

Assessment of Availability of Cancer screening facility across various Public Health facilities in Jaipur, Rajasthan

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About NHM



The National Health Mission (NHM) was launched by the Government of India in 2013, encompassing the National Rural Health Mission (NRHM) and the National Urban Health Mission (NUHM). The main programmatic components include Health System Strengthening, Reproductive-Maternal- Neonatal- Child and Adolescent Health (RMNCH+A), and Communicable and Non-Communicable Diseases.



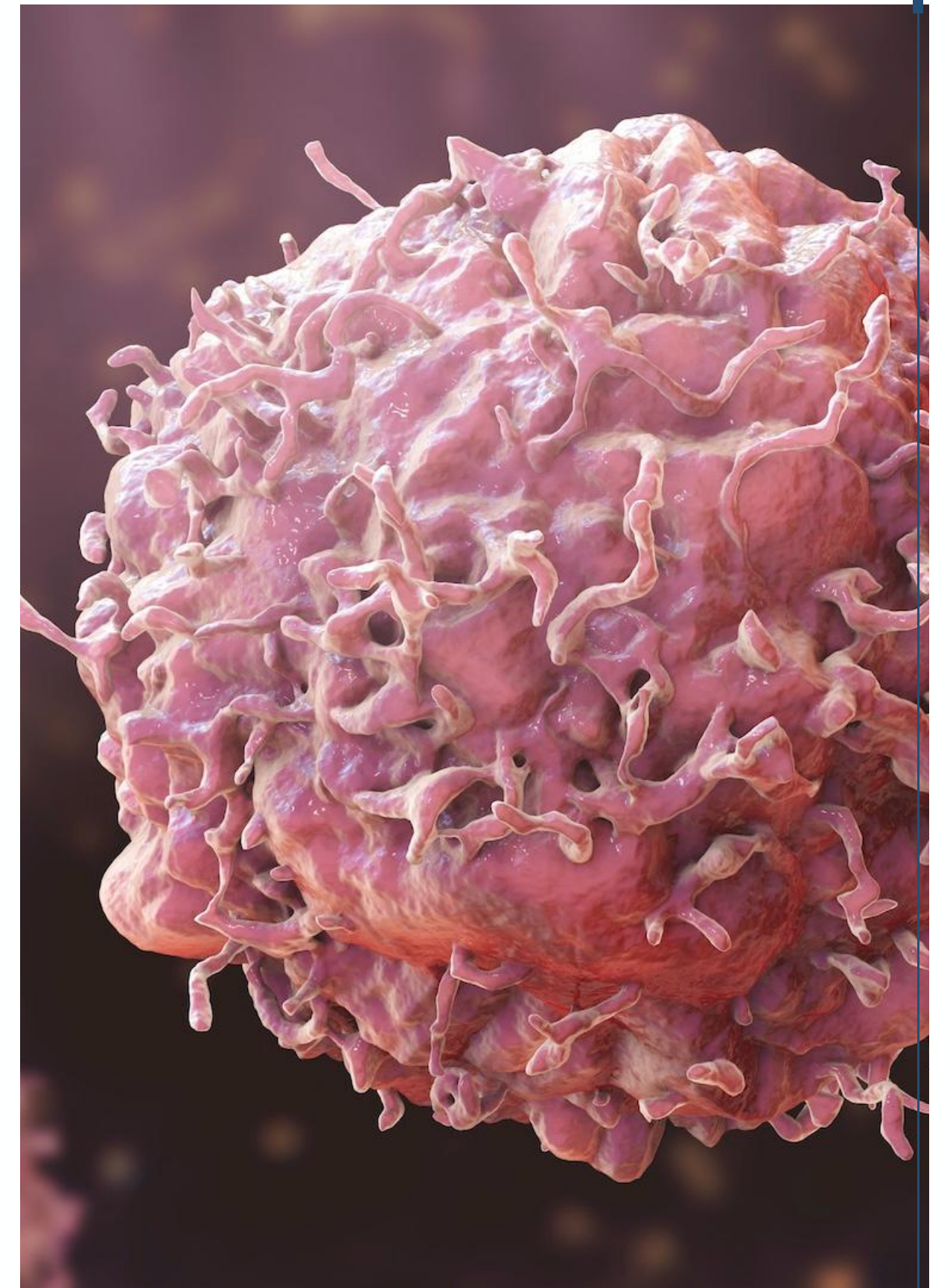
INTRODUCTION

OVERVIEW OF KEY TOPICS

Overview of NCDs

About Common Cancers

Benefits of Oncological screening





NCDs refers to a group of diseases that continue to be not mainly caused by acute infections, tend to persist over time, and often require continuous medical attention and management. Examples include diabetes, cardiovascular diseases, cancer, and chronic respiratory conditions. Many of these illnesses can be prevented by reducing shared risk factors such as tobacco use, excessive alcohol consumption, physical inactivity, and unhealthy diets.

One of the biggest public health issues in India and around the world remains still cancer.

It ranks second globally among NCDs in terms of causes of death



Why cancer screening is important?

- Cancer screening helps detect the presence of cancer before it spreads throughout the body, making treatment easier and more effective.
- The earlier the detection of the presence of cancer, the better are an individual's chances of survival.
- Early detection also means less treatment in terms of both, costs and use of chemicals and light therapy.
- Early detection of cancer also means detection of the problem before an individual has to suffer from the symptoms of the manifestation of the disease inside the body.

Common Cancers

Cancer develops when abnormal cells start growing uncontrollably, spreading to nearby tissues, and possibly to distant areas of the body via metastasis.

In India, over 50% of cancer-related deaths continue to be due to breast and cervical cancers in women, and lung and oral cancers in men.

REVIEW OF LITERATURE

S. no.	Author name & Year	Title	Source	Findings
1.	Madeleine Jones, Sujha Subramanian, Regi Jose Year- 2023	Cancer screening behaviors and preferences among women in southern India	PubMed	Among priority screening respondents, 14.39% indicated that they had previously had cancer screening, while in the entire sample, 14.22% had. The two most frequent reasons that were reported by respondents as to why they did not carry out cancer screening were not being advised to do so by a health provider, at 42.18%, and not knowing the significance of screening, at 40.76%. Although a majority believed that early detection could lead to better cancer outcomes, 64.93% perceived their personal risk of developing cancer as very low. Furthermore, 65.15% of individuals in the priority group and 61.61% of those who had never been screened stated that they would be willing to undergo all recommended cancer screenings if their physician advised them to do so. When additional barriers reported by participants were addressed, the willingness to get screened rose to 79.62% in the total group and 77.27% in the priority screening group.
