range of motion, coordination, and balance, especially after neurological events like strokes or spinal cord injuries.

Supporting Women's Health



Dr Nutan Tiwari

Physiotherapists assist in managing conditions related to pregnancy, postpartum recovery, and pelvic floor dysfunction, significantly enhancing women's health and comfort.

Paediatric and Geriatric Care

In children, physiotherapy supports developmental needs and helps with conditions like cerebral palsy or muscular dystrophy. For older adults, it promotes independence, prevents falls, and helps manage age-related conditions like osteoporosis.

Mental Health and Wellbeing

Physical activity is linked to improved mood and reduced anxiety or depression. Physiotherapy encourages safe movement and exercise, positively impacting mental health and overall well-being.

Historical Evolution

Physiotherapy in 1977:

In the early years, physiotherapy relied on foundational equipment and manual techniques. Common equipment included:

Electrotherapy Devices: Ultrasound machines, TENS, and shortwave diathermy.

 $\textbf{Exercise} \, \textbf{Equipment:} \, \textbf{Pulley systems and shoulder wheel}$

Hydrotherapy Tools: Hot packs and paraffin baths.

Assessment Tools: Goniometers.

Working staff: Physiotherapy department came in existence when Dr Kalpana Godse joined as part time

physiotherapist in 1977 in JJ Hospital as a part of BARC hospital, and in 1978 she joined as permanent post and got retired in 2004. In 1979 Dr Geeta Bharathan joined for a span of one year and resigned.

In 1980s

Electrotherapy Devices: Ultrasound machines, TENS, and diathermy, electrical muscle stimulator.

Exercise Equipment: Pulley systems, mechanical exercise bikes, and parallel bars.

Hydrotherapy Tools: hot packs and paraffin baths.

Assessment Tools: Goniometers

Working staff: In 1981 Dr Neera Chadha joined and got retired in 2012.

In 1990s

Electrotherapy Devices: Ultrasound machines, TENS, and shortwave diathermy, electrical muscle stimulator, Cervical and lumbar traction

Exercise Equipment: Pulley systems, mechanical exercise bikes, parallel bars, suspension system, Rotatory bed

Hydrotherapy Tools: hot packs and paraffin baths.

Assessment Tools: Goniometers

Working staff: One part time post created in 1998.

In 2000

Electrotherapy Devices: Interferential therapy, Ultrasound machines, TENS, and shortwave diathermy, electrical muscle stimulator, Cervical and lumbar traction, scanning Laser.

Exercise Equipment: Pulley systems, static bicycle, parallel bars, suspension system(discarded), Rotatory bed (discarded)

Hydrotherapy Tools: hot packs and paraffin baths.

Assessment Tools: Goniometers

Working staff: In 2003 Dr Nutan Tiwari joined and in 2004 Dr Krishan Kumar Meena joined.

In 2011

Electrotherapy: Shortwave diathermy, TENS, NEMS, IFT, ultrasound therapy, scanning Laser therapy, shockwave therapy, Cervical and lumbar traction machine.

Exercise Tools: Isokinetic system, Resistance bands and tubes, balance discs, treadmills, therapy balls, recumbent bikes, Shoulder CPM, knee CPM, Hand and wrist CPM.

Thermal Therapy: Hot/cold packs, paraffin baths,

cryotherapy.

Manual Therapy Tools: Foam rollers.

Mobility Aids: Walkers, gait trainers, parallel bars.

Hydrotherapy Tools: hot and cold gel packs and paraffin baths

Assessment Tools: Goniometers, Balance board, Handheld dynamometer (muscle strength testing)

Working staff: In 2016 Dr Shruti Ajgaonkar joined.

In 2021

Today, the department boasts cutting-edge technology and a comprehensive suite of equipment, such as:

Electrotherapy: Shortwave diathermy, TENS, NEMS, IFT, Handsfree Ultrasound therapy, Robotic Laser therapy, shockwave therapy, Cervical and lumbar traction machine, Decompression system.

Exercise Tools: Isokinetic system, Resistance bands and tubes, balance discs, treadmills, therapy balls, recumbent bikes, Shoulder CPM, knee CPM, Hand and wrist CPM.

Thermal Therapy: Hot/cold packs, paraffin baths, cryotherapy.

Manual Therapy Tools: Foam rollers.

