Original article

AWARENESS OF CERVICAL CANCER SCREENING AMONG PARAMEDICAL STAFF AND STUDENTS IN AN INSTITUTION OF NORTHERN INDIA

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ABSTRACT

Introduction: Cervical cancer is one of the leading causes of morbidity and mortality worldwide. Most women with cervical cancer present with advanced disease, resulting in low cure rates. Factors contributing to high burden of disease and advanced stage at presentation include poor knowledge about the disease furthermore and lack of screening among general population.

Objective: To assess the knowledge and awareness of cervical cancer and explore attitudes and practices of Pap smear screening among paramedical staff and students in Santosh Medical College & Hospitals, Ghaziabad.

Methods: A pretested self administered questionnaire based survey was done on 500 paramedical staff and students of Santosh Medical College & Hospitals, Ghaziabad, UP containing simple questions about demographics, knowledge about cervical cancer, its risk factors, screening techniques, attitudes towards cervical cancer screening and its practices.

Results: In this study, about 20% were not aware of cervical cancer as a disease.19% knew that Pap smear is used for detection of preinvasive cervical cancer. O About 80% of subjects did not know that it was possible to detect cervical cancer early nor were they aware of different screening methods like Paps smear and had limited understanding of the types of cervical cancer screening techniques and poor disposition towards undergoing cervical cancer screening. 30% of the respondents knew about HPV Vaccine.

Conclusion: This study serves to highlight that majority of paramedical staff was ill equipped with knowledge concerning cervical cancer.

Keywords: Cervical cancer, Pap smear, Screening attitude

INTRODUCTION

Cervical cancer is one of the most common cancers in women, with an estimate of 468,000 new cases annually in the world, 80% of these cases occurring in developing and undeveloped countries.[1] India accounts for one-fifth of the world burden of cervical cancer.[2] The incidence of cervical cancer has declined in western countries following the introduction of screening programs which are often rudimentary or non-existent in countries like India due to infrastructural, financial and personnel constraints.[3] In developing countries like ours, more than three-fourths of cervical cancer patients are diagnosed at advanced stages leading to poor prospects of long-term survival and cure.[4]

In spite of the gravity of the problem, there have not been active efforts to spread awareness about cervical cancer. The present study was undertaken to investigate the knowledge of risk factors for cervical cancer as well as awareness of the related symptoms and to explore the attitudes and practices among paramedical staff and students in terms of cervical cancer screening programs such as Pap smear as they are important health personnel who can educate and sensitize women on the need for cervical cancer screening. At the same time it is imperative that our health care professionals are aware of those interventions which can be utilized in low-resource settings.

MATERIALS AND METHODS

This descriptive cross-sectional study was conducted in Santosh Medical College and Hospitals, Ghaziabad Uttar Pradesh. Total of 500 paramedical staff and students were recruited for the study. After verbal consent, the questionnaire was provided and participants were asked to fill it individually without discussing with others. The study protocol was approved by the institutional ethical committee. Data was collected using a standard closed ended structured questionnaire adopted from WHO[4] with three sections on sociodemography, knowledge on cervical cancer , attitude and practices towards cervical screening methods. Questions tried to be short, clear, readable and understandable to the participants with only few medical terminologies. The data was presented in frequency distribution tables with percentages .Relevant tables and graphs were computed.. The data was entered into MS Excel software. Proportion and chi-square was applied for the analysis and interpretation of the result using 95% confidence interval.

RESULTS

The data shows that maximum number of respondents fell in range 20-30 years (42%) and was undergraduates (65%). A 41% were married, out of these 55% were multipara and 65% were not using any contraceptive method (Table 1).

Table 2 shows that 80% of participants were aware of cancer cervix and the main source of information being from the hospital (46%), media (28%) and friends (15%). Regarding the awareness of various risk factors, 35% knew that HPV was an important predisposing factor.

Table 1: Sociodemographic characteristics of study population (n=500)

Characteristics	Participants (%)
Age(years)	
20-30	210 (42)
31-40	190 (38)
41-50	70 (14)
51-60	30 (6)
Marital status	
Married	205 (41)
Unmarried	295 (59)
Education	
Primary	0 (0)
Secondary	100 (25)
Undergraduate	325 (65)
Postgraduate	50 (10)
Uneducated	0 (0)
Parity	
Nullipara	275 (56)
Multipara	225 (44)
Contraception	
None	325 (65)
Barrier	90 (18)
IUCD	35 (7)
OCP	40 (8)
Ligation	10 (2)

Table 2: Responses related to awareness of cervical cancer (n=400)*

Variables	Participants (%)
Source of information	
Hospital	184 (46)
Friend	60 (15)
Newspaper	76 (19)
Radio/tv	36 (9)
Others	44 (11)
Risk factors	
Early coitus	120 (30)
Multiple partner	60 (15)
STD	48 (12)
HPV	140 (35)
Don't know	32 (8)
Symptoms	
Menstrual	154 (38.5)
Discharge p/v	110 (27.5)
Pain	50 (12.5)
Postcoital bleeding	10 (2.5)
Postmenopausal bleeding	76 (19)
No symptom	0 (0)

* Number of participants who were aware of cervical cancer screening

Early coitus (30%), STD (12%) and multiple partners (15%) were other risk factors which the respondents were aware of. It was found that only 20% knew about 3 risk factors.Younger and educated participants were found to be more aware and this difference was found to be stastically significant ($p<0.05$). The common symp-

toms associated with cervical cancer were menstrual problems (38.5%) followed by vaginal discharge (27.5%) and postmenopausal bleeding (19%). Of all the respondents 50% didn't know that cervical cancer could be detected early and only 19% knew about cervical screening methods, the main source of information being hospital.

