KEY MESSAGES:

- Cervical cancer is the second most common cancer among women in India with nearly 74,000 new cases and 34,000 deaths in 2010.

- Cervical cancer screening is highly cost-effective, culturally acceptable, and practical across high and low income countries.

- To be effective in reducing incidence and mortality, screening programs must be of high quality.

- High quality screening programs are women-centered, implemented by competent staff, robustly linked to diagnostic and treatment services, and adherent to implementation standards.

Introduction

Cervical cancer screening is highly cost effective, feasible, and culturally acceptable in higher and lower income settings across the world. According to the World Health Organization and the World Economic Forum, screening for cervical cancer is an evidence-based “best buy” prevention intervention [1]. However, to be effective in reducing cervical cancer incidence and mortality, screening programs must be of high quality.

Cervical cancer is the second most common cancer among women in India. In 2010, nearly 74,000 Indian women were newly diagnosed with the disease and 34,000 women died [2].

Recognizing the challenge of cervical cancer in India, the World Bank published a review of research on cervical cancer prevention and implementation experiences of cervical cancer screening programs in the country [3]. The review found that program effectiveness depends on the quality of screening interventions.

Cervical cancer screening programs are effective when they achieve high coverage of the target population, ensure high rates of follow-up of women who screen positive, and provide services consistent with established standards and guidelines. Screening program quality, shaped by several factors described below, influences these outcomes.

Study Findings

WOMEN-CENTERED PROGRAMS

Programs that are based on an understanding of local perceptions about cervical cancer and respond to cultural norms related to health-care seeking are more likely to...
effectively mobilize women to participate in cervical cancer prevention.

Studies in India have found that fear of a cancer diagnosis, concerns about community gossip and stigma, lack of knowledge about cervical cancer prevention and treatment, and apprehensions about the screening process lead to women’s refusal to participate in screening [4, 5]. In India, given prevailing gender norms and women’s limited decision-making power, it is also important to involve husbands in screening promotion. In fact, studies that have successfully mobilized Indian women have also engaged in intensive education of husbands and recruited local community leaders to promote screening [6, 7].

Evidence from India [8] and other lower income countries [9] underscores the importance of establishing accessible, well-organized, private services that treat women with dignity and respect. Women are more likely to undergo screening if they do not have to travel long distances to the screening facility and are attended to in a systematic and timely way. Services that are provided respectfully and in a private setting are more likely to be used and recommended. Providing pre- and post-test counseling can enhance women’s comfort, reduce fear and anxiety, and increase adherence to follow-up recommendations. Numerous studies have documented women’s preference for being screened by a female provider. Finally, since financial concerns are a deterrent, programs must ensure that services are affordable and that communities are aware of mechanisms for financial protection.

Program sustainability is enhanced by developing a pool of trainers, ideally at the district level [12]. To minimize loss of skills, training should be conducted just before program launch. Systems for supportive supervision, which include on-going mentoring of staff, monitoring of program performance and joint problem-solving, are essential for maintaining and improving program quality.

**DIAGNOSTIC AND TREATMENT LINKAGES AND FOLLOW-UP**

Programmatic experiences in India suggest that strengthening linkages between screening and follow-up services is especially challenging. Although research is needed to identify the most optimal ways to ensure continuity of care, successful programs suggest several important strategies.

Screening often occurs in the community or at the primary health center while diagnostic and treatment follow-up services are provided at higher levels of the health care system. An efficient and effective referral system is one that ensures two-way flow of information to facilitate case management, conveniently locates referrals services, uses referral protocols and tools (such as standardized letters and patient information sheets), and engages in outreach by mobilizing community health workers or volunteers.

Communication is an integral part of promoting linkages and follow-up. Staff should be skilled in communicating cervical cancer prevention, and should communicate test results in a timely manner along with information to guide subsequent health care decisions. Facilities should be linked by well-functioning communication systems to ensure continuity of care. The increasing availability and reach of mobile phone technology has the potential to offer innovative solutions to the challenge of service linkages and patient follow-up.

**ADHERENCE TO IMPLEMENTATION STANDARDS**

Monitoring and evaluation systems that include indicators for all program components from community education to quality of screening (for example, positivity rate), adequacy and appropriateness of treatment, and treatment completion, are an important tool for quality assurance. A health information system can generate data on these indicators, and, if unique registration numbers are issued, can also be used to track the management of individual cases and help ensure that referral processes are functioning well. COPE® offers additional tools for quality assurance [10]. Data should be generated in a timely fashion, and program staff should be knowledgeable about and have the time to utilize the information.
Conclusion

DELIVERING HIGH QUALITY CERVICAL CANCER PREVENTION

Research and programs in India have demonstrated that cervical cancer screening and treatment can save lives. Implementing high quality cervical cancer screening and treatment programs can lead to a virtuous cycle of enhancing client satisfaction, promoting job satisfaction and performance, and increasing service utilization. The National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Strokes proposes to implement cervical cancer screening across all districts. The recommended strategies (listed below) can help promote its impact.

Recommendations

- **Design “women-centered” programs.**
  - Conduct formative assessments to ensure program design is responsive to local perceptions and norms.
  - Ensure that women are treated with dignity and respect.
  - Provide services in an accessible and organized manner.

- **Train, equip and support health care providers.**
  - Implement competency-based training and ensure adequate skill acquisition.
  - Ensure uninterrupted access to equipment and supplies.
  - Engage in performance monitoring and supportive supervision.

- Establish diagnostic and referral linkages and mechanisms to promote patient follow-up.
  - Develop referral protocols and tools, including guidelines for transportation of laboratory specimens and timely reporting of results.
  - Engage community health workers to facilitate referrals and patient follow-up.
  - Set up communication systems linking health facilities at multiple levels and women.
  - Train health care providers to communicate results and discuss their implications.

- Establish implementation standards and performance indicators.
  - Set up a monitoring and evaluation framework and a health information system at the outset of the program.
  - Define indicators for all program components.
  - Use established tools such as COPE®.
  - Institute mechanisms to feed monitoring data back to managers, supervisors and providers.

References


This HNP Knowledge Brief highlights the key findings from the following World Bank-supported papers:


This work was funded by the Bank-Netherlands Partnership Program for Sexual and Reproductive Health in South Asia.

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The Health, Nutrition and Population Knowledge Briefs of the World Bank are a quick reference on the essentials of specific HNP-related topics summarizing new findings and information. These may highlight an issue and key interventions proven to be effective in improving health, or disseminate new findings and lessons learned from the regions.

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