2.	Gopika MG, Prabhu PR, Thulaseedharan JV Year- 2022	Status of cancer screening in India: An alarm signal from the National Family Health Survey (NFHS-5)	Research Gate	Among females, 1.9% had ever undergone cervical screening, 0.9% had breast screening, and 0.9% had oral cavity screening. About 1.2% of males participated in oral cavity screening. Tamil Nadu had the highest rates of cervical and breast cancer screening participation (9.8% and 5.6%, respectively), followed by Mizoram (6.9% and 2.7%) and Puducherry (7.4% and 4.2%). Women in the Andaman and Nicobar Islands (10.1%) and men in Andhra Pradesh (6.3%) had the highest oral cancer screening rates.
3.	Mangayarkarasi V, Durairaj E, Ramanathan V Year- 2025	Enhancing Cancer Screening and Early Diagnosis in India: Overcoming Challenges and Leveraging Emerging Technologies	PubMed	Integrated Strategies: The review comes to the conclusion that India has to integrate new technology with low-cost screening that has been shown to be effective. Implementing cutting-edge screening instruments, increasing access (such as mobile units for rural areas), and fortifying health systems with transparent plans and oversight are important tactics. Policy and Resources: To guarantee fair cancer care, it is strongly advised to mobilize long-term funding and human resources. International partners, NGOs, and the government should work together to find answers. The importance of policy interventions—such as expanded immunization programs, fiscal incentives for research, subsidized screening tests, and regulatory support—is emphasized. Workforce Training: The authors place a strong emphasis on workforce training, which includes providing healthcare professionals with in-depth instruction in clinical skills, communication, and cultural competency as well as empowering community health workers and primary-care teams. In order to close the gap between urban and rural areas, they also support community engagement and the deployment of mobile screening vans. Community Collaboration: Multi-level cooperation is necessary for effective implementation. According to the assessment, local communities, NGOs, and patient organizations should be involved in program development. It suggests testing focused screening programs in a few areas before expanding them across the country.
4.	Kedar A, John A, Goala S, Babu R, Tapkire R, Kannan R, Hariprasad R Year- 2021	Barriers and facilitators in implementing population based common cancer screening through community health workers	PubMed	Community-Level Barriers: Fear, attitudes, and personal beliefs that deter people from getting screened. Community-Level Facilitators: Screening exam accessibility, Family assistance and have faith in CHWs to deliver services. CHW-Level Barriers: Having trouble inspiring community members, Supervisors' lack of support and lack of drive to work CHW-Level Facilitators: Screenings during home visits are convenient, Empowerment and the development of skills via instruction and collaboration between CHWs.