Hydrotherapy Tools: hot and cold gel packs and paraffin baths

Mobility Aids: Walkers, gait trainers, parallel bars with a dynamic stair trainer.

Assessment Tools: Goniometers, Balance board, Handheld dynamometer (muscle strength testing)



Shockwave Therapy



Handsfree Ultrasound Therapy



Interferential Therapy



Treadmill & Physio Ball



Multi Exerciser



Cervical Traction



Isokinetic System



Shoulder & Elbow CPM



Recumbent Bicycle



Spinal Decompression System



Robotic LASER



Cervical TractionParallel Bars + Dynamic Stair Trainer



Chronicles of Social Service Section

Smt. Asha Gaikwad , Smt. Sumitra Bhave
Department of Medical Social Welfare , BARC Hospital

The Atomic Energy Establishment Trombay's medical unit was set up at JJ Hospital in August 1965. Late Ms. A.K. Ahmed was the first medical social welfare officer (1965 to August 1986) and played a significant role in the growth of the department. Under the visionary leadership of Late Dr H.J. Bhabha, the Contributory Health Service Scheme (CHSS) came into existence. It is interesting to note that there was a gardener working in Homi Bhabha's department who was suffering from tuberculosis and often used to be absent from work. At that time, the hospital was in its nascent stage. This led Dr Bhabha to feel the need to take care of not only the employees but their families as well. His kindness resulted in the establishment of a benevolent fund to aid employees who were barely managing to make both ends meet, giving them rations and milk powder as aid.

In 1967-68, Ms. Ahmed gradually increased the strength of professionally qualified medical and psychiatric social workers from one to five. Their central role was referring the patients to concerned welfare organizations, and if required, to facilitate appropriate planning and community mobilization.

In 1967, a psychiatric section within JJ Hospital was constituted, which demanded placement of a full-time psychiatric social worker. As a result of increasing needs and services, eventually, eight dispensaries also became part of the organization.

In 1972, the Social Welfare Section started imparting education to the women in Deonar colony on baby welfare and overall health. Movies were procured from the Films Division of the Government of India, and were screened all year round at the school hall. Movies were also screened for primary and secondary school teachers under this awareness campaign.

The department also contributed actively towards the National Literacy Programme, and it ensured that departmental helpers were also a part of the Saksharta Abhiyan. This initiative resulted in a major accomplishment; employees who were previously unable to sign their names were now able to sign the cash payment



Smt. Asha Gaikwad



Smt. Sumitra Bhave

register with confidence.

Dr Smt. K. Mehta in 1987, helped the social service team to be associated with the Indian Cancer Society and audiovisual programs were conducted highlighting the fact that cancer is curable.

In 1987, family welfare programs at the macro level were emphasized heavily, which were carried out at the micro level in dispensaries. Beneficiaries were frequently followed up for the family planning methods adopted by them. Health talks, coupled with audio-visual presentations and film screenings, were organized in collaboration with the Family Planning Association of India at Indian Rare Earth venue.



TIMELINE OF INITIATIVES & CONTRIBUTIONS

15th August 1989 (Sausheelya Special School)

With the relentless efforts and persistence of Dr Patkar (Dept. of Psychiatry), along with Late Smt. Iyengar and late Smt Indira Lalchandani (social service) an initiative focused on providing education for children with special needs called Sausheelya Special School was born.



Sausheelya's Annual Day Programme

1990

Medical social workers along with medical officers were in the forefront and worked in coordination with MDACS (Mumbai District AIDS Control Society) for training programs for HIV modules.

Communication workshops for Group C and D employees were introduced to improve interpersonal skills.



Mental Well-being and Destigmatization

By 1994, de-addiction awareness took center stage. Joint efforts with Kripa Rehabilitation Centre and Asha Niketan helped spread crucial messages about drug abuse and alcoholism.

Inauguration of VTRC (Vocational Training & Rehabilitation Centre)

Vocational Training & Rehabilitation Centre (VTRC) was established in 2001, which addressed the needs of children with special needs.

 $Smt. \ Such it ra \ Joshi \ and \ Dr \ S. V. Patkar \ were \ actively involved in setting \ up \ Women's \ Cell.$



June 2003

Smt.Suchitra Joshi MSW & DrPatkar recognized the need to have creche facility for working women of DAE .With relentless efforts 'Kilbil' was established in the year June 2003 to create a child friendly environment, and to provide overall growth, innovation and social skills.





