

Screen and Treat Approach for Cervical Cancer - A Feasible Technique for Developing Setups like India

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Cervical cancer is one of the leading cancers among women worldwide (World Health Organization 2009). The estimated annual incidence cases and deaths in the moderate to low income countries is more than 4,50,000 and 2,40,000, respectively accounting for more than 88% of deaths are estimated to occur in these countries and this percentage is predicted to climb to at least 91.5% by 2030.

In 2008 in India, the annual incidence and mortality from cervical cancer was 134,420 cases (age-standardized rate (ASR): 27/100,000) and 72,825 deaths (ASR: 15.2/100,000), respectively. Cervical cancer was the most common cancer in Indian women, accounting for nearly 25.9% of new cancer cases and 23.3% of all cancer-related deaths in the country.¹ In 99.7% of cases, cervical cancer results from a persistent infection by a high-risk subset of Human Papillomavirus (HPV).²

Cervical intraepithelial neoplasia (CIN) occurs along a spectrum of grades as defined by World Health Organization ranging from low (CIN-1), moderate (CIN-2) to severe (CIN-3). The process from low-grade CIN to cervical cancer takes from 10 to 20 years, during which time screening for pre-cancerous lesions and early treatment is highly effective in preventing the onset of the disease especially in developing setup like India. This is the rationale for cervical cancer screening and treatment.³

There are several screening tests to identify pre-cancerous lesions, that include Pap test (cytology), visual inspection with acetic acid (VIA), with Lugol's iodine (VILI), and the HPV-DNA test. Pap-based screening programs are effective in Developed countries or High Income Countries (HIC), but health systems in developing countries are ill-equipped to effectively provide Pap screening to all women insofar as they are hindered by the challenges

of reaching target populations, carrying out appropriate testing, following up and treating women.

Highly effective alternative low-cost screening approaches like VIA, VILI and HPV- DNA tests offer new options for screening and have replace Pap Test in Low Income countries.⁴ These can be immediately followed by cryotherapy, a highly effective and low-cost approach for early treatment. These new combination allow for combined screening and treatment in one sitting, known as the screen-and-treat approach.⁵

Based on recent studies and analyses the recent cost effective and culturally adoptable gold standard approach for management of Cervical Cancer is "The Screen-and-treat Approach". Screening by VIA, eliminates the huge cost of cytology and the reduces the budget by eliminating high yield laboratories for interpretation of results, and screening could be done in Tertiary Health Care by dais and mid-wives.⁶

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