RESEARCH QUESTION

To what extent are common cancer screening services (for breast, cervical, and oral cancers) being screened in public health facilities, and what are the key challenges and gaps in providing screening services at public health facilities?

OBJECTIVES

- To assess the availability of screening services for common cancers (breast, cervical, and oral) across selected public health facilities.
- To identify the challenges and barriers faced by healthcare professionals in carrying out routine cancer screening services.
- To assess the level of skills of healthcare workers involved in cancer screening activities.
- To recommend the inclusion of inputs received from the healthcare workers involved in cancer screening services in public health facilities.

METHODOLOGY

Study design	Cross-sectional study
Study population	Frontline healthcare workers in the government health facilities in Jaipur.
Data collection method	Primary survey using a semi-structured questionnaire developed on Google Forms
Sample size	10 Public health facilities, namely- • Primary Health Centres (PHCs)- Begas, Vaishali Nagar, Sirsi, Kumbha Marg • Urban PHC- Gandhi Vihar • MCWC- Gandhinagar • Community Health Centres (CHCs)- Dhankya, Sirsi • Sub-Centre- Fatehpura, Jaipur • District Hospital- Kanwatiya Hospital
Sampling technique	Convenience sampling
Inclusion criteria	Health facilities that conducted screening for common cancers (breast, cervical, and oral) as per the National Programme for Prevention and Control of Non-Communicable Diseases (NP-NCD) were included.
Exclusion criteria	Facilities that dealt exclusively with rare cancers or cancers not prioritized under the NP-NCD guidelines were excluded from the study.

RESULT

The assessment aimed to determine whether cancer screening was being conducted and, if so, to identify the types of cancers screened and the techniques used.

Regular cancer screening conducted

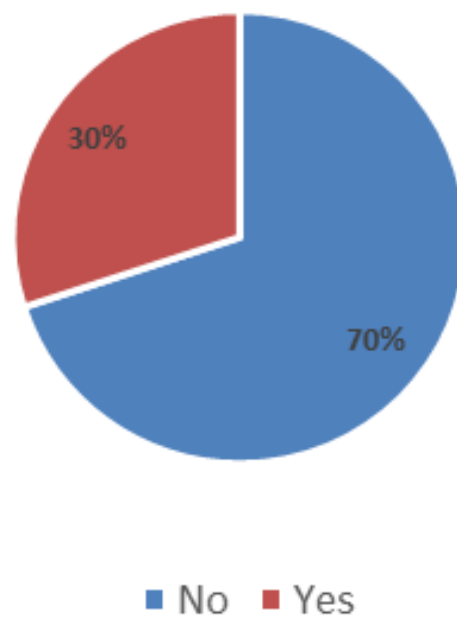


Figure 1 depicts that only 30% of the assessed facilities were actively conducting cancer screening services, indicating significant gaps in implementation across the public healthcare system.

