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Original Research Article

Perception about pap smear screening test among females attending a tertiary care center

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ABSTRACT

Background: Knowledge regarding the screening test (Pap smear) among women has been proven to be a significant predictor of first-time screening and in turn helps in early diagnosis and treatment of the disease. Hence this study was conducted to assess the knowledge and practice of pap smear screening test for cervical cancer among the women attending the outpatient department of obstetrics and gynecology.

Methods: The cross-sectional study was conducted by the department of obstetrics and gynecology, at Sri Muthukumaran Medical College Hospital and Research Institute, among the women attending the outpatient department, during the month of August 2019. A total of 180 participants were included in the study. Data was entered in Microsoft excel and data analysis was done using statistical package for social sciences (SPSS) version 17.

Results: Knowledge about carcinoma cervix and pap smear were present among 86.7% and 74.4% of participants, respectively. About the practice of pap smear, only 24.4% of the study participant have undergone the screening test and only two participants had taken the HPV vaccine.

Conclusions: Most of the women had poor attitude and practice related to screening and vaccination for cervical cancer. But their attitude is favorable for screening. Hence promotion of free regular health check-up and vaccination for cervical cancer among general population might increase the awareness and decrease the disease burden.

Keywords: Carcinoma cervix, Female, Pap smear, Perception

INTRODUCTION

Cervical cancer is a common cancer among both rural and urban women of India.¹ It has well known risk factors and an identifiable precancerous stage which is called as Cervical dysplasia. The precancerous and the early stages of invasive cervical cancer can be detected through visual inspection with Lugol's iodine or visual inspection with acetic acid or cytological smear examination.^{2,3} It has been documented that detection at the precancerous or early stage of invasive cancer along with early treatment reduces mortality and morbidity of cervical cancer.⁴ Knowledge regarding Pap smear test among women has been proven to be a significant predictor of first time screening.⁵

Most cases of cervical cancer in India are diagnosed at later and more serious stages which will reduce the survival rate of women with cervical cancer. The prime reason for late stage diagnosis of disease is a lack of awareness about screening and preventive methods of cervical cancer. Screening for cervical cancer is essential as the women often do not experience symptoms until the disease has advanced.⁶ The most common symptoms present in cervical cancer are bleeding between periods, persistent back pain, pelvic pain, bleeding after intercourse, urinary urgency, unexplained weight loss, and severe swelling in one or both legs. Infection with human papillomavirus (HPV), particularly HPV 16 and 18 strains cause 75% of cervical cancers globally.⁷ Other risk factors include having multiple sexual partners, early

age of sexual intercourse, tobacco consumption, prolonged use of oral contraceptive pills, increased parity, and early age of giving birth.⁸

Objectives of this study was to assess the knowledge and practice of pap smear screening test for cervical cancer among the women attending the outpatient department of obstetrics and gynecology.

METHODS

The cross-sectional study was conducted by the department of obstetrics and gynecology, at Sri Muthukumaran Medical College Hospital and Research Institute, among the women attending the outpatient department, during the month of August 2019. Based on the literature, considering the knowledge about the screening test as 69% with confidence of 95% and relative precision of 10%, the sample size was calculated as hundred and seventy-three and it was rounded to hundred and eighty.⁹ Hence, a total of 180 participants were included in the study. All women between 15- 65 years of age who were attending the outpatient department of obstetrics and gynecology were included in the study. Participants with known history of cervical cancer and gravid mothers were excluded from the study.

The principal investigator explained the purpose of the study to each participant and a written consent was obtained from the participants prior to the commencement of the study. The participants were also informed that their participation was voluntary and that they could withdraw from the interview at any time without consequences. Every effort was made, to be sure that all information collected from the participants, remain confidential. The study was conducted using a questionnaire, covering particulars related to knowledge and practice components of the screening test pap smear.

Statistical analysis

Data was entered in Microsoft excel and data analysis was done using Statistical Package for Social Sciences (SPSS) version 17.

RESULTS

In the present study the mean age of the study participants was found to be 44.53±12.48 years. Majority of the study participants (28.9%) were in the age group of 41-50 years of age followed by 24.4%, 21.1%, 18.9% and 6.7% of participants in the age group of 31-40 years, less than 30 years, 51-60 years and more than 60 years of age, respectively. Among the study participants only 40.6% were literate and 22.8% were employed. Also, majority of the study participants (85%) were married. Based on modified Prasad's socioeconomic status scale 35% of the participants were belongs to class 2. Also 60.6% of participants were from rural area and 39.4% were from urban area (Table 1).

