Month	Events	Place
	The Unified Payment Interface payment system was introduced under Digital India Scheme	HBCH, Sangrur
	A Capacity Development Centre (CDC) in Oncology donated by Power Grid Corporation of India (PGCI), was inaugurated by the Honorable Governor of Assam, Professor Jagdish Mukhi on July 1	BBCI
	The first patient in Varanasi was treated with Teletherapy on July 4	МРММСС
	The Institutional Ethics Committee (IEC) received approval for 2 years from the National Ethics Committee Registry for Biomedical & Health Research, Department of Health Research, MoHFW, GOI on July 7	(HBCH &)
	The HBCH was designated as a Covid testing centre in Varanasi from July 20	HBCH, Varanasi
July	The first Molecular Virology Laboratory in Assam was inaugurated by the Honorable health Minister of Assam, Dr Himanta Biswa Sarma on July 22	
	The WHO selected BBCI as its South-East Asia Regional Practice Network for Childhood Cancer Services (one of the four centres selected in India)	BBCI
	The state-of-the-art Digital Mammography machine was commissioned in Guwahati	
	The Flow Cytometry & Dental Prosthetic services were offered to patients	BBCI
	The first batch of students in TMH (and in India) appeared for the DM (Interventional Radiology) exams on July 27	ТМН
	The PET-CT scan services were commissioned from July 27	HBCHRC, Visakhapatnam
	All General patients of TMH, Mumbai were initially screened for Covid infection at the St. Xavier's ground from July 30.	TMH
	A dedicated ward for Hematolymphoid malignancies with facility for Stem Cell Transplant was inaugurated	BBCI
August	On the national Sadbhavna Day, TMC launched emotional support helpline services for cancer patients in Mumbai & Pune. It was called Can-Helper, a toll free number, in association with Cipla Palliative Care & Training Centre and the municipal corporations of Mumbai & Pune on August 20	TMC-TMH
	The first Brachytherapy Operation Theatre in Visakhapatnam was commissioned on August 24	HBCHRC, Visakhapatnam
	Directors TMC & ACTREC, Drs. RA Badwe & Sudeep Gupta published a significant study in the JAMA Network Open "that reduced treatment cost to breast cancer patients" on August 26	TMH & ACTREC (Navi Mumbai)

Month	Events	Place
August	All General patients of TMH, Mumbai were initially screened for Covid infection at the St. Xavier's ground from July 30. Full-fledged services at that ground were started from August 10	ТМН
	The Medical Intensive Care Unit (ICU) & High Dependency Unit (HDU) were inaugurated on August 31.	HBCHRC, Visakhapatnam
September	A Familial Cancer Clinic service was introduced for the first time in Assam	BBCI
	The Institutional Ethics Committees (IEC) for both hospitals in Varanasi were constituted	MPMMCC
	Director TMC, Dr. RA Badwe was appointed as visiting professor to the National Cancer Centre, Graduate School of Cancer Science & Policy, Korea till 31.08.2022	TMH-TMC
	Director, TMC Dr. RA Badwe was appointed on Board of Governors in the newly formed National Medical Commission of India from September 25.	
September 24, 2020	Demise of Secretary DAE (23.10.2015-17.09.2018) & Director BARC (2012-2015), Dr Sekhar Basu (20.09.1952-24.09.2020) in Kolkata due to Covid infection.	DAE-TMC
October	The First Stereotactic surgery was performed in North-East India	BBCI
	Director TMH, Dr. CS Pramesh was appointed on Board of Directors of the Union of International Cancer Control (UICC)	ТМН
	The first Population Based Cancer Registry (PBCR) in Varanasi was released on October 16	HBCH & MPMMCC
	The second surgical Operation theatre was inaugurated at the Visakhapatnam Port Trust hospital for HBCHRC on October 29.	HBCHRC, Visakhapatnam
	The Holistic service facilities for cancer patients were started at MPMMCC	МРММСС
	The introduction of first Electrical vehicle to transport patients between HBCH and MPMMCC	HBCH & MPMMCC
	The eighteen (18) bed St. Jude Child Care Centre was started at MPMMCC	МРММСС
November	Separate Out-patient and Day-care facilities were initiated from November 2	HBCHRC, Visakhapatnam
	TMH started admitting Covid-19 patients in the Indian Cancer Society (ICS) premises from November 7	ТМН
	A 3T Magnetic Resonance Imaging (MRI) was commissioned on November 11	HBCHRC, Visakhapatnam