Table 3: Responses Related To Cervical Cancer Screening (n=95)*

Variables	Frequency (%)
Source Of Information	
Radio/TV	8 (8.4)
Hospital	40 (42)
Newspaper	8 (8.4)
Friends	14 (14.5)
Internet	20 (21)
Others	5 (5.2)
Who should be screened	
Married	29 (30.5)
>30 years	20 (21)
Sexually active	12 (12.6)
Don't know	34 (35.7)
Other screening methods	
VIA	2 (2.1)
VILI	1 (1.03)
Colposcopy	5 (5.2)
Biopsy	12 (12.6)
HPV	10 (10.06)
Don't know	65 (68.4)

*Number of participants who were aware of pap smear as a screening method

Table 4: Responses related to attitude regarding screening of cancer cervix- Reason for Not Being Self Screened

Reason	Frequency (%)
Not indicated	75 (15)
Embarrassing	90 (18)
Cost factor	10 (2)
Not aware of facility	325 (65)

It was surprising to see that 35.7% did not know whom to screen. According to 30.5% respondents, married women, above 30 years of age (21%) or those who are sexually active (12.6%) were eligible candidates for Pap smear. A 31% of respondents thought Pap screening should only be done in the presence of symptoms. 68.4% of respondents did not know about other screening methods. 12.6% knew about the cervical biopsy, although only 1% respondents knew about visual inspection after acetic acid application (VIA), and 5% knew about colposcopy as diagnostic modalities of cervical cancer screening other than Pap smear. 30% of the respondents knew about the HPV vaccine, the source of information being the media. Only 21% respondents gained information about Pap smear while working in this institute (Table 3).

The source of information of pap smear amongst those who were aware, was mostly from hospital workers (46%) and media (19%). Most of them (82%) thought that a speculum examination is to be done by doctors. Among all respondents only 8% got Paps smear done. The results in table 4 shows that 80% of the respondents did not have a pap smear done because 15% felt that it was not needed because they did not have any symptoms, 65% were not aware of the facility, 18% found it embarrassing and 2% thought it might be costly.

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.[5,6,7] 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.[8] Attitudes that screening is to be done by doctors or gynaecologists only need to change. The survey revealed that the hospital played a limited role as a source of information on Pap smear. The Pap smear based screening program is not feasible in low resource settings like India due to economical and logistic reasons as there is a lack of trained pathologists and equipped laboratories. This calls for a re-orientation of nurses, paramedical and health workers and a need for introduction of simpler cervical cancer screening methods such as visual inspections.[9]

Our results are consistent with other studies [3,9,10] which showed that although 80% knew about cervical cancer, only 19% had heard of Paps smear and the source of information being hospital. This proves the point to integrate cancer screening and recognition in their training curriculum.

Our finding that married women are more likely to be screened is consistent with previous studies [10,11] in India. The proposed reason is that married women may receive more frequent obstetric or gynaecological care, making them more responsive to reproductive health care.[12] Rest of the

respondents did not get screened in view of embarrassment and financial reasons.

In departments other than gynaecology, the practice of not screening patients who come under their care is prevalent, despite the availability of the screening facility in the department of Obstetrics & Gynaecology. Among the eligible respondents 80% had never screened themselves because they did not feel it was indicated in them. It is unlikely that these medical workers will ever motivate others or advise them until their doubts are cleared. The lack of depth on knowledge of cervical cancer in paramedical staff can be explained by their training curriculum. In the proposed 'screen and treat' strategy there will be need to integrate cervical cancer prevention issues in the nurses' training curriculum with special emphasis on counselling and motivating the eligible women to get themselves screened for cervical cancer.

The study showed that despite the gravity of cervical cancer and prevention by screening using a Pap smear, attitudes and practices among nurses towards cervical cancer screening were negative.

CONCLUSION

The awareness of cervical cancer and its screening procedure is currently low but there is a lot of opportunity to increase the awareness of cervical cancer and Pap smear among paramedical staff and students. Most of the eligible participants did not get themselves screened which shows their negative attitude.

RECOMMENDATIONS

Although widespread screening programmes are nonexistent in developing nations like India, efforts should be made to spread awareness amongst women. Lack of knowledge of cancer screening is a reflection of poor health education in a society .There is a need to educate the paramedical staff and students who are in direct contact with the patient. It is suggested that institutions should organise training for health personnel about screening methods and prevention of cervical cancer.

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