Table 1: Demographic characteristics of the study participants.

Variables	Frequency	Percentage
Age group		
< 30 years	38	21.1%
31-40 years	44	24.4%
41-50 years	52	28.9%
51-60 years	34	18.9%
61-65 years	12	6.7%
Literacy		
Illiterate	107	59.4%
Literate	73	40.6%
Occupation		
Housewife	139	77.2%
Employed	41	22.8%
Marital status		
Married	153	85%
Unmarried	27	15%
Socio economic status		
Class 1	38	21.1%
Class 2	63	35%
Class 3	43	23.9%
Class 4	25	13.9%
Class 5	11	6.1%
Area of residence		
Urban area	71	39.4%
Rural area	109	60.6%

Table 2: Knowledge about carcinoma cervix and pap smear.

Heard about	Frequency	Percentage
Carcinoma cervix	156	86.7%
Pap smear screening	134	74.4%
Human papilloma virus	43	23.9%
HPV vaccine	21	11.7%

About the knowledge of carcinoma cervix and pap smear, 86.7% and 74.4% of the study participants were found to be heard about carcinoma cervix and pap smear screening test, respectively. Whereas only 23.9% of the participants were aware about the human papilloma virus and only 11.7% of the study participant were heard about the HPV vaccine (Table 2).

Table 3: Practice of pap smear and taking HPV vaccine.

Practice components	Frequency	Percentage
Pap smear screening	44	24.4%
HPV vaccine	02	1.1%

About the practice of pap smear, only 24.4% of the study participant have undergone the screening test and only two participants had taken the HPV vaccine (Table 3). In this study, 72.8% of the participants have told that they

are interested to undergo pap smear screening in future and 40.6% are interested to take HPV vaccine in future. (Table 4).

Table 4: Interested to practice in future.

Interested to practice in future	Frequency	Percentage
Pap smear screening		
Yes	131	72.8%
No	49	27.2%
HPV vaccine		
Yes	107	59.4%
No	73	40.6%

DISCUSSION

In spite of being a major public health problem in developing countries, there aren't any high-level opportunistic screening programs for cervical cancer in India.¹⁰⁻¹² In the absence of a systematic screening program the expected practice is to opportunistically screen eligible women when they come to health units. Studies have shown it is possible to train nurses to screen for cervical cancer.¹³

In the present study, regarding the knowledge of carcinoma cervix and pap smear, 86.7% and 74.4% of the study participants were found to be heard about carcinoma cervix and pap smear screening test, respectively. Whereas only 23.9% of the participants were aware about the human papilloma virus and only 11.7% of the study participant were heard about the HPV vaccine. These results were consistent with the study done by Saha et al where 89% of the respondents had heard of cervical cancer.¹⁴

Another study by Aswathy et al reported that about 89% of the respondents in the rural set up were aware of cervical cancer.¹⁵ Also in their study among 200 subjects, only 1 subject (0.5%), was aware of HPV vaccine. 97.9% of the subjects were unaware of Pap smear.

Aswathy et al showed that 6.9% of their study group has undergone cervical screening by PAP smear.¹⁵ The study by Kumar et al showed that 7.2% of the study participants in Mangalore city had undergone pap smear.¹⁶ Sudhir et al conducted a study in Manipal and it showed a very poor result of 2.25% who have undergone pap testing among their study group.¹⁷

In this study, 72.8% showed a willingness to undergo cervical screening in the future and 59.4% showed willingness to take HPV vaccine, if they are given the facility. Similarly, in the study conducted by Shrestha et al 79% were interested to undergo pap smear screening.¹⁸ A study done in Bhopal by Bansal et al showed a willingness of 76.25%.⁸ Thus the willingness among our

study group is almost similar to that found in most other studies.

CONCLUSION

The knowledge of cervical cancer risk factors and sign were very poor but knowledge about the method of prevention was good in the study population. Most of the women had poor attitude and practice related to screening and vaccination for cervical cancer. But their attitude is favourable for screening. Promote free regular health check-up and vaccination for cervical cancer among general population will increase the awareness and decrease the disease burden.

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