

Attitude of Female Teachers of Government and Private Schools of Chandigarh towards Prevention of Cervical Cancer by Screening and Vaccination against Cervical Cancer

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ABSTRACT

Background: ICMR report in 2016 showed that Cancer of the cervix is the third most common cancer with estimated 1 lakh new cases in 2016 in India and about 1.04 lakh during 2020. It is estimated that every 8 minutes one woman dies of cervical cancer. Awareness about Cervical Cancer in School Teachers will create awareness of vaccination and screening in adolescent girls. HPV Vaccination is given to adolescent girls.

Objective: To assess the Attitude of Female Teachers of Government and Private Schools of Chandigarh towards prevention of Cervical Cancer

Methodology: Cross-sectional study among Female School Teachers was carried in Chandigarh. 202 teachers were interviewed in a predesigned and pretested questionnaire.

Results and conclusion: 41.6% of Government teachers and 54.5 % of Private Teachers heard about Pap Smear Test previously. 33.7% of Government teachers and 45.5 % of Private Teachers were aware about availability of Vaccination to prevent Cervical Cancer

Keywords: Cervical Cancer Awareness, Female School Teachers, Cancer cervix Prevention, Pap Smear, HPV Vaccination

INTRODUCTION

The cervix is the lower part of the uterus that opens into the vagina. Cervical cancer occurs when abnormal cells on the cervix grow out of control. The area where ectocervix and endocervix cells meet is called the “transformation zone” (T-zone) and is the most likely location for abnormal or precancerous cells to develop.¹

Cervical cancer ranks as the fourth most frequent cancer among women in the World. HPV types 16 and 18 are responsible for about 70% of all cervical

cancer cases worldwide. HPV vaccines that prevent HPV 16 and 18 infections are now available and have the potential to reduce the incidence of cervical and other anogenital cancers.²

Cervical cancer ranks as the 2nd most frequent cancer among reproductive age (between 15 and 44 years) women in India after Breast Cancer. (Summary Report 27 July 2017 of HPV Information Centre).²

ICMR report in 2016 estimated that every 8 minutes one woman dies of cervical cancer in India.³

Cancer of the cervix uteri is the leading site in 6 registry areas viz., Barshi Rural, Barshi Expanded, Mizoram, Tripura, Nagaland and Pasighat PBCRs.⁴

Epidemiologic studies have shown that the HPV DNA was detected in 93% of the tumors of cervical cancer.⁵

It is established that well-organised cervical screening programmes or widespread good quality cytology can reduce cervical cancer incidence and mortality. The most frequent method for cervical cancer screening is cytology (Pap smear), and there are alternative methods such as HPV DNA tests and visual inspection with acetic acid (VIA).⁶ It usually takes 3–7 years for high-grade changes in cervical cells to become cancer. Cervical cancer screening may detect these changes before they become cancer.⁷

Screening has a big impact on cervical cancer mortality than it has on incidence and that if every women attends screening regularly, 83% of cervical cancer deaths could be prevented.⁸

Asymptomatic women are usually not screened for cervical cancer even once in their lifetime in India. NFHS 4 data shows that only 22.3 % of women of reproductive age (15-49) undergo cervix examination in a year.⁹

Rural women are at higher risk of developing cervical cancer due to various reasons that is low socioeconomic condition, poor hygiene, early marriage, multiple pregnancies, smoking, and multiple sexual partners. Awareness about Cervical Cancer in School Teachers will create awareness of risk factors, symptoms, vaccination and screening in adolescent girls. HPV Vaccination is given to adolescent girls.

OBJECTIVE: To assess the Attitude of Female Teachers of Government and Private Schools of Chandigarh towards prevention of Cervical Cancer

METHOD: A Cross-sectional study was conducted in randomly selected private and government schools of Chandigarh. The Study population included the Female School Teachers of selected Government and Private schools. The Sample Size was taken as 202 female school teachers. Equal representation was taken from Government Schools and Private Schools of Chandigarh. Schools were first categorized according to the regions they are present in. Chandigarh was divided into four regions according to the directions. Equal number of private and government schools was taken from each region. All teachers available from middle, secondary and senior secondary classes were taken of the selected schools. Prior permission from the DPI (Schools) was taken and also from the respective principals of each selected school. Study Period was Four Months (January to April 2018). A Pre-designed and Pre tested Questionnaire was used to collect information for the Study. Questionnaire was filled by the respondents themselves, without any assistance. Information was collected about socio demographic information of study participants and knowledge about vaccination and screening of cervical cancer was assessed. The obtained data was entered into Microsoft Excel 2010. Descriptive Analysis was done in form of numbers, percentages, and represented in form of tables and figures. The data collected was analysed with help of MS Excel 2010

Inclusion Criteria –

1. Female Teachers teaching above primary classes.
2. All those who were willing to participate in the study.

Ethical Consideration:

All the participants were explained about the study .The name of participants and there information was kept confidential .Written Consent was taken from all the participants.