Month	Events	Place
November	The Chief Minister of Uttar Pradesh, Shri Yogi Adityanath lauded the efforts of MPMMCC in providing cancer services to the local population	МРММСС
	Process for constituting the Institutional Ethics Committee for Sangrur initiated.	HBCH, Sangrur
December	The Institutional Ethics Committee (IEC) in Visakhapatnam was established.	HBCHRC, Visakhapatnam
	A first SPECT-CT in Visakhapatnam was commissioned on December 8	Visakiiapatiiaiii
	A MoU was signed between TMC & Vietnam National Cancer Hospital, Hanoi for a period of 2 years for collaborative exchange of students, research and cancer management on December 17	ТМС-ТМН
	A MRI was commissioned at MPMMCC by head of department of Radiodiagnosis, Dr Suyash Kulkarni on December 18.	МРММСС



Understanding (MoU) between HBCHRC and the Central Reserve Police Force (CPRF), and with the Naval and the Dockyard employees was underway.

The year of the onset of Covid pandemic saw a decline of annual total patient registration by 21% to below 7,000. However, the number of admissions and patients receiving radiotherapy increased due to augmentation of the facilities and the introduction of newer modalities in 2020.

Of the total registered patients, 56% made use of the Ayushman Bharat subsidized healthcare scheme.

A committee was constituted to supervise and implement Covid safety protocols, testing and other aspects, to contain the spread of Covid in the Hospital. There was regular Covid testing for the staff and patients. The Covid testing was performed after approval of the Indian Council of Medical Research (ICMR) and the State government authorities. A Fever Clinic was established to isolate those with signs and symptoms suggestive of Covid infection. The staff and patients were made aware of measures to reduce the risk of Covid infection and, safety kits were distributed to the patients.

Almost eighty staff members and more than seventy cancer patients were afflicted with Covid infection in the year 2020; all of them recovered.

Despite the Covid pandemic, the centre introduced newer facilities under appropriate safety measures. On the centre's formation day (June, 2), the doctors and nurses residential accommodations were inaugurated. The Microbiology department was fully equipped and functional in the year 2020. The Preventive Oncology and Radiodiagnostic services were relocated to the Radiotherapy (RT) Block. Brachytherapy treatment in a new Operation Theatre was commissioned. Inpatient admission facilities were started for those requiring radiation and/or chemotherapy. The first Magnetic Resonance Imaging (MRI), Positron Emission Tomography Computed Tomography (PET-CT), and a Single-Photon Emission Computerized Tomography (SPECT-CT) were commissioned in the latter half of year 2020.

The Dr Nandamuri Taraka Ramarao (NTR) University of Health Sciences AP granted four (04) seats for the masters' degree (MD) course in Radiation Oncology.

A certified Basic Life Support course for the nursing staff was undertaken in December 2020.

The Institutional Ethics Committee was constituted that was approved by the Central Drugs Standard Control Organization (CDSCO), Ministry of Health & Family Welfare, Directorate General of Health Services, Government of India.

#### Assam



In the pandemic of corona virus disease, the year 2020 brought about a 29% reduction in the total number of patients registered at Dr. B. Borooah Cancer Institute (BBCI) as compared to the year 2019. Thirty-eight percent (38%) of those registered, availed of the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) scheme and the Atal Amrit Abhiyan (AAA) scheme of the Assam government. During the Covid-19 lock-down period, 5000 patients were provided teleconsultation.

To further benefit the patients, a patient facilitation centre was established at MPMMCC to offer them holistic assistance with quality cancer care.

A free electronic vehicle service was also introduced to ferry patients between HBCH and MPMMCC.

In the year 2020, among all the TMC cancer hospitals, Varanasi had the maximum number of newly appointed staff of 115 in a total of 239. The maximum number of staff members who resigned (25) were from Varanasi, out of a total number of 44 who retired from all the TMC hospitals across India.

The new officials appointed included; Dr Shashikant CU Patna, as Dean Academics for HBCH & MPMMCC; Dr Durgatosh Pandey as Deputy Director, MPMMCC; and, Dr Bal Krishna Mishra as the Deputy Director HBCH.

The Institutional Ethics Committee (IEC), Varanasi received approval for 2 years from the National Ethics Committee Registry for Biomedical & Health Research, Department of Health Research.

The HBCH & MPMMCC obtained affiliation from Mahatma Gandhi Kashi Vidyapith, Varanasi to start paramedical and Post-Graduation medical courses.

