



HPV Vaccination Facts for Physicians

HPV vaccination prevents cervical cancer

Human papillomavirus (HPV) has been found to be the primary cause of cervical cancer, associated with nearly all cervical cancer malignancies [1]. Of more than 100 types of HPV, about 15 are found to be high-risk with the potential to cause cancer. Though the majority of HPV infections are asymptomatic and resolve spontaneously, persistent infection with high-risk HPV types can lead to the development of precancerous cervical lesions, cervical cancer, and other cancers including vaginal and vulvar cancers in women; penile cancer in men; and anal and oropharyngeal cancers in both men and women [1-3].

Three types of HPV vaccines are available, bivalent, quadrivalent, and nonavalent. The vaccines are over 90% effective at preventing persistent cervical infection and precancerous cervical lesions associated with HPV types 16 and 18 in girls who are free from HPV infection when vaccinated [4].

HPV vaccines are safe

HPV vaccines are safe, effective, and have been available in India since 2008. More than 100 countries have introduced the HPV vaccines in their national immunisation programmes and millions of girls and boys have been safely vaccinated [5]. The Global Advisory Committee on Vaccine Safety (GACVS) has found no adverse events of concern based on several large, high-quality studies [6].

As with all vaccines, international and national monitoring agencies continuously report, monitor, and evaluate any serious and non-serious adverse events with HPV vaccines too. No increase in the incidence of auto-immune diseases, neurological diseases, or other significant new onset of chronic diseases have been documented in vaccinated populations [6-10]. Like all medical interventions, HPV vaccines can have minor side effects, including fever, headache, and allergic reactions in very rare cases.

HPV vaccine works best when given at ages 9 -14

The HPV vaccine works best when given to adolescent girls [11,12]. The World Health Organization (WHO) recommends that adolescent girls 9 - 14 years of age be vaccinated because the vaccine is highly immunogenic at this age and girls are typically not yet exposed to the virus through intimate skin to skin contact [3,13].

A recommendation from a health care provider is the most important factor in parents choosing to vaccinate their child

A high-quality recommendation from a health care provider is a key factor in HPV vaccine uptake [14-18]. High-quality recommendations emphasize that HPV vaccination is cervical cancer prevention. They also discuss HPV vaccine in the same way as other vaccines and stress the importance of vaccinating on-time, between ages 9 and 14.

Even with limited knowledge of HPV vaccine among parents, there is a willingness to accept the vaccine when it is recommended by physicians [19-21].

HPV vaccine works very well and provides long lasting protection

Australia was the first country to introduce the HPV vaccine in its national immunisation programme in 2007, closely followed by the US, the United Kingdom and other European countries. Even after more than 15 years of use, there is no evidence of waning vaccine effectiveness and no breakthrough cases (precancerous cervical lesions caused by vaccine type HPV in vaccinated women) have been reported. This observation is consistent with vaccine trials that have demonstrated that the protective effect of the vaccine remains unchanged after vaccination. Research is continuing to monitor the duration of protection and need for a booster dose [22].

HPV vaccination does not cause fertility issues

Claims of HPV vaccine-induced infertility are anecdotal and not substantiated by research or clinical trials [23]. It is possible that the treatment of cervical cancer could leave a woman unable to have children, and treatment for cervical precancer could also put a woman at risk for cervical incompetence, leading to preterm delivery and neonatal loss. The HPV vaccine can actually help protect fertility by preventing gynaecological problems related to the treatment of cervical cancer and precancerous lesions [23,24].

Combining HPV vaccine with screening will have the greatest impact on reducing the future burden of cervical cancer

HPV vaccination can prevent most cervical cancers and is an important part of a comprehensive cervical cancer prevention strategy [2]. Regardless of HPV vaccination status, cancer screening by visual inspection with acetic acid (VIA) and/or HPV testing are also recommended as the vaccine does not protect against all high-risk HPV types [25].

Even though there are 13 other high-risk HPV types associated with cervical cancer, the bivalent and quadrivalent vaccines target HPV 16 and 18 since they are responsible for the large majority (at least 70%) of cervical cancers worldwide [26].

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