Poster on 'World Social Work Day 2025 -A journey of 50 years' DrPatkar explaining our posters

Medical Social Workers have always played a pivotal role by conducting regular post natal clinics, well baby clinics, T.B clinics, educational health talks and poster exhibitions at hospital & dispensary on various topics such as

tuberculosis, women's health/menopause to awareness on organ donation.

Smt.Padma Ranji (September 2004-August 2021) as MSW laid down Standard Operating Procedures in functioning, streamlining the work pattern and was a Member of BARC Women's Cell.



Smt. Padma Ranji, Women's Day 2011



Women's Cell Team



Smt. Aneeta Patil, senior MSW

Group work

Cancer support group, Alcoholics' wives group, Alcoholic Anonymous group, Alen-teen (Teenage children of alcoholics) support group, Widow support group etc.



Wives of Alcoholics Support Group



Widows Support Group



Dementia Caregivers Support Group



At the Antigen Camp

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AECS schools and colleges organized and conducted focused sessions on stress management, grooming, and social etiquette. These sessions were led by Smt. Padma Ranji, Smt. Sumitra Bhave, and Shri Shejy Joseph. They provided students with valuable guidance on navigating the pressures of social media and adolescence with resilience and confidence. Under the School Mental Health programme, Smt.Sumitra Bhave was actively involved in delivering lectures for parents during monthly visits to schools. Shri.Shejy Joseph conducted sessions for postretirement planning as well as awareness session on deaddiction for canteen employees.

Imparting knowledge to the next generations

Students from TISS (M.A Social Work) were supervised for the field work and students from Loyola College, Chennai were imparted training in medical social service.



Training of Student Social Workers from Loyola College, Chennai.

Covid-19

Under the leadership of Dr Anjali Kulkarni Head MD, and the Medical fraternity Smt Indu Fotedar took initiative in managing triage assessment, awareness in community frontline warriors, antigen camp, connecting with isolation centers and follow up with patients and networking with relatives and tele counselling, follow up with indoor patients during quarantine and vaccination drives at BARC hospital. It is noteworthy to put on record that 500 vulnerable patients were delivered medications at their doorsteps.



First Point of Contact Triage



Vaccination !!!



Awareness sessions for employees on sexual harassment at workplace at HBNI 2023

Smt.Rachal Cherian, MSWO (May 2023 to July 2024) took the initiative of coordinating with ATI and organized the DAE social workers meet, which was a milestone.

Smt. Asha Gaikwad, MSWO (2024 onwards) apart from clinical work, has assisted DNB students of psychiatry in

Smt.Rachal Cherian, MSWO (May 2023 to July 2024) took the initiative of coordinating with ATI and organized the DAE social workers meet, which was a milestone.

Smt.Asha Gaikwad, MSWO (2024 onwards) apart from clinical work, has assisted DNB students of psychiatry in data collection. She won a prize in poster competition on industrial safety 2021 and contributed an article on internet addictions published in BARC Newsletter 2022.

Social Service Section's vision is to remain committed to serve CHSS beneficiaries especially geriatric population by generating an independent e portal, enhancing tele counseling and reaching out to our vulnerable population.e is also the secretary, Family Relief Scheme since 2024.



Legacy of Medical Social Welfare Officers





The Journey of Medical Statistics Section

Shri Prashant Bhandarkar, Smt. Priti Patil

Medical Statistics Section, BARC Hospital

Overview

Medical Division, BARC caters to the healthcare needs of employees of DAE and their dependent family members under Contributory Health Service Scheme (CHSS). Currently, CHSS Mumbai has over 100,000 registered beneficiaries, including around 90,300 based in Mumbai and 17,405 from outstation DAE units. The medical division operates a 390 bedded multispecialty hospital along with 13 zonal dispensaries and 3 occupational health centres (OHC). Annually, around five lakh visits are recorded at dispensary and OHCs together, and over two lakh outpatient visits are recorded at various speciality clinics of BARC Hospital. Additionally, the hospital records around 13000 inpatient admission each year. If required, patients are referred to hospital on panel for advanced treatment.

