

# Low-Cost Interventions to Improve Cervical Cancer Screening: An Integrative Review

Giselle A.S. Rezende, BPharm, Mariana T. Rezende, PhD, and Cláudia M. Carneiro, PhD

**PROBLEM IDENTIFICATION:** Cervical cancer (CC) is a major public health problem in low- and middle-income countries. Although screening can reduce CC incidence, screening programs are difficult to implement in resource-limited countries, making innovative interventions necessary.

**LITERATURE SEARCH:** PubMed®, MEDLINE®, CINAHL®, LILACS, and SciELO databases were searched for studies published within the past five years that explored interventions to improve CC screening.

**DATA EVALUATION:** Of the 486 articles identified, 35 were included in the review. The evidence was summarized, analyzed, and organized by theme.

**SYNTHESIS:** Several low-cost interventions improved aspects of CC screening, most of which were associated with a significant increase in adherence and uptake. Other interventions led to better baseline knowledge and involvement among patients and healthcare providers and a higher proportion of patients receiving treatment. Screening programs can use single or multiple approaches and match them to the local conditions and available resources.

**IMPLICATIONS FOR PRACTICE:** By understanding the various interventions that can mitigate CC incidence, healthcare providers can select the best approach to reach women eligible for CC screening.

Cervical cancer (CC) is the fourth most frequently diagnosed type of cancer and the fourth leading cause of cancer deaths in women, with a worldwide estimate of 604,000 new cases and 342,000 deaths in 2020. This global public health problem primarily affects low- and middle-income countries (LMICs), where about 90% of cases occur (Sung et al., 2021). During the 73rd World Health Assembly, the World Health Organization (WHO, 2020) established the 90-70-90 targets within the scope of the global strategy for CC elimination. The 90-70-90 targets recommend that 90% of girls be vaccinated against human papillomavirus (HPV) at age 15 years, 70% of women be screened with a high-performance test at ages 35 and 45 years, and 90% of women identified to have CC be treated, with the goal of reducing the incidence of CC to less than 4 cases per 100,000 women within the 21st century (WHO, 2020).

Effective screening programs can decrease CC mortality rates (Jansen et al., 2020). High-income countries have successfully controlled CC through sophisticated population-based screening policies (Vale, Teixeira, et al., 2021); however, LMICs lack robust resources to quickly fund such programs and typically have fragile healthcare systems and fewer skilled technicians and equipment. As a result, CC incidence rates in LMICs are much higher than those in high-income countries (Gossa & Fetters, 2020).

The structure of a screening program is usually undervalued. Sometimes analyses focus on the performance of diagnostic tests, a critical component of screening. However, analyses of how the cancer screening program is organized, how its methods are implemented, how equitable access is, and how well CC is controlled are also important (Vale, Teixeira, et al., 2021). A contributing factor to effective CC screening programs is adequate uptake within the target population (Paulauskiene et al., 2019). Regardless of the diagnostic test used for screening, the participation of eligible patients at regular intervals is

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