

CANCER SCREENING IN INDIA

Cancer screening is a complex public health initiative requiring a highly organized framework for effective implementation. Screening aims to detect early preclinical cancer and/or precancerous lesions in an asymptomatic population. Screening is mainly categorized into two types - opportunistic and population-based screening. Opportunistic screening occurs without a structured invitation and is offered based on health professionals' recommendations or self-referrals, while population-based screening uses a systematic approach to reach the majority of at-risk individuals as outlined in the national screening programme. The programme has a mechanism to send personal invitations to eligible individuals to attend the screening. Population-based screening may be implemented nationwide (preferably) or regionally.

A large-scale, population-based screening programme is a resource-intensive strategy since it involves inviting and testing several thousands of apparently healthy people using a suitable screening test and referring screen-positive individuals (usually 2-10% of the screened population, depending on disease prevalence and efficacy of the screening process) for diagnostic confirmation, treatment and follow-up care. Therefore, successful implementation of screening programme requires effective governance and intersectoral coordination, considerable financial and human resources, an efficient information system to be able to invite eligible individuals and track the screen positives and a robust system of quality assurance based on measurable indicators.

The Government of India (GOI) adopted a policy in the year 2010 to implement breast, cervical, and oral cancer screening by clinical breast examination (CBE), visual inspection with acetic acid (VIA), and oral visual inspection (OVI) respectively through the National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS). Initiated as a pilot in the year 2010 covering 100 districts across 22 states of India, this programme was scaled up in a phase-wise manner across the country. To increase coverage and bring these services closer to the community, GOI launched population-based screening for NCDs in 2016 targeting all individuals aged 30 years and above.

The revised programme included community-level interventions like health promotion, assessment of risk factors, and mobilizing communities for screening mainly through community health workers known as Accredited Social Health Activists (ASHAs). Screening was planned at sub-centers (SC) and primary health centres (PHC) in rural and urban areas, and referral to higher centres for further treatment. Upgraded In 2018, the Government of India upgraded the healthcare facilities and expanded the range of services through Ayushman Arogya Mandir (AAM) and Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana AB- PMJAY for secondary care . In 2023, GOI launched revised operational guidelines of the programme (NP-NCD 2023-30) having a focus on primary and secondary prevention and clinical support for NCDs.

While the central government issues program policies and guidelines, the final responsibility to implement the NCD control programme lies with the state governments. The central government provides technical and financial support for the activities at primary and secondary levels of care in each state and monitors and evaluates the programme through NCD cells set up at national, state, and district levels.

Despite a comprehensive NCD screening programme in India since 2010, very little has been achieved on the ground. The latest National Family Health Survey (NHFS 2019-21) demonstrated that of the total female population aged 30 to 49 years, only 1.9% of women reported being ever screened for cervical cancer and 0.9% reported being ever screened for breast cancer. The proportion of 30-49-year-old males reported to be ever screened for oral cancer was only 1.2%. The southern states of Tamil Nadu and Kerala showed significantly better screening participation compared to all other states in India. Reasons for low screening uptake include inaccessible screening facilities, lack of cancer awareness, prioritised household and work responsibilities as well as day-to-day earnings. In the western world, screening participation varies from 70% to 95%. In Netherland participation to the cancer screening programmes is relatively high with 76.0% participating in breast cancer screening

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and 71.8% in colorectal cancer screening. Participation in a screening programme means the registration for a screening test as part of the national screening programme after sending screening invitation. We use the term concurrent participation to mean participation in all three programmes following invitation at the same age.

There are several reasons for the poor performance of the National screening programme. The pilot launched in 2010 in more than 100 districts was a good opportunity to document and understand the ground-level implementation challenges. Unfortunately, the pilot was never evaluated and no report was published. Several attempts were made to change the organization of the programme without addressing key issues like governance, coordination, monitoring and evaluation etc. The protocol itself was not evidence-based even though major randomized trials evaluating VIA screening for cervical cancer, CBE screening for breast cancer and OVE screening for oral cancer have been implemented in India. There is no evidence that visual screening for oral cancer is effective in persons who are not habitual users of tobacco and/or alcohol. NCD screening identified the key challenges in implementation due to a lack of adequate healthcare personnel, staff overburdened with other routine activities unaware of their roles in cancer screening and a lack of clear guidance on the referral pathway. Despite a significant move towards upgrading the infrastructure to provide required services at HWCs, lack of medicine, and consumables, absence of tracking of patients, missing community participation and not having funds on time were major deficiencies. Though cancers were included in the comprehensive NCD screening, cancer screening was observed to have low priority compared to other NCDs in many districts. There was no protocol for quality assurance (KPI) in the Indian screening programme. Screening was done once but screening is a process that needs to be repeated on the same population. There were no KPIs to estimate the number of cervical precancers detected and treated. The programme leaders at the national level needed to pay attention to these huge deficiencies in the programme. The screening programme in the state of Tamil Nadu incorporated a health information system developed by Tata Consultancy Services tailored to monitor cancer screening from the pilot phase. The pilot project implemented in the two districts of Theni and Thanjavur achieved coverage of 74 % of the targeted women. But the major shortcomings were in the care continuum as only 50% of the cervical cancer screen-positive women underwent colposcopy, only 13% of women

requiring treatment received it through the programme. An integrated approach and a strong monitoring system are essential for the successful implementation of the program and for achieving universal healthcare for all.