The medical statistics section plays a vital role in both micro and macro level data analytics and research activities within the medical division. Unlike many healthcare institutions where computerization is driven by business or financial intent, case of medical division is not the same. The level of computerization, consistency in Hospital Information System (HIS) operations for more than 17 years has been the biggest strength which provides potential opportunities for public health research using retrospective HIS dataset. This article outlines the evaluation, important milestones, achievements, challenges and opportunities, and future directions of statistics section, in medical division.

The Early Journey:



Dr A. Seshan



Ms. Ratna Talreja



Shri Prashant Bhandarkar



Shri

Smt Priti Patil

The statistics section is as old as the BARC hospital main building, having been established in 1976. In the early years, the section was staffed by two statisticians and two data entry operators. Manual records of all the daily admissions and OPD and dispensary visits detail were maintained in the statistics section. Manually collected data from various sources was documented by the data entry operators. Over the year, based on inferential statistical reports, various specialty and super-specialty clinics, diagnostic facilities, and dispensaries have been added to the regime of medical division.

In pre-HIS era, data collection was driven by the specially designed statistical record slips from various service points. Maintaining such manual records was resource-intensive, requiring significant manpower. The process was also prone to limitations such as lack of cross-validation, data entry errors, and issues with incomplete or missing information.

Before present HIS, earlier system in BARC Hospital was in-house developed using Oracle and D2K technology. That system was available to use at limited service center. The statistical record was maintained centrally, despite no specialized software nor the basic training programs. With HIS, statistics section proposed innovative Management Information System (MIS), provided data support, and maintained the census of active CHSS population and various data activities.

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Milestones in last two decades

(i)Development of Management Information System (MIS)

Prior to the implementation of the Hospital Information System (HIS), data collection was primarily manual, unstructured, incomplete and inconsistent. The introduction of HIS marked a turning point, enabling a streamlined, robust data capture system that integrated various departments into a unified digital platform. This facilitated systematic and timely data entry across the hospital and dispensary network.

The statistics section utilized the raw data and drew all possible inferences for the management and proposed internal publication of the MIS report. The MIS reports provides important insights for health system of Medical Division. MIS report keeps the track of various services offered by medical division for their smooth functioning. These reports included a wide range of critical indicators such as the CHSS census, addition/deletion summary of CHSS beneficiaries, OPD-IPD attendance, panel referral details, diagnostic services utilization, ward occupancy statistics, doctor to patient ratio in dispensaries, vital statistics of CHSS population etc.

Reports were published internally on monthly, quarterly and annual basis. MIS report and background database are useful for audit queries and helped to reduce regular data requirements.

(ii)Bulk data posting in HIS and Medical Division Website

The next step was to ensure comprehensive updating of the CHSS beneficiaries' data within the system. The statistics section coordinated with computer center, BARC Hospital, facilitated the intermittent bulk data updates necessary to reflect the most current beneficiary information.

Bulk data for relative activity like identifying over age (> 25 years) ineligible child cases, death and other cases where person is seen active in HIS are identified by statistics section as per the requirement.

In addition to existing activities, the statistics section, in joint collaboration with computer center of BARC hospital design and developed the present version of medical division website as a part of the MIS activity. This intranet circular system is maintained by HMD Office for uploading daily circular and academic lecture schedule. This website has made the medical division services more interactive



Fig. 1: Project Proposal for Introduction of MIS Report in Medical Division

and informative.

(iii) Horizon Expansion and Capacity Building:

The statistics section gradually expanded its focus beyond operational analytics toward the research statistics further in the domain of public health research.

We attended our first clinical research program conducted by TMH in the year 2013 and subsequently completed the master's degrees and published our master thesis findings as peer-reviewed research articles. We started working on various important public health issues like as the burden of osteoarthritis of the knee, diabetic foot complications among CHSS beneficiaries; Knowledge, Attitudes, and Practices (KAP) related to tuberculosis, and COVID-19 vaccination uptake within the CHSS population.[1-4]

Section also collaborated with clinicians and other scientists to provide statistical guidance to them in designing, analyzing, and publishing their research in peer reviewed journals. These includes studies on surgical needs, cataract surgery needs, diabetic foot screening outcome study, breast screening related aspects and outcome of breast cancer survivors.[5-8] Scientific collaborative outcome is visible in biomarker study to identify cancer cases, breast screening studies, issues about domestic violence, inequality in cesarean section and so on.[9-14]

The section has presented its work and research at national conferences and scientific forums. Both the statistician have secured fellowship to participate in the National Cancer Grid (NCG) sponsored International Collaboration for Research Methods Development in Oncology (CReDO) program. They also excelled during masters with top rank in their respective batch and several similar accolades and awards.

