Human papillomavirus & cervical cancer: Looking ahead

Since these viruses are also associated with the development of several other cancers, benign warts and papillomas, it should equally be effective in preventing these diseases.

Although at least 15 high risk oncogenic HPVs are known, vaccines against only two of them—HPV type 16 and HPV 18 may create selective immunologic pressure to raise prevalence of cervical cancer due to emergence of nonvaccine related HPV genotypes. However, such assumption can only be tested in the time to come.

Since development of cervical cancer takes 10-15 yr, demonstration of a vaccine intervention that prevents cancer, would require a long term observation of a large number of vaccinated women. In addition, there are several issues particularly social, economic and ethical issues associated with vaccine implementation in developing countries such as India where cervical cancer is still a most common cancer in women. Also, the number of doses, the cost and durability of immune protection and whether men should be vaccinated or not- are other important concerns associated with HPV vaccination program particularly in low resource settings. Recently, Drug Controller General of India (DCGI) has approved introduction of one of the HPV vaccines, ‘Gardasil’ in India. But no national guidelines have been developed. Nor any initiative has been taken to consider if HPV vaccine could be incorporated in the universal infant immunization program alongwith other vaccines.

Efforts are also being made to develop therapeutics as well as cost-effective second generation HPV vaccines including anti-HPV therapeutics such as carragenan curcumin and neem which need further study for establishing clinical efficacy of these compounds.

Realizing an immediate importance of HPV vaccine in India and to understand the pros and cons of...
the vaccine implementation programme and to generate knowledge and awareness, this special issue of IJMR with articles from reputed scientists and clinicians of India and abroad working in the field of cervical cancer and HPV vaccine has been brought out. The topics covered include the magnitude of the disease and HPV prevalence\(^1\)\(^-\)\(^3\), role of screening, newer and cost-effective screening tools such as VIA, Care HPV and their clinical utility in relation to PCR and HC 2\(^4\)\(^-\)\(^6\), current and future second generation vaccine efforts\(^4\)\(^-\)\(^7\)\(^-\)\(^12\) including anti-HPV therapeutics and immunology of HPV infection\(^13\)\(^-\)\(^16\).

Though global burden of cervical cancer may eventually be reduced through universal immunization, at present HPV vaccine will supplement rather than replace cervical screening program.

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**References**