Cancers Commonly Screened Where Programs Are Active

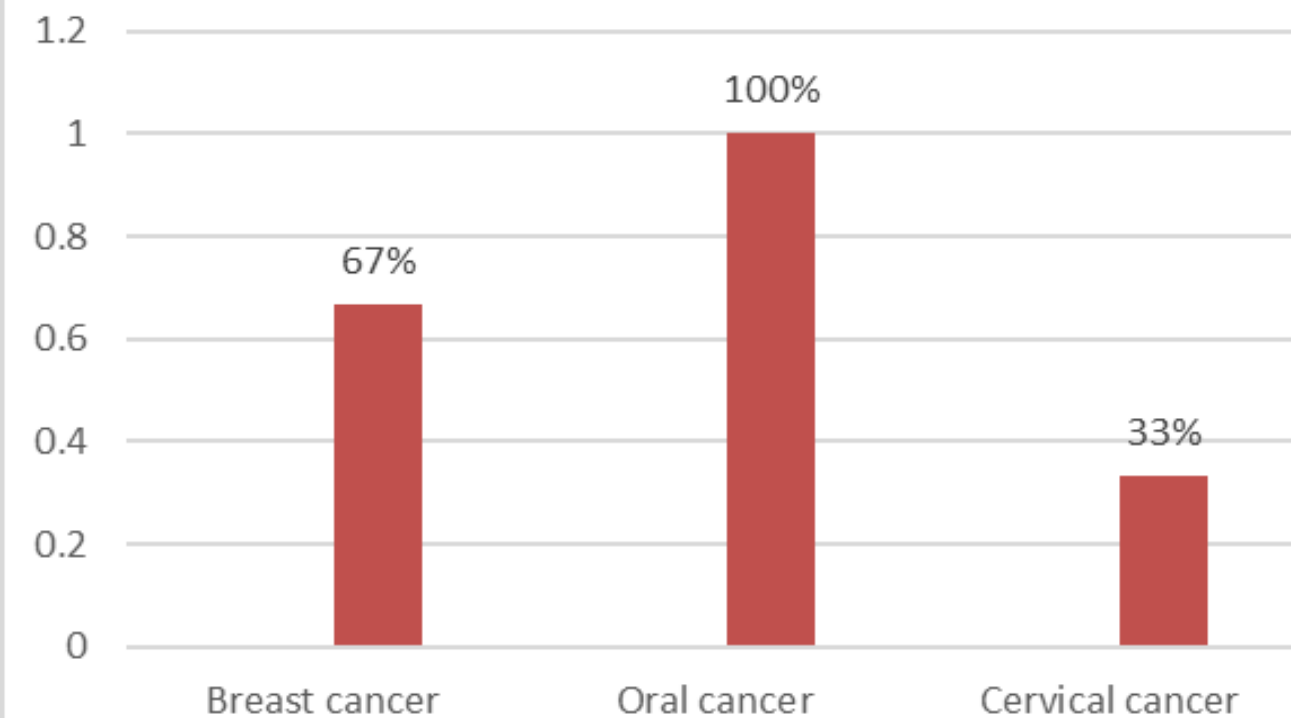


Figure 2 depicts that Oral cancer screening was universally implemented, with all surveyed facilities (100%) reporting its practice. In comparison, breast cancer screening was conducted in 67% of facilities, while cervical cancer screening had the lowest uptake, reported by only 10% of facilities.

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Training received for cancer screening procedures

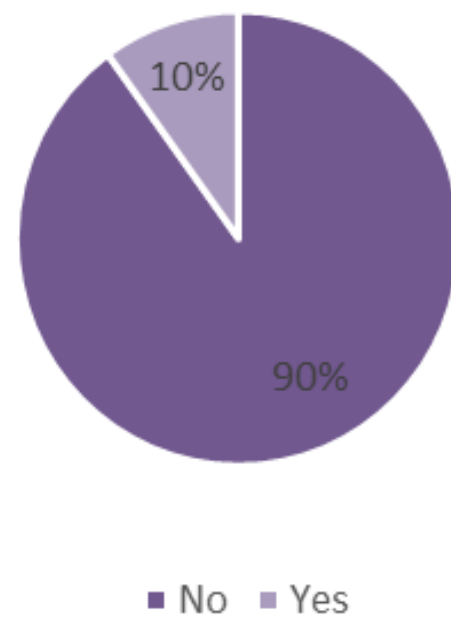


Figure 3 depicts *only a District Hospital reported having received training in cancer screening procedures, while the remaining 90% of the facilities indicated that no such training had been provided.* This points to a significant gap in capacity building, especially at the primary and secondary care levels.

