



Elimination of Cervical Cancer in Bangladesh by 2030

Carcinoma cervix is the second most common cancer among women in Bangladesh. This is the third most common cancer among Asian women and the leading cause of cancer deaths in low- and middle-income countries. In Bangladesh, there were an estimated 9,640 new cases of cervical cancer in 2023, which resulted in an age-standardised incidence rate of 11.3 per 100,000 women.¹

More than 90% carcinoma cervix are caused by Human Papilloma Virus (HPV), a sexually transmitted virus. There are over 100 subtypes of HPV, and a dozen of them are high oncogenic and responsible for cervical cancer.² The virus spreads through unsafe sex and multiple sex partners. Sexual exposure and first pregnancy at an early age, too frequent and too many childbirths, and sexually transmitted infections are important risk factors for carcinoma cervix. This cancer is mostly found among women of low socioeconomic status having malnutrition, poor genital hygiene and a weak immune system.

Cervical cancer usually develops slowly. It has a precancerous stage, which takes a long time (about 15-20 years) to become full-blown cancer. However, sometimes the process may be faster and take 5-10 years to develop into cancer. Thus, the disease has two peaks of age incidence – at around 35 years and about 50-55 years.

The good thing is this cancer is highly preventable. It can be prevented by eliminating the risk factors, screening, vaccination, and treating at the precancerous stage.

HPV Vaccine is the main tool to prevent cervical cancer. The bivalent vaccine (Cervarix, HPVax, Papilovax) works against two high oncogenic strains of HPV, whereas the quadrivalent vaccine (Gardasil) works against four strains of HPV. Both of them are available in Bangladesh. Vaccines are advised to take from 9 to 45 years of age. It is highly effective at a young age and a single dose can protect from carcinoma cervix. Initially, the World Health Organization (WHO) recommended two doses for young girls (9-14 years) and three doses for women above 14 years. Now the recommendation has changed to a single-dose HPV vaccine to protect against cervical cancer, especially the younger age group (9 to 14 years).

On the other hand, screening for cervical cancer can detect the disease at a premalignant stage. Pap test or Pap smear test is a widely accepted and previously named “gold standard” screening procedure. The U.S. Preventive Services Task Force (USPSTF) recommends screening for cervical cancer every 3 years with a Pap test in women ages 21-29 years. All other recommendations and guidelines recommend regular screening between the ages of 25 and 65 years at a 3-year interval. The WHO recommends VIA (visual inspection with acetic acid) as a screening procedure for low-resource settings. It is a simple but affordable screening test, which can be considered an alternative of Pap-test.³ Bangladesh is adopting VIA as a screening test for cervical cancer. The national screening program for cervical cancer has been running in Bangladesh since 2004 through VIA. The major benefits of VIA are its

simplicity, low cost, and linkage with further investigations and treatment.^{4,5} This screening program is delivered through the existing healthcare infrastructure in the country. It is done by trained nurses at all government medical colleges, some private medical colleges, district hospitals, maternal and child welfare centres (MCWCs), and selective Upazilla health complexes. The target population for VIA screening is apparently healthy, married women aged between 30 and 60 years. Screen positive and clinically unhealthy cases are referred to colposcopic examination, and if needed, colposcopy guided biopsy is taken from the cervix. The HPV DNA test is another screening test which is expensive but confirmatory for HPV infection. Most of the centres are adopting the “See and Treat” approach even at a very early premalignant stage during screening to reduce the dropout rate. This procedure skips the step of colposcopy and guided biopsy and minimizes the chance of attrition.⁶

The World Health Organisation (WHO) launched a Global strategy to accelerate the elimination of cervical cancer control by 2030. It can be achieved by implementing the triple intervention, ie. 90% girls to be vaccinated by the age 15 years, 70% women should be screened by 35 and again by 45 years and 90% women identified with cervical precancer should receive adequate treatment and care.¹ To fulfil the goal, awareness among people about its risk factors, screening and vaccines is important. Unfortunately, a huge population is unaware of the situation, especially in rural areas with lower levels of education. Even the decision makers of the family have a low level of knowledge about the risk factors. Girls are being married off at a young age, whereas sexually active before 18 years and becoming a mother during adolescence increase the likelihood of infection with the virus. Here public health campaigns can significantly contribute to improve the knowledge about the disease and to discourage early marriage.

Bangladesh has joined the global effort to eliminate cervical cancer by 2030 by strengthening HPV immunization programs. To ensure sustainability, it is being planned to integrate HPV vaccination into the routine immunization program for girls in grade five and for 10-year-old girls who are not enrolled in the education system. Apart from the governmental organisations, several non-governmental and voluntary organisations are working against cervical cancer.

The triple intervention, especially “See and Treat” approach in a low-resource setting, like ours, can help to reduce the incidence of cancer cervix. Thus, Bangladesh is hoping to be a cervical cancer-free country by 2030.

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