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Knowledge, Attitude and Practices about Cervical Cancer and Screening among Nurses of a Tertiary Care Centre in Western India

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ABSTRACT

Introduction: Nurses play a crucial role of enlightening community about need and availability of screening test so it is important to explore the knowledge, attitude and practices of nurses about cervical cancer and screening.

Methodology: A pretested semi structured questionnaire used to carry out the study among nurses of a tertiary care centre in Western India.

Observations: Out of total 103 nurses, 90.3% were married with mean age was 34 years. Majority (98%) were aware about cervical cancer while 73.8% agreed that it could be prevented. Major symptoms of cervical cancer recognized were irregular bleeding (31.7%) & foul smelling vaginal discharge (34.2%). Nursing academic study (51.3%) was the leading source of all information. Risk factors identified were Human Papilloma Virus (15.6%) and poor personal hygine (14.7%). As many as 62% nurses felt that they were not at risk of cervical cancer. Only 3.9% had received HPV vaccine.

Conclusions: This study highlights major Knowledge, Attitude, Practice gap among nursing staff regarding cervical cancer.

Keywords: KAP, Nurses, Cervical Cancer, PAP Smear

INTRODUCTION

Cervical cancer is the leading cancer among women across the globe with nearly half million annual cases with 4 out of 5 women were from developing and undeveloped countries[1, 2]. Approximately 20% cases of cervical cancer were occurring in India only [1, 3]. In many of the developed countries ccommunity level screening program helped significantly to reduce annual incidence and mortality from cervical cancer[2].

The key to reducing cervical cancer morbidity and mortality is early detection and treatment of cervical precancerous lesions[4].Well organised programmes to detect and treat precancerous abnormalities and the early stages of cancer prevent up to 80% of cervical cancer in developed countries. However, large scale screening programs for detecting carcinoma of cervix based on cytology have been very difficult to undertake in country like India[5]. In India, enough importance was not given to cervical cancer, except only local efforts for screening and intervention in some hospitals and in research projects [2].

The female health care providers especially the staff nurses play an integral role in educating women in prevention of diseases and health promotion, they also influence cervical cancer screen-

ing adherence and health activities among most women[6]. As the doctor to patient ratio is low in India i.e., 1:2,000 according to Medical Council of India, staff nurses if trained properly, can make aware and screen all the women coming / admitting to hospital for any of their problems, along with motivating the peripheral health workers to bring all the sexually active females to the hospital for the cervical screening[2].

Though there is no dearth of studies on awareness and attitudes and practices of women about cervical screening, very few studies focus on the female health care providers. Studies need to be done to document the knowledge of female health care provider (HCPs) staff concerning cervical cancer and their attitudes and practices towards cervical screening. KAP study will bring weak points among health care providers, So that training can be organised.

METHODOLOGY

A cross sectional study was conducted at Surat Municipal Institute of Medical Education and Research (SMIMER), Tertiary care hospital and teaching institute. Total 110 female staff nurse were recruited from 240 female health workers as study participants during August 2015.Total 103 female staff nurse completed questionnaire. A self-administered semi structured questionnaire was designed in collaboration with the Obstetric and Gynecology Department and Community Medicine Department to cover maximum aspects related to cervical cancer and its screening. The questionnaire contained recall questions about demographics, the knowledge of risk factors, sign and symptoms of cervical cancer, diagnostic modalities other than Pap smear and vaccine for human papilloma virus (HPV); recognition type questions (knowledge of eligibility for screening and its interval, practices and attitudes about cervical cancer screening); questions related to actual practices of female HCPs (referral and self screening) and attitudes of female HCPs (reasons for not get cervical cancer screening) about cervical cancer screening. All questions were close ended. Special care was taken to prepare questions in a way that they are short, clear, readable and understandable. A pilot study was carried out on five female health care providers and questionnaire was modified on the basis of experiences from pilot study. Data from the pilot study was not included in the final analysis of the study. The study protocol was approved by the institutional ethical committee. The data was entered into MS Excel. Proportion and frequencies were calculated with the help of SPSS V.16.

Enrolment of the Study Participant:

A list of all the Female Staff Nurses was obtained from Matron Office. Staff Nurses were invited on particular day in two batches of 50 to enrol in the study at lecture hall. At the beginning, information about study and study variables was discussed. Participant information sheet was distributed among participants & informed written consent was taken from participants. A self-explanatory, pre-tested, semi structured questionare available in English and Gujarati language was distributed to all the participants &they were requested to fill up the questionnaire. The female HCPS completed responses to the questionnaire in approximately 15 minutes.

