

Cervical Cancer Prevention in Asia Pacific

Diseases caused by HPV include cancers of the cervix, vagina, vulva, penis, anus and head and neck. More than 100 HPV genotypes are known. HPV types 16 and 18 cause about 70% of all cases of invasive cervical cancer worldwide. In 2005, there were about 500 000 cases of cervical cancer and 260 000 related deaths worldwide. Asia Pacific accounts for more than half of all cases of cervical cancer registered globally and improving prevention is urgently needed. In Asia Pacific, screening programs have been proposed and implemented in several populations, successful programs are rather limited and the majority of countries still have no or minimal screening services. The current priority and the short-term goal for cervical cancer control in Asia Pacific is to find the most effective way to combine vaccination with sustainable screening programs. HPV vaccines have been marketed in more than 100 countries in the world. The preventive efficacy and safety with HPV vaccines in women age 15 – 26 have been proven by various clinical trials. The duration of the protection is estimated with modeling as an antibody level higher than the natural infection maintains at least 20 years. It is confirmed that immunogenicity in girls age 10 – 15 is higher than that of adult women, and safety profile is also similar to the adult women. In addition, the immunogenicity in women age over 26 is confirmed as similar to age 15 – 25 as well as the safety and it is expected that up till 55 years-old the HPV vaccine can offer the protection. HPV vaccines are most efficacious in females who are naive to vaccine-related HPV types; therefore, the primary target population should be selected based on data on the age of sexual debut and the feasibility of reaching young adolescent girls through health-care facilities or community-based settings. The ACIP and WHO recommendations suggest for a routine vaccination in 9 years-old girl or 11–12 years-old as it's the priority target of HPV vaccination, while the age for the secondary target is recommended for the woman up to 26 years-old in many countries. Depending on modeling prediction in Japan, vaccination programs for 12 years-old girls could substantially reduce the incidence and mortality of cervical cancers by 70%. Modeling also estimated that vaccination to women age 10-45 is considered as cost-effective. Routine HPV vaccination by national funding has not introduced in any countries in Asia, while Australia and New Zealand have fully national universal vaccination programs. Moreover, it is important to monitor the impact of HPV vaccination after the introduction of vaccination program. Countries should monitor the incidence of cervical cancer and pre-cancerous lesions and the prevalence of HPV types. We provide evidence-based scientific information, it is likely to be useful to governments, public health professionals, clinicians and opinion leaders.