Impact of this capacity building is visible with regular interaction with DNB student for their study protocol, sample size, selection of test, and research method. Similar support is extended to nursing staff, clinician and colleagues. The statistical section has addressed clinicians regarding data flow mechanism in HIS, data storage and retrieval, statistical analysis related topic. Token generation program, labour room record forms for infant are some of the tools developed by the department which are consistently in use since inception without additional cost.

(iv) Administrative and Accounts Supports

The statistics section plays a key supporting role in administrative and financial functions within the medical division. One of its routine responsibilities includes supplying the list of active CHSS beneficiaries to the accounts medical unit for computing per capita expenditure under CHSS. This data is crucial for financial reconciliation and cost recovery from various Public Sector Units (PSUs) under the Department of Atomic Energy (DAE). The section also assists in validating and reconciling beneficiary records to ensure the accuracy of financial transactions and inter-departmental settlements.

BARC Hospital is accredited by NBE for the conduct of DNB program; during the DNB reaccreditation various data regarding patient turnover is needed for each specialty and the section has provided requisite support for this. Radiation Medical Center, (RMC) also received accreditation for MD/MS program for which extensive data inputs were provided from the section. Live HIS data demonstration of patient visits data are given to the auditors as required. Divisional administration often needs the inputs of patient turnover in various services for contractual manpower and decision making which is provided by the section. Part-time dispensary doctor post is one of such decision taken in the past based on the analytical inputs from Statistics section. Pin code wise population mapping for newly inaugurated dispensary and estimation of catchment of potential beneficiaries for survey or studies are often being decided based on our inputs.

(v)COVID-19 Surveillance system

During COVID-19 pandemic, all possible efforts were taken for active patient surveillance. A dedicated COVID-19 surveillance mechanism was developed and managed by the section to support timely identification and reporting. Accurate and updated information on diagnosed cases, recoveries, and fatalities was collected daily from various formal and informal sources. This information was collated, validated, and communicated to the hospital authorities through daily reports for monitoring and strategic response planning. These surveillance reports played a vital role in ensuring informed decision-making by the hospital administration during the peak of the crisis. The collected data also formed the basis for research studies on COVID-19 trends among the CHSS population.

(vi)Present Status and Updates

The various tasks performed by the statistics section have grown tremendously over last two decades. Today, the section operates across two broad and vital domains namely Health System Studies and Public Health Research.

Health system studies include regular reporting, data validation, and analytics to support planning, monitoring, and decision-making while public health research contributes to academic and clinical research activities. The longitudinal dataset has enabled academic exploration. One of our doctoral studies is in the final phase and the other is due for academic registration. Obstacles and

Limitations

Statistics section is fortunate to have always received strong and supportive leadership.

However, we have also faced several challenges. One major issue was getting permission to pursue higher education, restrictions in doctoral studies initiation. Moreover, our work area is not clearly defined when it comes to departmental track changed promotions.

Statistics as a discipline is not recognized compared to fundamental sciences like physics, chemistry and other sciences. Another challenge is the lack of regular communication between statisticians and clinicians. Many times, valuable opportunities for working together are missed because our roles and support are not fully understood. This gap affects how effectively we can contribute to public health research and patient care improvements.

Road Ahead

We would like to expand our role by adopting advanced data analytics, machine learning, and predictive modeling techniques. These tools will help in identifying healthcare trends, forecasting disease patterns, and improving patient care planning within the CHSS system.

Conclusion

The statistics section of the medical division has come a long way - from keeping paper records to using computerized records and public health research.

Despite challenges, we stayed committed to the organizational agenda and aim to keep improving our work, support healthcare staff with reliable data, and help in research that can benefit our patients and the CHSS.