RESULT

A total of 103 female staff nurses contributed to the study. Their mean age was 34.29 years but majority (78.6%) were between 26 to 40 years of age. Out of total participants, 90% were married and 83% had children. Maximum number of female HCPs used barrier methods (male condoms) for contraception. (Table 1)

In present study, 98% participants have heard about cervical cancer and 74% participants thought that cervical cancer can be prevented. 94% participants knew that Pap smear can be used for detection of cervical cancer but only 54% participants knew the correct meaning of Positive Pap smear. Only 43% of study participants had heard about HPV Vaccine and only 4 participants had received HPV vaccine. (Table 2)

Table: 1 Socio-demographic characteristics of participants

Variables	Participants (n=103) (%)
Age (In Completed Years)	
Less than 25 years	6 (5.8)
26 year to 40 year	81 (78.7)
More than 40 year	16 (15.5)
Marital status	
Married	93 (90.3)
Unmarried	10 (9.7)
Parity	
Nullipara	17 (16.5)
Para (1-3 Children)	86 (83.5)
Contraceptive practices	
Natural	8 (7.8)
Pills	7 (6.8)
Condom	40 (38.8)
IUCD	8 (7.8)
TL	10 (9.7)
Not Using any contraceptive	20 (19.4)
Not applicable	10 (9.7)

Table: 2 Knowledge regarding cervical cancer and screening among Female health care provider

Variables	Participants (n=103) (%)
Heard about Cervical cancer	
Yes	101 (98.1)
No	2 (1.9)
Cervical changes be prevented	
Yes	76 (73.8)
No	27 (26.2)
Ever heard about Pap smear	
Yes	97 (94.2)
No	6 (5.8)
Pap smear used for detection of Cervical Cancer	
Yes	97 (94.2)
No	6 (5.8)
Meaning of positive Pap smear result	
Full Blown Cancer Cervix	37 (35.9)
Cervical Cancer that is about to start	56 (54.4)
Cancer of the Breast	2 (1.9)
Don't know	8 (7.8)
Heard about HPV Vaccine	
Yes	45 (43.7)
No	58 (56.3)
Received HPV vaccine	
Yes	4 (3.9)
No	99 (96.1)

Table: 3 Attitude Questionnaire for Female health care providers towards Cervical cancer and screening (n-103)

Variables	Participants (%)
Have you been ever screened for cancer of the cervix	
Yes	4 (3.9)
No	99 (96.1)
Reason of not being screened for Cervical cancer	
painful.	2 (1.9)
Not feeling at Risk	2 (1.9)
I am healthy	72 (69.9)
Afraid	6 (5.9)
haven't just decided	17 (16.6)
Others	2 (1.9)
NA	2 (1.9)
At risk of Cervical cancer	
Yes	13 (12.6)
No	64 (62.2)
Don't know	26 (25.2)

In this study, only 3.9% of participants had ever screened for cervical cancer and most common reason for unscreened was majority thought they were healthy and not needed it. Only 12.6% of study participants thought they were at risk of cervical cancer. (Table 3)

Around 24% HCPs were routinely managing female patients and performed vaginal examination. All those who performed vaginal examination, had used speculum for vaginal examination. Out of total 103 nurses, 42.7% were referring female patients for cervical cancer. (Table 4)

Major source of information for cervical cancer among female health care providers were research related to nursing (96%) while most common risk factors considered for cervical cancer were Human Papilloma Virus- HPV (49.5%). Excessive menses (65.3%) were most common symptoms for Cervical cancer according to female HCPs and around 50% of participants thought that women with more than 30 years of age should undergo Cervical screening. (Table 5)

DISCUSSION

Cervical cancer is one of the preventable disease and a key aspect of its prevention is to find out its premalignant form by screening test at an early age[5]. This study aimed to evaluate knowledge regarding cervical cancer and perceptions and utilization of cervical cancer screening among nurses.

Socio-Demographic Variables

The current study shows mean age of female HCPs was approximately 34 years and majority of women belonged to the age between 26 and 40 years. This age distribution in current study was similar to studies done elsewhere [2, 7]. Maximum number of nurses were already married (90%) in current study[2,5]. Data from National Family Health Survey-3 gives us marital status of Indian women and reports that 74.8% are married and 20% unmarried[8]. Present study reported more married women; mostly because of the age of respondents is more than 20 years while in NFHS-3 the age of women is between 15-44 years and more women get married in our country before the age of 20 years[8].

