

Vision: 2030

Pandya Shashank J

Director, Professor & Head of Surgical Oncology

The Gujarat Cancer & Research Institute, Asarwa, Ahmedabad, Gujarat, India.

Corresponding Author: shashank.pandya@gcriindia.org

 <https://orcid.org/0000-0002-8432-4293>

About GCRI:

Foundation of M.P. Shah Cancer Hospital was done as a 50 bedded hospital by Gujarat Cancer Society in 1962. Thereafter in the year 1972, Govt. of Gujarat converted this hospital into an Autonomous Body through a tripartite agreement between Govt. of Gujarat, Gujarat Cancer Society and a new body called 'The Gujarat Cancer & Research Institute (GCRI)' with 100% Grant-in-Aid from Govt. of Gujarat. In view of the availability of comprehensive cancer facilities in the Western Part of India and progress made by The Gujarat Cancer & Research Institute, Ministry of Health & Family Welfare Govt. of India has recognized this Institute as 'Regional Cancer Centre' in the year 1981 and finally promoted to "State Cancer Institute" in the year 2015.

Cancer Statistics: Cancers is among the leading causes of morbidity and mortality worldwide, as per GLOBOCAN report approximately 19.3 million new cases were reported in 2020 and this number is expected to reach 21.5 million by 2030. In India, cancer prevalence is 70-90 cases per one lakh population. As per reports, number of new cancer cases in India will rise to 25 lakhs by 2030. Cancer has become one of the ten leading causes of death in India and approximately 6.8 lakh deaths occur annually due to cancer. Data from Ahmedabad urban cancer registry indicates that the prevalence of cancer among male and female is 116 and 85 cases per one lakh population respectively.

By 2030, cancer burden will rise extensively, and therefore there is need to formulate and organise to overcome the forthcoming problem. With this vision GCRI have started to upgrade our institute on following points:

- **Manpower:** We have started many new medical and paramedical courses like DM Oncopathology, MD Palliative Medicine, increase in seats of MCH Gynec Oncology, Msc in Medical Physics, Postgraduate Diploma Medical Laboratory Technician (DMLT), Certificate Course in Medical Radiotherapy Technology (CMRT). We are also planning to add many courses like DM

Paediatric Oncology, MCH Head & Neck oncology, DM in Haematology, MD/DNB Nuclear Medicine and many more. Along with this our efforts are continued to increase our hospital manpower to cater rising demand of cancer care.

- **Beds:** We are already in process of increasing our bed strength from 650 beds to 1000 beds.
- **Technologies:** Shortly, "**New Operation Theatre (OT) Complex**", comprising of 19 Modular high-end OTs will be operational at GCRI. These OTs will be having all high end and state of art technologies and in future newer facilities like robotic surgery, Intra operative radiotherapy and Hyperthermic Intraperitoneal Chemotherapy (HIPEC) facilities will be introduced.
- **New technologies** will change the way doctors treat and interact with patients over the next decade. Experts predict artificial intelligence (AI) will soon be used to help inform clinicians on the best treatment plans for each individual patient, instead of "waiting a few months" to see how a patient responds to a treatment - especially when "some patients don't have that time."
- **Radiation Oncology** has seen 120 years of development from deep X-Ray therapy to High End machines (with special techniques like IMRT, IGRT etc.), mainly to treat target tumour and spare normal tissues. As Cancer survivors are increasing all over the world and with that patients are increasing with years lived with disability due to cancer. Looking to Proton therapy treatment – which have been accepted worldwide with main advantage of its physical and radiobiological properties like NO EXIT DOSE, and reduction of clinically observable undesirable side effects. Its main use is in paediatric tumors and for the targets which are nearby critical structures. Currently we have state of art equipment's like Cyber Knife, Tomotherapy which only few institutes have at national level. We will continue to procure new technologies and machine like Proton Therapy, Cyclotron machines and many more to provide recent cancer care at GCRI.

- Screening activities: From decades, GCRI is doing cancer screening activities throughout the Gujarat state as community outreach activity, however in next decade we will priorities our in-house cancer screening and cancer awareness activities. Oral, breast and cervical cancer forms almost 50% of cancer load of GCRI cancer cases. Moreover, all these cancers can be easily screened and identify in their early stage which will make our efforts more effective. We are also planning to start liquid-based cytology with HPV DNA testing for cervical cancer screening, which will increase sensitivity of the screening method.
- Targeted treatment: Traditional chemotherapy has long been a standard treatment in cancer care. But it's increasingly taking a back seat to a more precise and personalized approach, called targeted therapy. GCRI will also incorporate personalised and targeted approach as more and more such treatment will be available.
- Molecular Diagnostic Testing: Currently the molecular diagnostic services at GCRI is being managed by using PCR and RT-PCR technology and are being performed in several solid and liquid malignancies such as lung cancer, breast cancer, brain malignancies, hereditary breast and ovarian cancer and blood cancers along with HLA typing for bone marrow transplantation. Since the current era demands a need to stratify individuals who are at a higher risk for development of cancer, and for personalized medicine of diagnosed cancer, the implementation of “Next Generation Sequencer platform” will contribute remarkably with the clinical demand in identification of actionable molecular diagnostic, prognostic, and therapeutic targets at gene level and provide meaningful knowledge to unravel the genetics of disease, diagnostic and treatment strategies to a new level.
- Accreditation: GCRI hospital is accredited with entry level NABH and all laboratories of GCRI are NABL certified. We are working towards full NABH certification which will enable the organisation in demonstrating commitment to quality care.
- Holistic and integrated approach: Cancer treatment is a multimodality treatment; our prime focus will be to provide integrated and holistic health care to cancer patients. Increased efforts will be given to have a team-based approach in managing cancer care.
- Research: More efforts will be given on research and academic activities. Staff and students will be encouraged to have newer research projects. In this digital era, we are also working to make GCRI digitalised and to strengthen telemedicine services which will promote research and academic activities manifold as well as will reduce patient’s follow-up visits respectively.
- Providing comprehensive cancer care at our satellite centres – Siddhpur Cancer Care Centre-Siddhpur, Saurashtra Cancer Care Canter - Rajkot and Bhavnagar Cancer Care and Research Centre - Bhavnagar.

**I alone will not be able to complete this vision on my own,
I will need help of each GCRI staff to achieve this vision.
I believe, if we work together as “Team GCRI”,
We can represent our institute as one of the
Best Cancer Treating Institute on International level.**

*Dr. Shashank J Pandya
Director, GCRI*