## HUMAN PAPILLOMA VIRUS VACCINE AND A FEW FACTS

## Sir,

Every year 132,082 women are diagnosed with cervical cancer, and 74,118 die from the disease in India according to the current WHO estimates.<sup>[1]</sup> Cervical cancer is the most frequent cancer in women in the country. Human papilloma virus (HPV) vaccines to prevent specific HPV infections and with potential to reduce incidence of cervical cancer are now available in India.<sup>[1]</sup> The vaccine is aggressively marketed in India. Several issues should be addressed before we go ahead with vaccination against HPV infection and cervical cancer.

The vaccine available today is for prophylactic use but not therapeutic. It means that screening program will be necessary for the already infected women or for the women that will remain un-immunized and may become infected in the future.<sup>[2]</sup> Current vaccine prevents the occurrence of cervical cancer due to HPV infection types 16 and 18. All over the world, 70% of cases of cervical cancer are due to these 2 types of the infection.<sup>[3]</sup> Thus vaccine is not preventing cervical cancer in 30% of the cases. However, a few studies conducted in India show HPV prevalence of 6.6% in the general population, and 76.7% of invasive cervical cancers in India are attributed to HPVs 16 and 18.<sup>[1]</sup> There is urgent need to validate these findings further.

Success of induction of new vaccine in the country depends upon the issues related to performance of the immunization program, e.g., coverage. Issue of coverage is further complicated by the fact that the target age group for this vaccine is 9 to 26 years, while current immunization program mainly targets children less than 5 years of age. If we choose school children for this vaccine, obviously concerns are about out-of-the-school children and the rate of dropout from the school. Adolescent vaccination is not much practiced in India as awareness about such vaccination and thus the need felt for such vaccine is very low. Government of India has not introduced any new vaccine for routine immunization since the inclusion of measles vaccine. Inclusion of HPV vaccine in the schedule is unlikely due to the cost of the vaccine.

Cultural issues are also of prime importance as the recipients are girls only. Gender issue may play a major role as a girl child is given less priority compared to a male child in the Indian society.

Cost of the vaccine is another major hurdle for any country. Current cost of Rs. 8,400 is very high for a full course of 3 doses per individual. This is very expensive considering the fact that we have huge numbers of beneficiaries of the vaccine.

Trials all over the world have proved the benefit of the vaccine, not only for cervical cancer but also for the sexually transmitted infections caused by HPV.<sup>[3]</sup> Immediate concerns are cost reduction, education for the screening program and the vaccine, improving the coverage of screening program, raising awareness among the professional groups about the screening program and vaccine, and further research for HPV-prevalence studies across the country. India needs to do thorough groundwork for all the above-mentioned concerns.

TAPASVI PUWAR, BHAVNA PUWAR<sup>1</sup>

Indian Institute of Management, Ahmedabad, <sup>1</sup>Department of Community Medicine, Smt. NHL Municipal Medical College, Ahmedabad, India

> Correspondence: Dr. Tapasvi Puwar, Indian Institute of Management, Vastrapur, Ahmedabad - 380 015, India E-mail: drtapasvi@gmail.com

## REFERENCES

- WHO and ICO, 2007. Human papilloma virus and cervical cancer, Summary report India. HPV Information Center, 2007. [retrieved on 2009 Jun 15]. Available from: from http://apps.who.int/ hpvcentre/statistics/dynamic/ico/country\_pdf/IND. pdf.
- Mark K, Jacqueline S, Pierre C, Teresa A, Felicity C. Chapter-15, HPV vaccine use in the developing world. Vaccine 2006;2483:83/132-83/139.
- Gary C, Silvia F, Mireia D, Nubia M, Luisa VL. Chapter-3, HPV type- distribution in women with and without cervical neoplastic diseases. Vaccine 2006;2483:83/26-83/34.

DOI: 10.4103/0019-5359.55116