

Awareness of HPV Vaccination among Medical Students

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Abstract: *Aims and Objectives:* The study objective is to assess the knowledge of HPV vaccination, the attitude towards HPV vaccination and the practice of HPV vaccination among medical students of GMC, Ongole. *Material and Methods:* This is a cross sectional community based study of 6 months duration. 487 medical students with in the age group 18- 24 years from GMC, Ongole participated in the study. *Results:* Out of all the subjects 81.5%, 28.2% and 14.5% know that HPV vaccine protects against carcinoma cervix, genital warts and carcinoma penis respectively. 50% of the people know that HPV vaccine is administered at the age of 10-25 years. 47.6% people know that HPV vaccine can be administered to males. 24.6% know that HPV vaccine had an efficacy of >90%. 88.9% had responded that they were not vaccinated against HPV. *Conclusion:* In conclusion the knowledge about HPV vaccination is poor among medical students. So Indian Government should implement more awareness programmes on carcinoma cervix and the role of HPV vaccine on its prevention.

Keywords: HPV, Cervical cancer, Pap smear, HPV Vaccine

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I. Introduction

Human papilloma virus infects epithelial tissues and causes both benign and malignant disorders in human population. HPV is associated with a number of cancers including cervical, oropharyngeal, penile and anal (1).

HPV is the most common sexually transmitted infection in the world. HPV 16 and HPV 18 are oncogenic. They are prevalent among college aged individuals about 18-22 yrs (2). This is due to high risk sexual behaviours including multiple sexual partners and engagement of unprotected sex (3). Cervical cancer is the primary cause of death in Indian women. HPV vaccination is considered primary strategy for cervical cancer prevention by World Health Organization (WHO) (4). For primary prevention, recently two high vaccines, a quadrivalent (HPV 16, 18, 6 and 11) 'Gardasil' and a bivalent (HPV 19 and 18) 'Cervarix' have been introduced for vaccinating young adolescent women between age 18- 26 (5,6).

Because of social, religious and ethical issues associated with vaccination of adolescent girls in India and lack of awareness about HPV and HPV vaccines, no successful immunization program has been employed in India (7). The goal of our study is to create some awareness in both general public and in Government of India and about HPV and HPV vaccination.

II. Materials And Methods

To assess

- The knowledge of HPV vaccination
- The attitude towards HPV vaccination, and,
- The practice of HPV vaccination among medical students of GMC, Ongole.

1. **Study design:** Cross sectional, community based study.

2. **Study setting:** Govt. Medical college, Ongole.

3. **Study duration:** 4 months

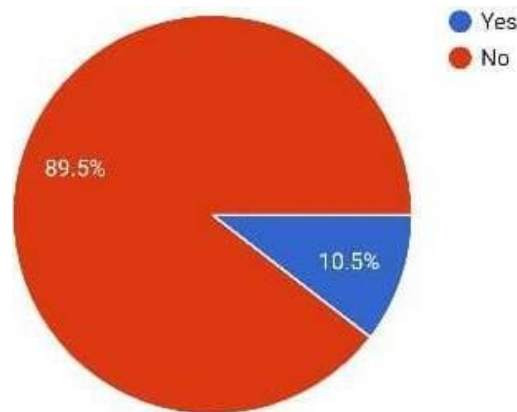
4. **Sample size:** 487 (age group 18-24 yrs)

5. **Statistical analysis:** Data is collected from online questionnaire forms and data extracted will be evaluated using Microsoft Excel.

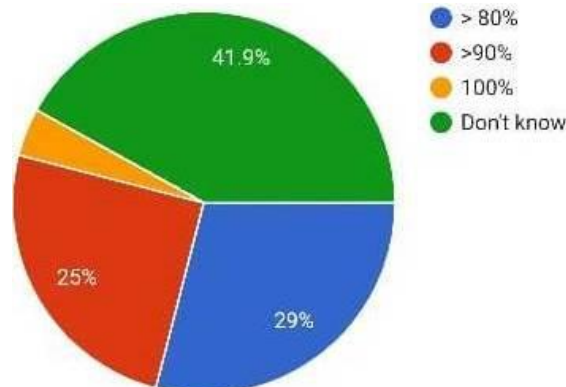
6. **Confidentiality:** Confidentiality is assured regarding medical students at all stages of the study.