Availability of IEC (Information, Education, Communication) materials for patients

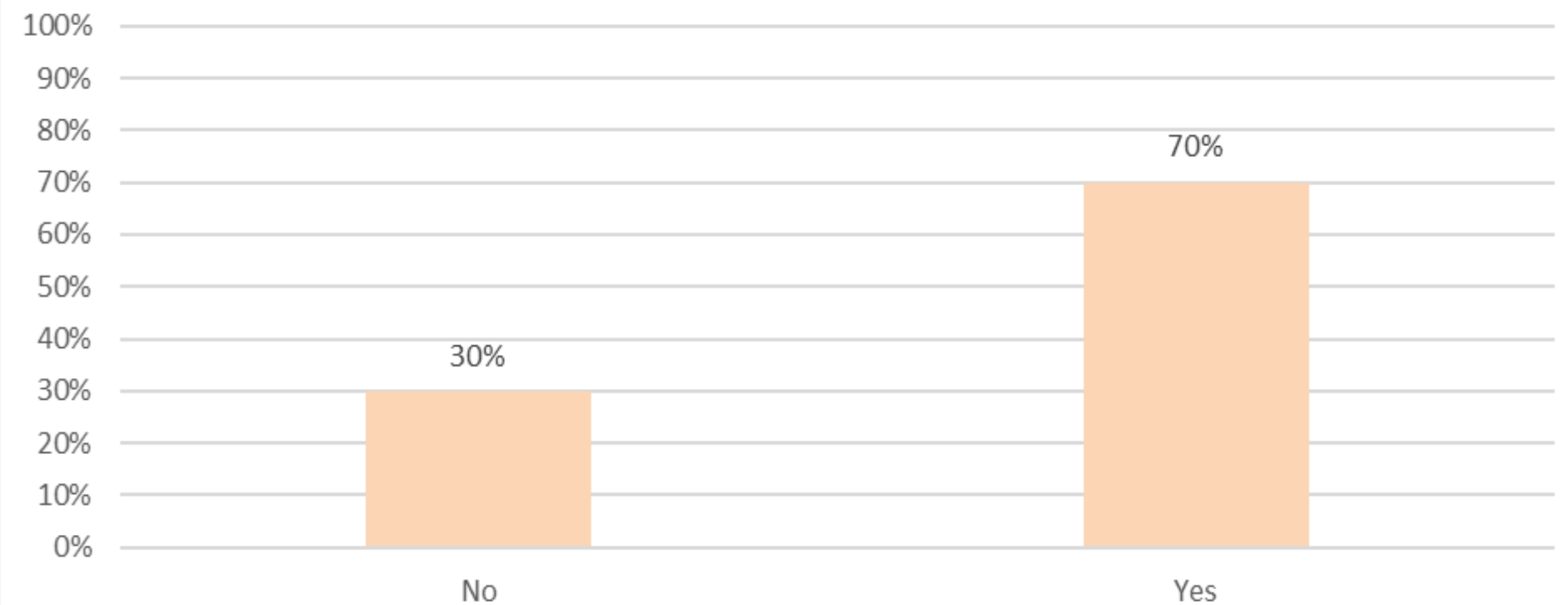


Figure 4 depicts IEC materials were available in 70% of facilities, suggesting moderate patient education efforts, but the 30% gap indicates a need for improved coverage to ensure consistent health communication.

