

Knowledge and practice of cervical cancer screening in general population and medical personnel: A gap to be bridged



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ABSTRACT

Background: Carcinoma cervix is a leading cause of morbidity and mortality among women worldwide. Early diagnosis is quite beneficial as it has a long precancerous state. It is important to have a knowledge regarding the natural course of the disease and the screening methods. **Aims and Objectives:** This study was conducted to evaluate the knowledge, attitude, and practice among women attending the outpatient department (OPD) and medical personnel. **Materials and Methods:** The present cross-sectional study was carried out on 240 women, out of which 120 women were taken randomly from the OPD and 120 women were the medical personnel (doctors and nurses) of the hospital. After obtaining written informed consent from the women, a structured questionnaire was administered to collect the information. **Results:** The knowledge and awareness of carcinoma cervix and its screening was 32.5% in the women of general population and 100% in the medical personnel, whereas the percentage of women undergoing the actual screening was 25% in general population and 17.5% in medical personnel. The hindrance of practice in general population was lack of knowledge, but in medical personnel, it was due to hesitation, embarrassment, lack of time, and lack of positive motivation. **Conclusion:** There was a wide discrepancy in the knowledge of cervical cancer and the actual screening practices, not only in the general population but also among the medical personnel. To bridge this gap, effective information, education and communication strategies are required in both the groups to alleviate the morbidity and mortality of this grim disease.

Key words: Attitude; Cervical cancer; Knowledge; Pap test; Practices

INTRODUCTION

Carcinoma cervix is the leading cause of morbidity and mortality among women across the world and India. Worldwide cancer cervix affects about 16/100,000 women per year and kills about 9/100,000 per year globally. Developing countries account for 85% of the estimated burden.¹⁻³ The current estimates indicate approximately 132,000 new cases diagnosed and 74,000 deaths annually in India, accounting to nearly 1/3rd of the global cervical cancer deaths.¹

Cervical cancer is a slow growing disease and women generally manifest in later stages of the disease when chances of survival are lower.⁴ Virtually all cases of cervical cancer are attributable to persistent infection by certain strains of human papilloma virus (HPV) especially HPV-16 and HPV-18 and it can take 20 years to develop the carcinoma cervix.^{2,5} The other known risk factors for cervical cancer include early onset of sexual activities, multiple sex partners, long use of oral contraceptives, immunosuppressants, smoking and specific dietary factors. Thus, slow growing nature of cancer, known etiology, other

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modifiable cause, and availability of preventive vaccination make it a preventable malignancy.

The methods of prevention are known since long. Despite the availability of cervical cancer screening facilities (Pap test) as preventive measure at free of cost, the burden of cervical cancer presenting in advanced stages of the disease is very high in India. It is due to poor utilization of these services, as women have poor knowledge and attitude. This aspect is important not only for the general population but also for the medical professionals as they play a key role in imparting awareness regarding prevention and treatment. Hence, this study was conducted to assess the knowledge, attitude, and practice (KAP) regarding cervical cancer screening among women of general population and medical profession.

Aims and objectives

Aim of the study was to evaluate the KAP among women attending the outpatient department (OPD) and medical personnel.

MATERIALS AND METHODS

This cross-sectional study was carried out in a tertiary care hospital in New Delhi. A total of 240 women were included in the study, out of which 120 women were taken randomly from the OPD and 120 women were the medical personnel (doctors and nurses) of the hospital. After obtaining written informed consent from the women, a structured questionnaire was administered to collect the information regarding KAPs. Knowledge was assessed based on information about carcinoma cervix, its risk factors, knowledge about preventable nature of the disease, screening tests and any vaccination available. If the women had not heard about the carcinoma cervix, it was considered as zero knowledge. If they answered one question, it was considered poor knowledge. If they answered two questions, it was considered average knowledge. If three questions were answered, it was considered good knowledge, and if more than three questions were answered, it was considered very good knowledge. Attitude was assessed based on whether they were willing for screening or not. Practice was assessed based on whether the women underwent cervical cancer examination and not.

RESULTS

Majority of the women in general population were in the age group of 21–25 years and those in medical personnel group were in the age group of 26–30 years. Majority of the women were married in both the groups. While the most women from the general population were from the lower socioeconomic

strata, subjects in the medical personnel group belonged to middle class. As far as education status was concerned, 73% of general population women had education below higher secondary certificate and 33% were illiterate, while all women were graduates in the medical personnel group. In terms of working, 70% of the general population women were non-working and all were working in the medical personnel group where 76.7% (n=92) of women were doctors and the rest (n=28) being the nurses (Table 1).

It was observed that in general population group, 92.5% (n=81) women had no/poor knowledge whereas rest 7.5% had average/good knowledge. In medical personnel group, none of them had zero/poor knowledge and average/good knowledge was present in 41.2% (Table 2).