References

- Bhandarkar P, Priti P, Chander S, Nandan K. Prevalence of osteoarthritis knee: four year study based on digital records of comprehensive healthcare setup at Mumbai, India. Int J Community Med Public Health. Published online 2016:1049-1053. doi:10.18203/2394-6040.ijcmph20161356
- 2. Laiby R, Debjani P, Prashant B. Knowledge, Attitude and Practices Towards Tuberculosis: Study Amongst Urban Adults Visiting the Community Health Center. Int J Med Public Health. 2022;12(1):28-32. doi:10.5530/ijmedph.2022.1.6
- 3. Jadhav R, Reji L, Kulkarni A, Nair B, Sampatkumar L, Bhandarkar P. Experiences of Covid-19 Early Vaccination: A Survey-Based Study from the Community Healthcare Setup in India. Int J Med Public H e a l t h . 2 0 2 3; 1 3 (1): 37 41. doi:10.5530/ijmedph.2023.1.6
- 4. Patil P, Mishra S, Bhandarkar P, et al. The Burden of Diabetic Foot Ulcers in Urban India: A Community Healthcare Setup-Based Study. Indian J Endocrinol M e t a b . 2 0 2 4 ; 2 8 (5) : 4 9 4 4 9 9 . doi:10.4103/ijem.ijem_346_22
- Bhandarkar P, Gadgil A, Patil P, et al. Estimation of the National Surgical Needs in India by Enumerating the Surgical Procedures in an Urban Community Under Universal Health Coverage. World J Surg. 2021;45(1):33-40. doi:10.1007/s00268-020-05794-7
- 6. Nadkarni S, Patil P, Roy N, Bhandarkar P. Eight year longitudinal study of cataract surgeries in an urban

- Indian population. Int J Community Med Public Health. 2019;6(6):2514. doi:10.18203/2394-6040.ijcmph20192314
- 7. Deepa KV, Gadgil A, Bhandarkar P, et al. Is quality of life after mastectomy comparable to that after breast conservation surgery? A 5-year follow up study from Mumbai, India. Qual Life Res. 2020;29(3):683-692. doi:10.1007/s11136-019-02351-1
- 8. Sawhney R, Nathani P, Patil P, et al. Recognising sociocultural barriers while seeking early detection services for breast cancer: a study from a Universal Health Coverage setting in India. BMC Cancer. 2023;23(1):881. doi:10.1186/s12885-023-11359-3
- 9. Balla MMS, Desai S, Purwar P, et al. Differential diagnosis of lung cancer, its metastasis and chronic obstructive pulmonary disease based on serum Vegf, Il-8 and MMP-9. Sci Rep. 2016;6(1):36065. doi:10.1038/srep36065
- 10. Patil P, Sarang B, Bhandarkar P, et al. Does women's empowerment and their socioeconomic condition affect the uptake of breast cancer screening? Findings from NFHS-5, India. BMC Womens Health. 2023;23(1):7. doi:10.1186/s12905-022-02147-5
- 11. Ghoshal R, Patil P, Gadgil A, et al. Does women empowerment associate with reduced risks of intimate partner violence in India? evidence from National Family Health Survey-5. Solanki HK, ed. PLOS ONE. 2023;18(11):e0293448.

doi:10.1371/journal.pone.0293448

- 12. Ghoshal R, Patil P, Sinha I, et al. Factors associated with help-seeking by women facing intimate partner violence in India: findings from National Family Health Survey-5 (2019–2021). BMC Glob Public Health. 2024;2(1):25. doi:10.1186/s44263-024-00056-3
- 13. Dutta R, Tuli S, Shukla M, et al. Geographic and socioeconomic inequities in cesarean delivery rates at the district level in Madhya Pradesh, India: A secondary analysis of the national family health survey-5. Glob H e a l t h A c t i o n . 2 0 2 3; 1 6 (1): 2 2 0 3 5 4 4 . doi:10.1080/16549716.2023.2203544
- 14. Dutta R, Nathani P, Patil P, et al. State-wise variation and inequalities in caesarean delivery rates in India: analysis of the National Family Health Survey-5 (2019–2021) data. Lancet Reg Health Southeast Asia. 2025;32:100512. doi:10.1016/j.lansea.2024.100512



Department of CSSD: A Gamechanger!

Alwyn Rodrigues
In-Charge, CSSD, BARC Hospital

There is a saying in the field of Central Sterile Services Department (CSSD) "One can clean without sterilizing instrument, but cannot sterilize without cleaning."