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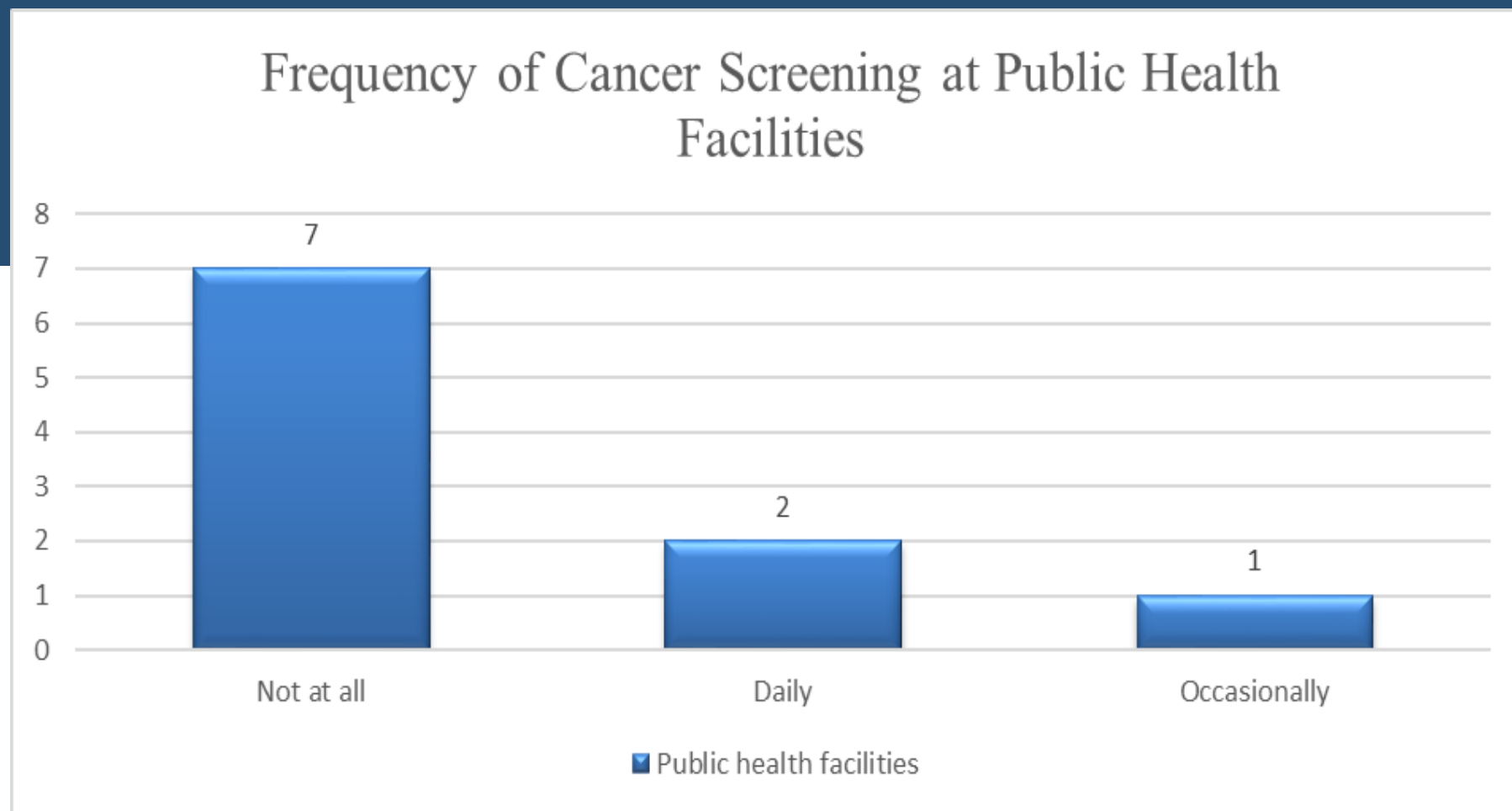


Figure 5 depicts the bar graph illustrates the frequency of cancer screening across public health facilities, revealing that 7 facilities do not conduct screening at all, while only 2 conduct it daily and One facility conduct occasionally.