Strategies to be adopted by India for effective cancer screening

Organised cancer screening should be offered to healthy people if the screening is proved to decrease-specific mortality and or decrease the occurrence of advanced disease, if the benefits and risks are well known, and if the cost-effectiveness of the screening is acceptable. The strategies which need to be adopted for effective screening include

1. Introduction of new cancer screening devices.
2. Human resources, need to be strengthened.
3. Promoting more awareness campaigns.
4. Monitoring and Audit of different programmes.
5. Household surveys, population-based cancer registries. Establishing mobile screening units for common cancers like breast, cervical, and oral cancers to reach remote and under served populations.
6. Integrating cancer screening programs with already existing public health programs and strengthening the tele-medicine infrastructure.
7. Implementing the developed national cancer control programs effectively so that they are cost-effective, inclusive of all age groups, have sufficient resources, oversight, and responsibility.
8. Developing culturally sensitive strategies addressing the socio-cultural barriers prevalent in India.
9. To establish centers of excellence for cancer screening. Strengthening the National Cancer Registry. Cancer should be made a notifiable disease.
10. Encourage recommendations that assist in clinical decision-making and timely referrals, based on the efficient, secure, and economical use of cancer diagnostics and treatment services.

In nutshell community education, training of frontline health workers, facilitating prompt referrals and improving the infrastructure for cancer diagnosis and treatment, close coordination between state-level and district-level programmes can improve screening adoption at all levels. Even medical institutions and non-medical organisations can adopt villages or regional areas within state and contribute to screening programmes.

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NURSICON 2025 - 12TH ANNUAL INTERNATIONAL NURSING CONFERENCE

The Department of Nursing at Rajiv Gandhi Cancer Institute and Research Centre (RGCIRC), New Delhi, successfully organized the NURSICON2025 12th Annual International Nursing Conference on October 31 and November 1, 2025. The conference theme, “Oncology Nurses Leading Change: Elevating Care, Rising Stronger,” highlighted the evolving leadership role of nurses in advancing cancer care.

The two-day event witnessed enthusiastic participation from over 300 delegates representing various parts of India and neighbouring countries. The scientific program featured eminent speakers, panel discussions, hands-on workshops, poster and abstract competitions, quiz sessions, and exhibitions, creating a vibrant platform for learning and collaboration.

Mrs. Evelyn P. Kannan, Secretary-General, The Trained Nurses’ Association of India (TNAI), graced the occasion as the Chief Guest. In her inspiring address, she said, “Nurses are the reason for the smile because they are the heart of oncology healthcare. Nurses walk with the patient and family throughout the cancer care journey. Empathy and learning from everyday challenges are vital aspects of a nurse’s role.”

Mr. D. S. Negi, CEO, RGCIRC, reflected on the enduring spirit of nursing, stating, “When Florence Nightingale lit her lamp during the Crimean War in the 1850s, caring for injured soldiers in dimly lit tents, it was the true light kindled by a great soul — a light we still hold today and must continue to carry forward.”

Col. Madhumita Dhall, Director of Nursing, RGCIRC, emphasized the objective of the conference, noting, “Through this conference, we aim to provide a vibrant platform for sharing knowledge, innovations, and best practices that empower us to deliver compassionate, evidence-based, and patient-centred care.”

Distinguished dignitaries including Dr. Dharmendra Singh Gangwar (Interim CEO, RGCIRC), Dr. Gauri Kapoor (Medical Director, RGCIRC, Niti Bagh, and Director, Pediatric Hematology & Oncology), and Dr. Archana Atreja (Medical Superintendent, RGCIRC) also graced the event and extended their best wishes for its success.

The conference reaffirmed RGCIRC’s commitment to advancing nursing education and fostering leadership among oncology nurses to improve patient outcomes and elevate standards of care.



CME WITH UDAIPUR ONCOLOGY FORUM AND DEPARTMENT OF RADIATION ONCOLOGY, RNT MEDICAL COLLEGE, UDAIPUR

RGCIRC organized an Oncology CME program in collaboration with the Udaipur Oncology Forum and the Department of Radiation Oncology, RNT Medical College, Udaipur on Saturday, 1st November 2025, at Ramada Udaipur Resort & Spa, Rampura Circle, Kodyat Road, Udaipur.

The session featured eminent speakers from RGCIRC who shared valuable insights on recent developments in oncology:

Dr. Munish Gairola, Director – Radiation Oncology, delivered a lecture on **“Recent Advancements in Radiation Oncology.”**

Dr. Mudit Agarwal, Unit Head & Senior Consultant – Head & Neck Surgical Oncology (Unit-II), presented on **“Robotic Surgery in Head & Neck Cancers.”**

Dr. Narendra Agrawal, Unit Head & Senior Consultant – Hemato-Oncology, Leukemia and BMT, shared his views on **“CAR-T Cell Therapy.”**

The audience gave a warm welcome to the team from RGCIRC and promised to continue their support to RGCIRC, highlighting the significance of collaboration and cooperation in advancing the field of oncology.

Overall, the event was a great success, providing a platform for the dissemination of knowledge and the exchange of ideas in the field of oncology.



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| Mr. D. S. Negi (Chief Executive Officer)
Dr. D. S. Gangwar
Dr. S. K. Rawal (Medical Director)
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Dr. Gauri Kapoor
Dr. Anurag Mehta
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