It's been a long journey of CSSD at BARC hospital from main building basement to the recently shifted second floor of C block building. This department has seen many transitions in recent decade as a part of organizational update for better surgical care with infection control and meeting the advancement in medical field technologies throughout the world. From old equipment, manual autoclaves to latest state of art fully automated computerized steam, VH2O2 plasma, EO sterilizers, automated washer disinfectors, ultrasonic cleaners, processing machinery, with a team of highly skilled experienced professionals in this field; this journey has been stunning and interesting!

The vision of Head Medical Division about importance and need of a latest updated CSSD that will provide 100% sterile standard supplies and carry out instruments, linen, reprocessing effectively, implementing standards, for infection free procedures and consistent efforts of all hospital authorities landed into this latest state-of-art CSSD, constructed under new hospital building project.

How important is CSSD?

CSSD plays very important vital role in hospital functioning just like the heart and lung in human body. Surprised? Well then let's understand its functioning....

We know, the dirty or deoxygenated blood from body is collected by the heart and sent to lungs for purification with fresh oxygen and this purified blood is again pumped to all body parts, similarly, CSSD receives all used, dirty instruments, infected devices, materials, linen, etc. from user units like major operation theatres, ophthalmology OT, minor OT, wards, OPD's, ICCU, casualty, dispensaries, etc. and after cleaning, disinfection, packaging, sterilization processes, they are sent back to the users.

As medical field develops newer technologies, the complexity of instrumentation used for surgeries or procedures also increases, which makes the CSSD job very



Alwyn Rodrigues

challenging. These complex instruments are delicate, need to be handled very carefully, cleaned and processed in specified manner to avoid damage or unclean instrument.

To meet these challenges, our new CSSD is planned with unidirectional work flow to stop cross contamination and is equipped with latest EN-ISO standard sterilizers with world's fastest 24 minutes cycle processing VH2O2 plasma sterilizer, machineries and procedures that are necessary to meet NABH and International ICI standards.

CSSD is divided into three sections namely 1. Decontamination (cleaning) Area, 2. Preparation & Packaging (Sterilization) Area and 3. Sterile stores Area.

- 1. The decontamination area is where all the cleaning, decontamination, disinfection, drying by means of manual, mechanical (ultrasonic bath cleaner) and fully automated washer disinfector) machines and compatible medical grade cleaning detergents is carried out by trained staff. We use 100% bio degradable multi enzymatic solutions for manual, mechanical and in fully automated machines, followed by A 03, the highest level of thermal disinfection at 90°C. Heat sensitive instruments, devices are put into medical grade drying cabinet equipped with HEPA filters for further drying at 50°C.
- 2. Once the instruments, trays, devices, sets are cleaned and safe for handling, are sent to preparation & packaging area for checking, assembling, packaging, labelling and sterilization. Here the mode of sterilization of any item/instrument, device is decided as per the manufacturer's instructions and material compatibility

towards the sterilization process. Heat sensitive instruments, devices are sterilized in low temperature sterilizers (45-50°C) like ethylene oxide gas sterilizer and vapor hydrogen peroxide plasma sterilization, while heat resistant materials are processed in fully automated steam sterilizers at 121°C & 134°C. All these sterilizers are latest, fastest, most accurate, adhering to the most stringent standard (EN-ISO) in the healthcare industry.

3. The sterilized instruments, items, materials after processing are then stored in a dedicated restricted area of sterile stores, from where the material is issued to all users. A dedicated dumbwaiter system is installed between CSSD and main operation theatre to control cross contamination of major operation theaters.

While we cater on day-to-day basis to all our major users like main operation theatre, minor OT, wards, departments, OPD's, casualty, ICCU, LR, dispensaries etc., it becomes mandatory to follow standard operating procedures and quality checks at every step of reprocessing. The different types of standard chemical indicators, digital & analogue

gauges, machine processed printouts with critical parameters, biological indicators with highest stringent standards are used to monitor each and every step of the process for its compliances/failures if any. All these documents with sterilization logs are documented, and stored for minimum of 03 years for infection control, any future references, medico legal evidences, etc.

Currently, CSSD cater from 7 am to 9 pm daily, 7 days a week, 365 days a year non-stop to process hundreds of surgical instruments, dressing materials packets, gowns, linen etc. daily for which we consume 80 working manhours, more than 5,000 liters of water, 150 kw of electricity and much more for the smooth functioning of our hospital.