RESULTS:

Table 1: Socio demographic distribution of the respondents

	Government(N=101)	Private(N=101)
Age Group (Years)	No.(Percent)	No.(Percent)
31-40	38(37.6%)	49(48.5%)
41-50	29(28.7%)	19(18.8%)
51-60	24(23.8%)	8(7.9%)
21-30	10(9.9%)	25(24.8%)
Education		
Postgraduate	84(83.2%)	85(84.2%)
Graduate	13(12.9%)	14(13.8%)
Doctorate	4(4.0%)	2(2.0%)
Marital Status		
Married	96(95.0%)	74(73.3%)
Unmarried	5(5.0%)	24(23.8%)
Others	0(0%)	3(3.0%)
Monthly Family Income		
<30000	8(7.9%)	16(15.8%)
30000-60000	47(46.5%)	47(46.5%)
>60000	46(45.5%)	38(37.6%)
Family Type		
Nuclear	58(57.4%)	52(51.5%)
Joint	43(42.6%)	49(48.5%)

Table 1 shows the age of respondents ranged from 21 to 60 years. Majority of the respondents were in the age group 31 to 40 years (37.6 % in Government and 48.5 % in Private). Most of respondents were Postgraduate (83.2 in Government and 84.2 in Private). Marital Status of 95% in Government Schools and 73.3% in Private Schools was married. Majority of respondents were having monthly income of Rs 30,000 to Rs 60,000 (46.5% in Government and 46.5% in Private) and are having nuclear type of family (57.4% in Government and 51.5% in Private)

Table 2: Distribution of respondents according to their Knowledge about HPV Vaccination

	Yes	No	Don't Know
	N (%)	N (%)	N (%)
Vaccination Awareness			
Government (N=101)	34(33.7%)	14(13.9%)	53(52.5%)
Private (N=101)	46(45.5%)	13(12.9%)	42(41.6%)
Recommended Age of Vaccination			

Government (N=101)	27(26.7%)	11(10.9%)	63(62.4%)
Private (N=101)	26(25.7%)	16(15.8%)	59(58.4%)
Awareness about vaccinating adolescent girls and women before initiation of sexual relationship			
Government (N=101)	33(32.7%)	9(8.9%)	59(58.4%)
Private (N=101)	31(30.7%)	11(10.9%)	59(58.4%)
Pap Smear Test Awareness			
Government (N=101)	42(41.6%)	26(25.7%)	33(32.7%)
Private (N=101)	55(54.5%)	28(27.7%)	18(17.8%)
Regular screening with Pap smear helps in preventing cervical cancer			
Government (N=101)	46(45.5%)	2(2.0%)	53(52.5%)
Private (N=101)	61(60.4%)	6(5.9%)	34(33.7%)
Attitude about initiation of regular screening from age of 30 years			
Government (N=101)	53(52.5%)	5(5.0%)	43(42.6%)
Private (N=101)	68(67.3%)	8(7.9%)	25(24.8%)
Fear of screening/ test procedures			
Government (N=101)	36(35.6%)	49(48.5%)	16(15.8%)
Private (N=101)	25(24.8%)	68(67.3%)	8(7.9%)
Pap Smear Screening Practise			
Government (N=101)	23(22.8%)	55(54.5%)	23(22.8%)

Private (N=101)	23(22.8%)	75(74.3%)	3(3.0%)
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33.7% of Government teachers and 45.5 % of Private Teachers are aware about availability of Vaccination to prevent Cervical Cancer. Awareness about recommended age of Vaccination was even lower, only 26.7% of Government teachers and 25.7 % of Private Teachers were found to be aware. Vaccination needs to be administered before initiation of sexual relations was known to 32.7% of Government teachers and 30.7 % of Private Teachers.

41.6% of Government teachers and 54.5 % of Private Teachers were aware about Pap Smear Test previously. 45.5% of Government teachers and 60.4

% of Private Teachers responded that regular screening with Pap smear will help in preventing cervical cancer.

52.5% of Government teachers and 67.3 % of Private Teachers had positive attitude for regular screening from age of 30 years. Only 35.6 % of Government teachers and 24.8 % of Private Teachers admitted that they have fear of undergoing screening procedures. 22.8 % of Government teachers and 22.8 % of Private Teachers said that they have undergone Pap smear screening.