There was lack of practice in both the group. In general population group, 75% (n=90) women never underwent screening and in medical personnel group, 82.5% (n=99) women never underwent screening. This difference was not statistically significant (P=0.155). HPV vaccination was received by approximately two percent of general population women and 18% of medical personnel women (Table 3).

Table 1: Demographic data of the study participants

Variables	General population (n=120) (%)	Medical personnel (n=120) (%)
Age (years)		
21–35	82 (68.3)	84 (70)
36–45	28 (23.3)	29 (24.2)
>45	10 (8.4)	7 (5.8)
Marital status		
Married	104 (86.7)	68 (56.7)
Unmarried	16 (13.3)	52 (43.3)
Educational status		
Illiterate	39 (32.5)	0
<SSC*	20 (16.7)	0
SSC	29 (24.2)	0
HSC†	15 (12.5)	0
Graduate and above	14 (11.7)	65 (54.2)
Post-graduation	3 (2.5)	55 (45.8)
Working status		
Working	36 (30)	100
Not working	84 (70)	0

*SSC: Secondary School Certificate, †HSC: Higher Secondary Certificate

Table 2: Grading of knowledge

Grading of knowledge	General population (n=120) (%)	Medical personnel (n=120) (%)
Zero knowledge	81 (67.5)	0
Poor knowledge	30 (25)	0
Average knowledge	3 (2.5)	9 (7.5)
Good knowledge	6 (5)	41 (34.2)
Very good knowledge	0	70 (58.3)

Table 3: Practice of cervical cancer screening

Pap test	General population (n=120) (%)	Medical personnel (n=120) (%)
Ever done	30 (25)	21 (17.5)
Never done	90 (75)	99 (82.5)
HPV* vaccination received	2 (1.7)	22 (18.3)

*HPV: Human papilloma virus

Counseling was done for the women who never underwent screening test. In general population group, 55.6% (50 women out of 90) had positive attitude for screening while in medical personnel group, 61.6% (61 women out of 99) women had positive attitude. The main cause of not accepting the screening of cancer cervix in both the groups was embarrassment. The main source of knowledge in general population was medical personnel followed by mass media such as television, print media, and newspapers.

DISCUSSION

Cervical cancer is one of the leading causes of morbidity and mortality among women in India. Poor knowledge and attitude towards cervical cancer screening and HPV vaccination are important causes of low utilization of these services. This has been observed not only among general population but also among women of medical profession.

In the present study, we observed that 67.5% women in general population had zero knowledge and 25% had poor knowledge, and in medical personnel group, 93% women had good and very good knowledge. Jain et al., found that the number of women aware of cervical cancer and screening tests was 86% in their study.⁶ Swapnajaswanth et al., found the similar status of knowledge in medical personnel group.⁷ This signifies that care givers are having good knowledge and they can be a good source of knowledge for general population. The source of knowledge in general population is medical personnel which is similar to the study by Hoque.⁸

In this study, we found that 75% women from general population group never had pap smear and neither 98% women were vaccinated whereas in medical personnel group, despite of having knowledge of 100%, 82.5% women never had pap smear and only 18% were vaccinated. The studies by Swapniljaswanth et al., and Tran et al., had found cervical cytological screening in about 26% and 13%, respectively.^{7,9} Thus, it showed that knowledge in medical personnel group had no or very less effect on their practice.

In the general population group, the main reasons for never willing to undergo cervical screening test included no symptoms in 60% (n=24) and embarrassment in 35%

(n=14) whereas in the medical professional group, the main reasons were embarrassment in 68.4% (n=26) and no symptoms in 15.8% (n=6). Swapnajaswanth et al., noted that the most common reason for not practicing screening test was absence of symptoms (31%), and the second common reason was the subjects felt they were not at risk (29%).⁷

In the present study, more number of women in the general population group had screening (25% vs. 17.5%), but more number of women in the medical profession group changed their attitude after proper counseling (61.6% vs. 55.6%).

In the index study, there was wide discrepancy in the knowledge and practice in both the groups. Other similar studies also reported gap in knowledge and practice.^{10,11} This gap is more prominent in medical personnel group who are the main source of information for the women in the general population. Thus, health care professionals need to be sensitized first for undergoing cervical cancer screening because of their essential role in the implementation of any future screening programs.

Limitation of the study

The present study has small sample size. On the other hand, the strength is that two different groups (general population and medical personnel) have been studied simultaneously for KAP regarding carcinoma cervix and its screening.

CONCLUSION

The study concludes that effective information, education and communication strategies are required in both the groups to bridge the gap of knowledge and the actual screening practice. It is necessary that health care providers should have adequate knowledge and a positive attitude towards screening so that they can motivate the general population for the same.

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