

Medical Students' Knowledge of Screening of Cancer Cervix and its Prevention and its Dissemination in Community at Large

Uma Pandey

Abstract

Introduction: Incidence of cervical cancer is still very high in India as compared to the western countries. It is the commonest genital malignancy and leading cause of women's mortality. It is very unfortunate to see so many cervical cancer patients in India when there are preventive and screening methods available. The screening method is cheap but still not used as a national screening method in our country. The questionnaire survey was done to find out medical students' knowledge about screening (Pap smear) and preventive (HPV vaccination) methods. They were also asked if they have been proactive in spreading this information far and wide. Methods: Questionnaire survey was done of the final year and pre-final year medical students of Institute of Medical Sciences, Banaras Hindu University. It was done in April and May 2015. There were total of 61 Final year Medical Students and 37 Pre-final year Medical Students (a total of 98 medical students). Results: Male students were 38 in final year and 17 in pre-final year. Female students were 23 in final year and 20 in pre-final year. Total number of male students was 55 and female students were 43. All students were unmarried. 89 students = 90% (50 male and 39 female) knew cancer cervix and its predisposing factors. 77 students = 78% (38 male and 39 female) knew that HPV has a strong association in causation of this cancer. 54 students (55%) knew about the HPV Vaccine (42 female and 12 male). None of the female students had HPV vaccine. Male students were asked about their HPV vaccine intake and they thought it was a joke! Students were asked if they

have explained to anyone in family or community regarding Pap smear or HPV vaccine, for which the reply was negative. 75 = 76% (39 male and 36 female) students knew about Pap smear as a screening method. Conclusions: Students knowledge were good about Pap smear and HPV vaccine but they need to be motivated to spread their information wide in the community. This is due to the very fact that incidence of cancer cervix is very high in our country and if we decide to make each and every medical student as a champion of it, it will do well to our society.

Keywords: Cervical Cancer; Pap Smear; HPV Vaccine.

Introduction

Unfortunately in spite of India's increasing growth in the private health sector there remains a big gap for a national program for screening of cervical cancer. Till date there is no national screening program for pre-invasive stage of cancer cervix, this remains the situation after many western countries have reduced their incidence of cancer cervix remarkably just by regular screening.

Cancer cervix remains the major killer among women in our country. It is seen in clinics many times at the advanced stage of cancer cervix for which Radiotherapy remains the only option with its associated morbidities.

It was what inspired us to find out from medical students who are our future doctors regarding preventive method. Human Papilloma Virus (HPV) vaccination and screening by Pap smear [1-4].

HPV types are many but the most virulent are 16 and 18. There are bivalent and quadrivalent vaccine available for vaccination of young girls at the age of 9-11 years or before their sexual debut. These

Associate Professor,
Department of Obstetrics &
Gynaecology, Banaras
Hindu University

Uma Pandey
6 FF, Kabir Colony
Banaras Hindu University
Varanasi-221005
(Uttar Pradesh)
E-mail:
uma.pandey2006@yahoo.com

vaccines have been researched and HPV vaccination is part of national vaccination programme in the UK.

Approximately 50-80% of sexually active women acquire HPV infection, but it is the persistence of HPV which causes cervical cancer. It may take up to 20 years for cancer cervix to develop. Therefore it is the best suited for screening. The sensitivity and specificity of Pap smear is 50-75% and 98-99% respectively [5-6].

The aim & objective of this study was to find out knowledge and awareness regarding Pap smear and HPV vaccination for cervical cancer among medical students (final and pre-final year) of Institute of Medical Sciences, Banaras Hindu University, Varanasi.

Methods

Questionnaire survey was done of the final year and pre-final year medical students of Institute of Medical Sciences, Banaras Hindu University. It was done in April and May 2015. There were total of 61 Final year Medical Students and 37 Pre-final year Medical Students (a total of 98).

These students were expected to have knowledge and awareness regarding Pap smear and HPV vaccination as they had frequent clinical exposure in the outpatients department and wards. Medical students also had theoretical classes on screening of pre-invasive stage of cervical cancer and HPV vaccination.