A Memorandum of Understanding (MoU) was signed by Director, Dr Satyajit Pradhan with Nagar Nigam Varanasi to organize cancer awareness & screening program for the Varanasi Nagar Nigam employees at Varanasi.

## **Maldives**

As and when required, help was provided to the Ministry of External Affairs for setting up of the 100-bed cancer hospital in Hulhumale, Maldives under the Line of Credit (LoC) extended to Maldives in the year 2019.

# **National Cancer Grid**



The National Cancer Grid (NCG) was the largest cancer network with more than 230 members.

Since the beginning of the Covid-19 pandemic, the NCG took the initiative to help all the member centres to provide periodic updates on various aspects of Covid-19, including the overview of SARS COV-2,

judicious use of PPE, testing methods, treatment of Covid-19, sero-immunology, psycho-social issues, public health implications, the role of nurses, administrator's role, vaccines, research priorities, and patient's perspective.

The National Health Authority signed a Memorandum of Understanding (MoU) with the NCG to incorporate essential and optimal guidelines in the Pradhan Mantri Jan Ayogya Yajana (PMJAY) scheme for cancer packages to facilitate preauthorization and claims.

Enabling patients to become the owner of their health records was one of the objectives of the NCG for the National Digital Health Mission.

3. Evidence Based Management of Cancers in India: Guidelines for Current Concepts and Controversies in Palliative Medicine (Part C).

The EBM 2020 adopted the Go Green initiative, using eco-friendly merchandise and reducing the use of paper and disposable plastic whenever possible.

The **Hospital Day Oration** was given by Dr Roger Stupp on "Management of glioma: Translating evidence into meaningful treatment and care."

Over 170 medical observers from India and abroad visited the cancer hospitals under TMC.

The **Foreign students training** programs included:

Training	2020
TMC Merck Fellows	10
Indo African Foreign Summit Fellows	00
Myanmar Candidates	12

Over 170 medical observers from India and abroad visited the cancer hospitals under TMC.

A Memorandum of Understanding (MoU) would be signed between Tata Memorial Centre (TMC) and the Vietnam National Cancer Hospital (VNCH) in Hanoi for student exchange programs, research & educations collaborations, and sharing of cancer management intelligence in the first week of January 2021.

#### Research

The Institutional Ethics Committees (IECs) that was recognized nationally and internationally ensured the highest scientific and ethical standards of research at Tata Memorial Centre. There were five IECs; two in TMH, and one each at ACTREC, Varanasi, and Visakhapatnam. The sixth IEC was due to be constituted for Sangrur in the year 2021.

The majority of laboratory, animal and clinical researches were conducted at ACTREC. In the year 2020, there were six hundred thirty-six (636) research projects, of which, ninety-two (92) were dissertations by students of HBNI.

The TMC provided financial support for research studies through the grants available from DAE and more than 50% of the projects were funded.

## The International Peer Review

The International Peer Reviews became part of evaluation of TMC's aim for excellence, and to maintain the highest standards for cancer management in the world. The first such review was held in the year 2011 and the second in 2016. The third International Peer Review would be conducted in two parts; the first part in the first half of year 2021 and the next, in the second quarter of 2022.

# **Ethics Committees**

Regulatory boards were in place since a very long time at every reputed pharmaceutical company to monitor the efficacy and safety of their drugs and its side effects. The concept of introducing regulatory board in hospitals originated from the lack of guidelines for performing abortions in the US around the 1960s. Slowly, the concept was introduced to include daily hospital practices. Other nations too followed; and after 1980, many countries started introducing ethical or regulatory committees to look after patient safety, both, when under the course of routine treatment and, when included for medical research studies. Many countries established these committees in their hospitals to suit their political and/or religious principles as well.

The first such committee formed at Tata Memorial Centre (TMC) was the Human Ethics Committee (HEC) in the year 1996. Next year (1997), the Hospital Scientific Review Committee (HSRC) was constituted. In the year 2012, the HEC and the HRSC were merged to form the Institutional Review Board (IRB). The IRB was renamed as the Institutional Ethics Committee (IEC) in 2013.

The mandate of Institutional Ethic Committees was to oversee and monitor ethical aspects of research projects only; mainly related to informing the patients in detail about the nature and purpose of the research study, their approval with full understanding in the language they could comprehend, and ensuring their safety during the course of such research trials. To this end, there was a separate division under the IEC called the Data Safety & Monitoring Unit (DSMU). The other responsibilities of the IECs included: maintaining the highest standards in clinical research; to formulate institutional policies & guidelines for clinical trials; to have quality control measures on the data and its analyses; and, to be at the forefront as the Indian standard of reference in cancer management.