References

 IAHCSMM central service technical manual:2007 https://pubmed.ncbi.nlm.nih.gov/12267939/ EN – ISO norms



Decontamination and Washing Area



linen Folding Area



Sterilization Area



Instruments Preparation and Packaging Area



VH2O2 (PLASMA) Sterilizers



Instruments, Device Medical GradeDrying Cabinet

BARC अस्पताल — DAE की मूक जीवनरेखा

डॉ. दिनेश कुमार असवाल (पूर्व एसोसिएट डायरेक्टर, मेडिकल ग्रुप)

मैंने देखा है विज्ञान को, रेएक्टर की धधकती आग में। सुनाई दी है उसकी नब्ज़, साइक्लोट्रॉन की गूंजती छाँव में।

पर जब विज्ञान ने मौन बोला, और सेवा बनकर हृदय में डोला, तो वह रूप था, सहज उजाला, BARC अस्पताल का प्यारा उजाला।

यह कोई साधारण भवन नहीं, यह मूक तपस्या का स्थल है कहीं। जहाँ न कोई शोर, न कोई वाद, बस समर्पण की मौन परंपरा का संवाद।

तेरह डिस्पेंसरी — दीप बने, मुंबई भर में संकल्प तले। हर कदम पर भरोसा जगाएँ, DAE परिवार को जीवन दिलाएँ।

नब्बे हज़ार से अधिक जीवन, यहाँ पाते हैं स्वस्थ धारण। हर तीसरा वरिष्ठजनों में गिना, पर तन-मन से पूर्ण सुरक्षित बना।

मेडिसिन विभाग समझे रोग, लक्षण के पार पढ़े हर छोग। बाल रोग में कोमलता रचे, मासूम किलकारी फिर से बचे।

स्त्री रोग नवजीवन रचाए, हर पीड़ा में करुणा बसाए। ऑर्थो में टूटी हड्डी जुड़ती, चलते क़दमों में आशा जुड़ती।

ENT हर ध्विन को पहचाने, गला, साँस और श्रुति बचाने। नेत्र विभाग दृष्टि लौटाए, भविष्य की स्पष्ट राह दिखाए।

दंत चिकित्सा मुस्कान सजे, आत्मबल में उत्साह भरे। मनोचिकित्सा मन के द्वार खोले, अंधेरों में संवेदना बोले।



सर्जरी विभाग सटीक चले, जीवन की डोर को फिर से कसे। संज्ञाहरण हर पीड़ा हर ले, चुपचाप करुणा से भर दे।

पैथोलॉजी, रेडियोलॉजी साथ चलें, अंदर के संकेतों को पढ़ लें। नेफ्रो, यूरो, न्यूरो की रेखा, कठिन राहों को बनाए देखा।

ऑन्को-सर्जरी, गैस्ट्रो का ज्ञान, हर रोग से लड़े विज्ञान। यहाँ हर विभाग नहीं, एक साधना है, डॉक्टर नहीं, तपस्वी की भावना है।

यह अस्पताल एक व्रत समान, सेवा, समर्पण और विज्ञान का त्रिगुण ज्ञान। हर नर्स, टेक्नीशियन, स्टाफ बना, DAE के कर्मियों का मौन सना।

> पर हर साधना को चाहिए सहारा, कुछ सहयोग, कुछ उजियारा। प्रशंसा के शब्द, जोश दिलाएँ, नव ऊर्जा से पथ दिखाएँ।

दवाओं की खरीद हो शीघ्र, बीमारी न ले कोई दीर्घ। लेखा निपटान हो समय से, समर्पण ना थके व्यवस्था के भय से।

सहायक स्टाफ भी भरपूर हो, प्रशिक्षित, समर्पित, और दूरदर्शी हो। तभी यह मंदिर और ऊँचा होगा, सेवा का सूर्य और प्रखर जलेगा।

मैं नमन करूँ उन तपस्वियों को, जिन्होंने मंच नहीं माँगा, पर मंच पर खड़े वैज्ञानिकों को स्वस्थ रखा, तन से, मन से साधा।

BARC अस्पताल — तुम हो वह मूक जीवनरेखा, जो बिना बोले संजीवनी देता, और सेवा में राष्ट्रधर्म निभाता।



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