Knowledge and Attitude about Cervical Cancer and Cervical Cancer screening

In current study, major source of information regarding cervical cancer was nursing study course similar to other studies done elsewhere[2] while one research shows that health professionals were major source of information to female staff nurses[5]. According to the HCPs in present study, major risk factor for cervical cancer was Human Papilloma virus (49%).Compared to present study, research done few years back shows that very few HCPs recognised HPV as a cause of cervical cancer; though they knew that infection or sexually transmitted infections is a major cause for cervical cancer[5, 6]. The most common symptom for cervical cancer was excessive bleeding during menses or menorrhagia (65.3%) and foul smelling discharge (57.4%) in present study which is in line with previous research [2, 5, 6]. This study says infection with HPV is commonest factor for acquiring cervical cancer.

Table: 4 Questionnaire of practices for Female health care providers towards cervical cancer and screening

Variables	Participants (%)
Routinely managing female patients	
Yes	25 (24.3)
No	78 (75.7)
Perform vaginal examinations frequently	
Yes	25 (24.3)
No	78 (75.7)
Use of speculum during vaginal examination	
Yes	24 (23.3)
No	79 (76.7)
Refer patients for screening	
Yes	44 (42.7)
No	59 (57.3)

Table:- 5 Multiple Choice questions for Cervical cancer and screening

Variable	Participants (%)
Sources of Information	
Electronic Media	7 (6.9)
Print Media	10 (9.9)
Educational (Nursing) Courses	97 (96.0)
Seminars/Workshop	27 (26.7)
Friends/ Relatives	17 (16.8)
Hand bills and Posters	6 (5.9)
Medical Journals	14 (13.9)
Others	11 (10.9)
Risk factors for Cervical cancer	
Early sexual Intercourse	21 (20.8)
Multiparty	26 (25.7)
Poor hygiene of personal parts	47 (46.5)
Family History	40 (39.6)
Acquiring Human Papilloma Virus infection	50 (49.5)
Having multiple sexual Partners	28 (27.7)
Cigarette smoking	24 (23.8)
Alcohol	11 (10.9)
Old age	27 (26.7)
Contraception Use	17 (16.8)
Nulliparity	11 (10.9)
Others	18 (17.8)
Signs of Cervical Cancer	
Irregular menses	48 (47.5)
Excessive menses	66 (65.3)
Bleeding after intercourse	41 (40.6)
Bleeding after menopause	36 (35.6)
Foul discharge	58 (57.4)
Don't know	5 (5.0)
Who should be screened for Cervical Cancer	
Women of all age	35 (34.0)
Married women	47 (45.6)
Women above 65 years of age	34 (33.0)
Women ≥30 yrs of age	52 (50.5)
Women ≥ 21 yrs of age or those who are sexually active for last 3 years.	26 (25.2)
Don't Know	1 (1.0)

Older research demonstrates that multiple sexual partner were one of the major risk factor for cervical cancer[4, 5].

Present study reported majority of respondents have heard about Cervical cancer, knew that pap smear can be sued for early detection of cervical cancer and three fourth respondents thought that cervical cancer can be prevented which is higher compared to previous studies[5]. All knowledge variables were improved in present study compared to previous research papers.[2, 5-7]

Prsesnt study reported only four participants had ever screened for Cervical cancer and most common reason for unscreened was that they perceived themselves to be healthy which is again similar to other research [2].Unmarried women normally refused to screen themselves because of social stigma, they would suffer; if they had a test perceived to be used for sexually active women[2, 7] Cervical cancer is the commonest genital cancer and second commonest type of cancer of women in India and still there are no properly organized screening programs for Cervical Cancer[4].

The female HCPs who treat eligible women refer them for screening of cervical cancer. In the study institute, cervical screening is exclusively performed in the Obstetric & Gynecological department and all eligible women from other units are referred there for screening[2]. Evidence shows that it is possible to train Female health care providers to screen for cervical cancer[9]. Attitudes that screening is to be done by doctors or gynaecologists only needs to change[10].Many study have shown that hospitals played a little role as a source of information. As India has low resource setting, Pap smear based screening program is not feasible due to economical and logistic reasons as there is a lack of trained manpower. 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 that are more sustainable[9, 11].We expect that female health care provider would motivate family members, colleagues, friends, patients and general community to accept and adopt cervical screening.

CONCLUSION

The awareness of cervical cancer screening procedure is quite good but actual practices of performing screening procedures and getting themselves screened for cervical cancer is deficient. There is a need of converting the knowledge to correct attitudes and practices of cervical screening among female health care providers.

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Ethical Approval

Study was approved by Ethical Committee, Surat Municpal Insttitute of Medical Education and Research, Surat.

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