The ethical and safety aspects of routine daily and day-to-day management were under the purview of the Office of the Medical Superintendent.

As research was one of the three mandates of TMC's policy, many individual IECs were constituted. There were two IEC in the Tata Memorial Hospital in Mumbai; IEC-I and IEC-II. At ACTREC in Navi Mumbai, there was IEC-III. The Homi Bhabha Cancer Hospital and the Mahamana Pandit Madan Mohan Malaviya Cancer Centre in Varanasi were governed by a single committee, the IEC-Varanasi from the year 2019. The fifth IEC formed under TMC was at the Homi Bhabha Cancer Hospital & Research Centre in Visakhapatnam, late in the year 2020 and was named IEC-Vizag.



# TMH & ACTREC, Mumbai

#### **Activities:**

- The support, training and guidance for constituting the Institutional Ethics Committee at TMC's Homi Bhabha Cancer Hospital & Research Centre, Visakhapatnam. The IEC was functional from September 2020.
- Continued support to IEC at MPMMC & HBCH, Varanasi for day to day functioning of IEC and financial support to the projects.
- · Implementation of Phase II of the IRB portal.
- Processing Grant applications for Terry Fox International Research awards.
- Quality Improvement plans Audits of functioning of IEC-I, II, III and research projects at regular intervals.
- Financial support was granted for sixteen (16) research projects.

#### **Future Goals:**

- Phase –III of IRB Portal for research projects life cycle
- Implementing IRB portal for online project submission to satellite centres like Varanasi,
  Visakhapatnam and Sangrur
- · The quality control program for research projects
- To monitor the progress of research studies supported by institutional funds
- · To develop online education models for researchers and staff
- · Capacity building for Scientific and Ethical review process.

# MPMMCC & HBCH, Varanasi

The IEC of MPMMCC & HBCH was established in September 2019 as per the New Drugs and Clinical Trial Rules, ICMR and ICH-GCP guidelines. The IEC of MPMMCC & HBCH was constituted by the Director, MPMMCC & HBCH under the authority vested by the Governing Council of Tata Memorial Centre.

The committee was registered with National Ethics Committee Registry for Biomedical and Health Research, Department of Health Research vide registration no. EC/New/INST/2020/822 on 7th July, 2020 and was valid for 2 years.

# **Training:**

SOP training sessions for IEC members and investigators was arranged in October 2019.

#### **IEC Performance:**

The committee conducted ten (10) full-board committee meetings in 2020 for meticulous scrupulous examination of the scientific and ethical contents of submitted projects, owing to which sixty-six (66) new projects in 2020 and seven (07) projects from 2019 were examined. The entire spectrum of studies involving human subjects including epidemiological studies, biological studies on human tissues, retrospective audits, Pharmacokinetic studies and human clinical trials using drugs or additional invasive intervention were discussed and approved by the committee.

# **Future steps:**

To further reduce the carbon foot-print by being more paperless for all kinds of communications to and from the IEC. TRAC would launch a web portal (https://iecportal.org) for online submission, review, and tracking status of research projects from January 2021.

# **HBCHRC**, Visakhapatnam

The IEC of HBCHRC was reconstituted on November 2020 as per the New Drugs and Clinical Trial Rules, ICMR and ICH- GCP guidelines. The IEC of HBCHRC is constituted by the Director HBCHRC under the authority vested by the Governing Council of Tata Memorial Centre.

The committee was registered with National Ethics Committee Registry for Biomedical and Health Research, Department of Health Research vide registration no. ECR/1370/INST/AP/2020 and was valid until April 2, 2025.

# **Training:**

SOP training sessions for IEC members and investigators was arranged in September 2020.

# **IEC Performance:**

The committee conducted two (02) full-board committee meetings in 2020 for meticulous scrupulous examination of the scientific and ethical contents of submitted projects, owing to which four (04) new projects in 2020 were examined. The entire spectrum of studies involving human subjects including retrospective audits, and human clinical trials using drugs or additional invasive intervention were discussed and approved by the committee.

#### **HBCH**, Sangrur

The process for establishing Ethics Committee for HHBCHRC Sangrur was initiated in November 2020. The members being identified and their CV and training records collected to find suitability for the inclusion.