Questionnaire were collected by the first author and data was fed on excel sheet. Calculations were of the data entered.

Results

Male students were 38 in final year and 17 in pre final year. Female students were 23 in final year and 20 in pre final year. Total number of male students was 55 and female students were 43. All students were unmarried (table 1). 89 students =90% (50 male and 39 female) knew cancer cervix and its predisposing factors (table 2).

77 students = 78% (38 male and 39 female) knew that HPV has a strong association in causation of this cancer (table 3). 54 students (55%) knew about the HPV Vaccine (42 female and 12 male) table 4. None of the female students had HPV vaccine. Male

Table 1: students detail

	Final	Prefinal	Total
Male students	38	17	55 (56%)
Female students	23	20	43 (43%)
Total Students			98

Table 2: Knew predisposing factors of cancer cervix

	Knew	Didn't know
Male student	50 (51%)	5 (5%)
Female student	39 (39%)	4 (4%)

Table 3: HPV has a strong association in causation of cancer cervix

	Knew	Didn't know
Male student	38 (38%)	17 (17%)
Female student	39 (39%)	4 (4%)

Table 4: knowledge of HPV vaccine

	Knew	Didn't know
Male student	12 (12%)	43 (47%)
Female student	42 (42%)	1 (1%)

Table 5: Pap smear as a screening method

	Knew	Didn't know
Male student	39 (39%)	16 (16%)
Female student	36 (36%)	7 (7%)

students were asked about their HPV vaccine intake and they thought it was a joke! Students were asked if they have explained to anyone in family or community regarding Pap smear or HPV vaccine, for which the reply was negative. 75 =76% (39 male and 36 female) students knew about Pap smear as a screening method (table 5).

Discussion & Conclusion

This study shows good knowledge and awareness among medical students. Knowledge of cancer cervix is found to be more than 75% but that is lower than the study done in 2013 in North India [7].

78% knew HPV as a prime causative factor in cancer cervix in this study in contrary to a study done in South Africa. 76% students knew that Pap smear is a screening method which is more than study done by Hoque et al [8].

Student's knowledge was good about Pap smear and HPV vaccine but they need to be motivated to spread their information wide in the community. This is due to the very fact that incidence of cancer cervix is very high in our country and if we decide to make each and every medical student as a champion of it, it will do well to our society.

References

1. Christopher PC, Derek WA, Bradley JQ. Cervical Cancer screening: from the Papanicolaou smear to the vaccine era. *J Clin Oncol*. 2003; 10: 224-30.

2. Franco E, Harper DM. Vaccination against human papilloma virus infection: new paradigm in cervical cancer control. *Vaccine* 2005; 23: 2388-94.
3. Brown DR, Shew ML, Qadadri B. A Longitudinal study of genital human papilloma virus infection in a cohort of closely followed adolescent women. *J Infectious Disease* 2005; 191: 182-92.
4. Cronje HS. Screening of cervical cancer in the developing world. *Best Pract Res Clin Obstets Gynaecol* 2005; 19: 517-29.
5. Arends MJ, Buckley CH, Wells M. Aetiology, pathogenesis and pathology of cervical neoplasia. *J clin Pathol* 1998; 51: 96-103.
6. Aboyeji PA, Ijaiya MDA, Jimoh AGA. Knowledge, attitude and practice of cervical smears as a screening procedure for cervical cancer in Iliron, Nigeria. *Trop J Obstet Gynecol*. 2004; 21: 114-117.
7. Thippeveeranna C, Sadhana MS, Singh LR, Singh NN. Knowledge, attitude and practice of the Pap smear as a screening procedure among nurses in a tertiary hospital in North Eastern India. *Asian Pacific Journal of Cancer Prevention*. 2013; 14: 849-52.
8. Hoque ME. Awareness of cervical cancer. Papanicolaou's smear and its utilization among female, final year undergraduates in Durban, South Africa. *J Cancer Res Ther*. 2013; 9 (1): 25-28.