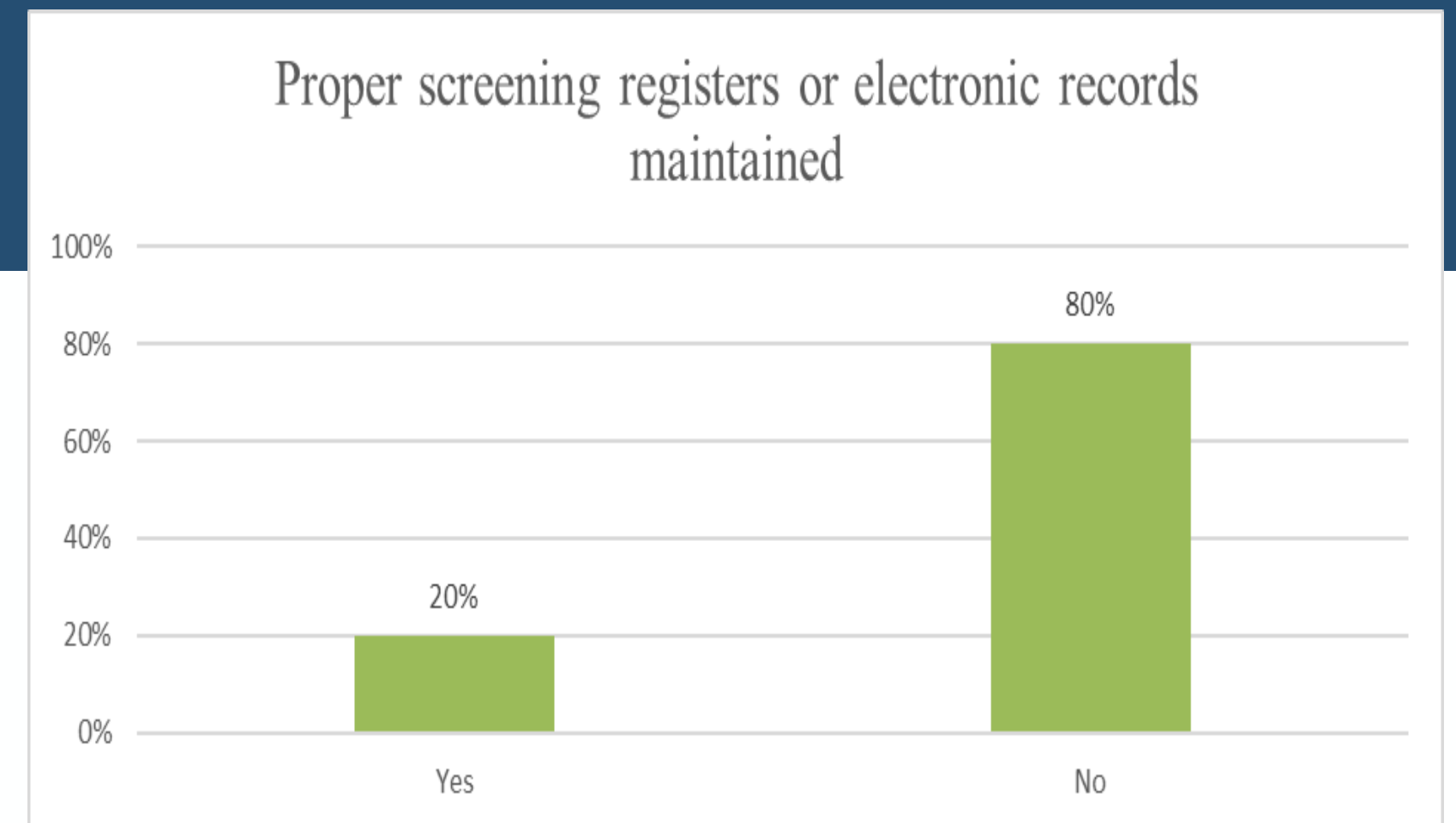
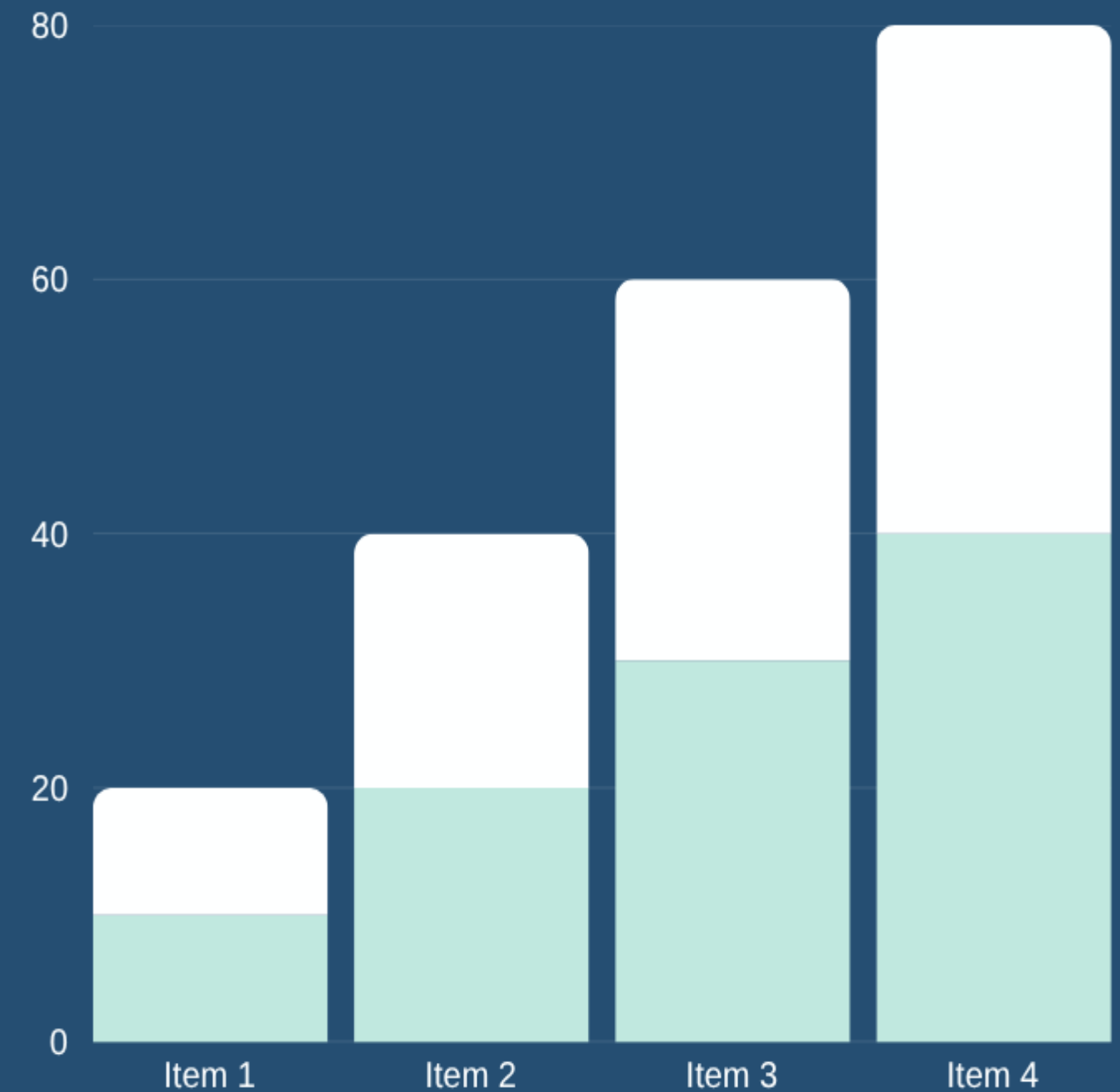