III. Results

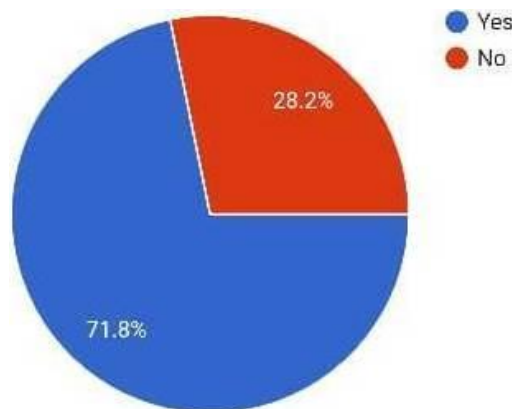
A total of 487 students participated in this study. Majority of them are females(68%).In our study, 94.4% of the subjects know about Human Papilloma Virus and 91.9% know that the route of transmission of HPV is through sexual contact. 62.4% people know that both males and females are prone for HPV infection. 93.5% students know that HPV causes cervical cancer and 83.9% know that use of condoms reduce the risk of getting HPV. Out of all the subjects 90.3% know what is pap smear and 89.5% know the use of pap smear.79.8% know about HPV vaccine. Out of all the subjects 81.5%, 28.2% and14.5% know that HPV vaccine protects against carcinoma cervix, genital warts and carcinoma penis respectively. 50% of the people know that HPV vaccine is administered at the age of 10-25 years. 47.6% people know that HPV vaccine can be administered to males. 24.6% know that HPV vaccine had an efficacy of >90%. The fact that HPV vaccine is contraindicated during pregnancy is known by 34.9%. 42.9% of subjects know that the vaccine cannot be administered to affected individuals. 88.9% had responded that they were not vaccinated against HPV. 71.4% showed their interest towards getting vaccinated.



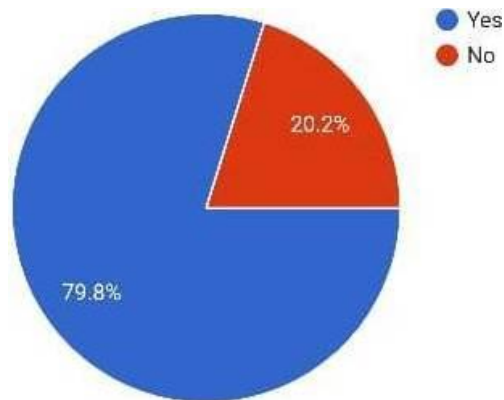
Are you vaccinated against HPV?



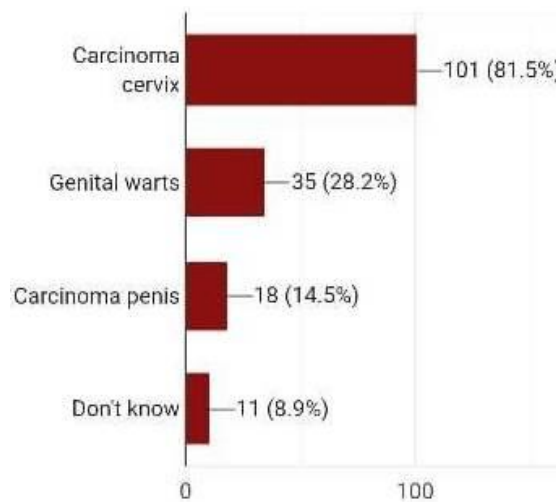
Efficacy of HPV vaccine



Are you willing to get vaccinated?



Do you know about HPV vaccine?



HPV vaccine provides protection against

IV. Discussion

Mortality due to carcinoma cervix in Indian women is greater compared to other countries. In the present study a high proportion of students reported that they know about HPV but only 81.5% were aware that HPV vaccine could prevent carcinoma cervix. Some (28.2% and 14.5%) are aware of the role of HPV on diseases like Genital warts and Carcinoma penis.

Only (27.4%) know the number of doses of administration, 47.6 % know that the vaccine could be administered to males and that HPV vaccine was administered to people between 10-25 years was known to 50% of subjects. Many studies documented high risk of HPV infection which is 30% of inflammatory lesions and 95% of cervical cancer cases.

Eventhough it is proved that the efficiency of HPV vaccine is more, only few subjects (25.6%) know its efficiency in controlling the carcinoma cervix. HPV vaccine administration is very poor in developing countries like India. The reasons are lowered perceived risk of cervical cancer, prohibitive cost, non-availability of vaccine in India (8). But lack of knowledge about HPV vaccine and about HPV in causation of carcinoma cervix is the most determining factor for poor uptake of HPV vaccine (9).

V. Conclusion

In conclusion the knowledge about HPV vaccination is poor among medical students. The reasons for not uptaking vaccine are doubts regarding efficacy and fear of side effects. So Indian Government should implement HPV vaccination programmes and strengthen the health care professionals by implementing more awareness programmes on carcinoma cervix and role of HPV vaccine in its prevention.

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