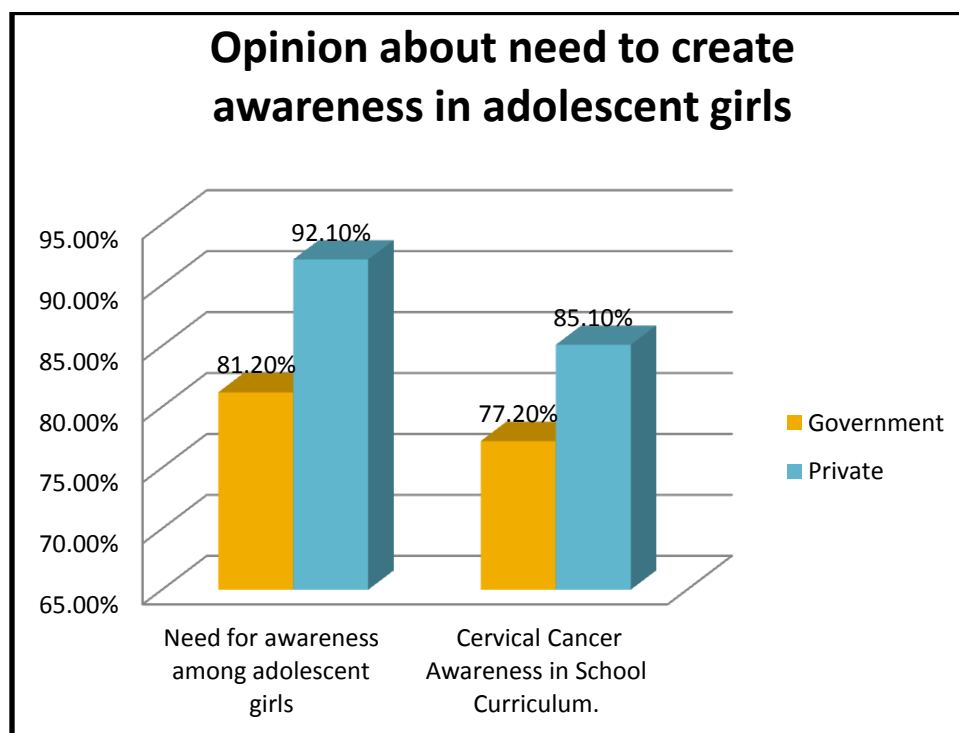


Figure 1: Percentage distribution of respondents who felt need for creating awareness about cervical cancer among adolescent girls and to add Cervical Cancer as a topic in School Curriculum.

Majority of respondents 81.2 % of Government teachers and 92.1 % of Private Teachers have opinion that it will be helpful to create awareness about cervical cancer among adolescent girls in school.

Majority of respondents 77.2 % of Government teachers and 85.1 % of Private Teachers have opinion that Knowledge about Cervical Cancer should be added to School Curriculum.

DISCUSSION

In present study only 33.7% of Government teachers and 45.5 % of Private Teachers are aware about availability of Vaccination to prevent Cervical Cancer whereas In Chawla P.C. et al (2016)¹⁰ study, (81%) respondents were found to be aware about the existence of vaccines for cervical cancer prevention. Chawla P.C et al(2016)¹⁰ study was done on Health Care Providers whereas our subjects are school teachers that's why higher level of awareness was found in their study.

In present study, 45.5% of Government teachers and 60.4 % of Private Teachers were aware that regular screening with Pap smear helps in preventing cervical cancer whereas Varughese NR *et al* (2016)¹¹ study shows only 4.3% (13) of the women had heard about Pap smear. Higher awareness level in our study may be due to better socioeconomic and educational background of respondents.

In present study, 35.6 % of Government teachers and 24.8 % of Private Teachers admitted that they have fear of undergoing screening procedures. Krishnaveni K *et al* (2018)¹² study reported fear of procedure (30.4%) was the main barrier according to respondents for not undergoing cervical screening. There is slight more fear in government school teachers but less in private school teachers than Krishnaveni K *et al* (2018)⁹ study. If we see average of both then the result of our study is almost equal to their.

In present study 22.8 % teachers (both Government and Private) said that they have undergone Pap smear screening whereas Rahman H *et al* (2015)¹³ study shows only 16.6% nurses, who were aware of a Pap smear (11.9% of the total sample), had ever undergone a Pap smear test. This difference of higher level of practice may be due to better socioeconomic background and awareness of our respondents.

In our present study majority of respondents, 81.2 % of Government teachers and 92.1 % of Private Teachers had opinion that it will be helpful to create awareness about cervical cancer among adolescent girls in school and 77.2 % of Government teachers and 85.1 % of Private Teachers had opinion that Knowledge about Cervical Cancer should be added to School Curriculum which shows the demand and requirement of awareness in society about cervical cancer. Community desires to be informed about Risk Factors, Sign and Symptoms, Prevention and Screening of Cervical cancer.

CONCLUSION AND RECOMMENDATIONS:

Awareness of Cancer can help in reducing incidence, morbidity and mortality of Cancer. Vaccination can reduce incidence and prevalence. Regular screening can lead to early diagnosis and treatment which can save many precious lives. Awareness of School Teachers helps them and their students also so it is recommended from our study that special trainings

and awareness activities for cancer including cervical cancer should be conducted for school teachers.

LIMITATIONS

- Collected data was based on self- reporting and interview method cannot be applied which could yield better results.
- As study was conducted in specialized group so findings cannot be generalized for entire population.

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