Figure 6 depicts the bar graph illustrates that only 20% of the facilities maintained screening registers or electronic records.

Challenges in conducting regular screening

- **Training Deficiencies** – The most frequently mentioned issue, with 8 out of 10 responses citing inadequate training as a major barrier.
- **Human Resource Constraints** – Reported by 3 respondents who noted a lack of manpower, affecting the capacity to conduct screenings regularly.
- **Patient-Related Barriers** – Low patient awareness was cited by 2 respondents, highlighting a need for greater community outreach and education.
- **Infrastructure Limitations** – One response cited lack of equipment, indicating operational limitations.



Conclusion

The findings of this research provide valuable insight into the current status and challenges of implementing common cancer screening services in public health facilities in Jaipur, Rajasthan. Despite national policies and structured programs like the National Programme for Prevention and Control of Non-Communicable Diseases (NP-NCD), there exists a substantial gap between policy mandates and their execution at the grassroots level. The study highlights critical gaps in infrastructure, workforce training, screening frequency, documentation, and patient referral mechanisms. These inadequacies point to an urgent need for systematic interventions to strengthen public health services at both primary and secondary levels.



Recommendations

- **Capacity Building:** Conduct regular, hands-on training and refresher courses for ANMs, ASHAs, and nurses to build a competent frontline screening workforce.
- **Infrastructure Investment:** Ensure consistent availability of screening materials and basic equipment across all public health facilities.
- **Integrated Digital Systems:** Implement user-friendly digital systems for real-time documentation and tracking of screened individuals.
- **Strengthen Referral Systems:** Establish clear referral pathways and transport linkages to ensure continuity of care from screening to treatment.
- **Community Education:** Launch community awareness drives using IEC materials, peer educators, and local influencers to normalize screening and early detection.

THANK YOU