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Original Research Article

Cervical cancer: a hospital based KAP study among women aged 18 years and above in Northern India

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ABSTRACT

Background: Cervical cancer is known for its late detection due to a variety of reasons chiefly lack of knowledge, undesirable attitudes and poor practices. Early screening and adequate knowledge about the disease remains the important safe guards against this disease. The study aimed to assess the knowledge, attitudes and practices of the women aged 18 years and above regarding cervical cancer visiting a tertiary care teaching hospital.
Methods: The present cross sectional hospital based study was conducted in Jammu city, Jammu and Kashmir, India. All the women aged 18 years and above visiting OPD of gynaecology-obstetrics department of Government Medical College Jammu and willing to participate were administered a pretested questionnaire to collect the relevant data.
Results: It was found that 91.56% of the respondents had heard of cervical cancer with 83% reporting that it was both preventable as well as curable. Multiple sex partners were the most important risk factor identified. Among the attitudes, 62% agreed that screening was harmless to the client. Only one third knew about the availability of preventive vaccine. About 83.6% of them had never been screened by Pap smear. However willingness to get HPV vaccination was found to be high.
Conclusions: Though knowledge among the respondents was found to be adequate but it lacked transformation into attitudes and practices. In this connection, authors recommend health promotion campaigns to educate women and the community about cervical cancer and its preventability through screening.

Keywords: Cervical cancer, Knowledge, Attitude, Practices, Prevention

INTRODUCTION

Cervical cancer is the fourth most common cancer in women worldwide, with an estimated 5,28,000 new cases in the year 2012. Around 85% of this global burden occurs in the less developed regions, where it accounts for almost 12% of all female cancers. There were an estimated 2,66,000 deaths from cervical cancer worldwide in 2012, accounting for 7.5% of all female cancer deaths. Almost nine out of ten cervical cancer deaths occur in the less developed regions.[1] In India 1, 23,000 new cases and 67,000 deaths from cervical cancer were estimated in 2012, it was reported as the leading site among women in 6 population based cancer registry areas viz., Barshi rural, Barshi expanded, Mizoram, Tripura, Nagaland and Pasighat.[2]

Cervical cancer is a malignant neoplasm arising from cells in the transformation zone in cervix uteri. Although asymptomatic in the early stages it presents with

persistent pelvic pain, weight loss, bleeding or unusual vaginal discharge and post coital bleeding. Various risk factors like multiple sexual partners, early age of sexual intercourse, increasing parity, use of oral contraceptive pills and tobacco consumption etc. are implicated in its causation. Studies have shown Cervical cancer occurs due to infection with a high-risk genotype of the human papilloma virus (hrHPV+). In majority of cases the infection does not lead to any cellular abnormalities. But if infection persists for a longer period, changes develop in epithelial cells leading to, cervical intraepithelial neoplasia (CIN)–a precursor of cancer cervix. A long latent period of about fifteen years makes cervical cancer an ideal 'candidate' for screening.[3]

In India, the peak age of incidence of cervical cancer is found to be 55–59 years and unfortunately, a considerable proportion of women report to the health services in the late stages of disease. India developed a national program for cancer in 1975 and in 2010 cancer control and management activities became a part of a more comprehensive and broad program on non-communicable diseases called National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Disease and Stroke (NPCDCS) which primarily aims to address the common risk factors in an integrated manner. It focuses on population based cervical screening through VIA (visual inspection with acetic acid) across different levels of health care coupled with early intervention. To make the screening activities more effective and acceptable a multipronged approach is required which can increase the acceptability towards screening through activities like behaviour change communication exercises, sensitizing the people of the area, including men folk, increased participation in vaccination against types 16 and 18 HPV among adolescent girls.[4]

Increased uptake of all these activities will require an in depth knowledge regarding perceptions of stake holders so that they can be effectively targeted. Review of literature revealed that a few studies have been conducted in various parts of India but no study was carried out in this part of the country. With this purpose a study was planned to assess the knowledge, attitude, practices and prevention regarding cervical cancer in females aged 18 years and above visiting OPD of gynaecology and obstetrics department of a tertiary care hospital in Jammu city.

METHODS

The present cross sectional study was conducted among the females visiting the OPD of gynaecology and obstetrics department of Government Medical College Jammu, J and K, India. Inclusion criteria included females aged 18 years and above visiting the OPD due to any reason and willing to participate. Exclusion criteria's included females not willing to participate, mentally ill and already diagnosed with cervical cancer. Due approval was sought from institutional ethical committee and the study was conducted from March 2018 to May 2018 over a period of three months.

The questionnaire for the present study was prepared by the experts from community medicine department with extensive review of literature. The questionnaire so developed was pilot tested on a sample of 25 females who didn't comprise the final study population. The feedback so obtained was incorporated and the final questionnaire was thus ready for use. The final version was 31- item questionnaire comprising of four parts. The first part gathered socio demographic information with 8 items. Knowledge followed by attitudes and practices had 9 and 8 items respectively. The fourth part elicited information regarding human papilloma virus (HPV) and HPV vaccine containing 6 items.

The data thus collected was tabulated and analyzed. Descriptive statistics like frequency and proportion were used to represent the data.

RESULTS

During the study period, a total of 415 females visiting the OPD of gynaecology and obstetrics were enquired about the cervical cancer, but only 91.56% (380/415) of them had heard of the cervical cancer, hence the final sample size interviewed was 380.

Majority (70%) of the respondents belonged to Hindu religion and were in the age group 30-49 years. More than 70% of the respondents belonged to urban areas and about one third of them were homemakers as per their occupation. Almost 90% of the respondents were married and half of them were literate above secondary levels. About two third were married since more than 20 years and 71.5% of the respondents had parity of <2 (Table 1).

Among the respondents who had heard of cervical cancer, the main source of information was friends and relatives. 83.15% of the respondents said that cervical cancer was preventable and equal proportion replied that the disease was curable. Among the most important risk factor for, 35.78% identified multiple sex partners. Almost one third of the respondents replied that bleeding after intercourse was the most important symptom of the disease. Majority of the respondents were aware of availability of screening test for cervical cancer through knowledge about treatment varied. Regarding frequency of screening test, about one third said that it should be on yearly basis (Table 2).

Among the attitudes of the respondents, 62.63% of the respondents agreed that screening is harmless to the client but only 30% agreed that screening helps in prevention of cancer cervix. Also 31.5% agreed with the statement to keep away from a neighboring lady suffering from

cervical cancer. Among the practices, about 78% of the respondents would go for screening of cancer cervix if offered free. 84.2% would go to a doctor/health center in case symptoms suggestive of cancer cervix develop. 83.6% of the respondents had never been screened by Pap test and those screened, only 16.12% were screened once a year. Among those not screened, 57.36% reported that the reason was non presence of any signs and symptoms suggestive of the disease (Table 3).

Table 1: Socio-demographic profile of the respondents (n=380).

Socio-demographic variable		Frequency	%
Age group (in years)	<20	28	7.36
	20-29	82	21.57
	30-39	142	37.36
	40-49	101	26.57
	>50	27	7.10
Religion	Hindu	266	70.00
	Muslim	64	16.84
	Others	50	13.15
Residence	Rural	110	28.94
	Urban	270	71.05
Occupation	Home makers	130	34.21
	Student	28	7.36
	Employed	112	29.47
	Own business	86	22.63
	Others	24	6.31
Literacy levels	Illiterate	78	20.52
	Primary	112	29.47
	Secondary	52	13.68
	Higher secondary	92	24.21
	Graduate and above	46	12.10
Marital status	Unmarried	30	7.89
	Married	338	88.94
	Widowed	12	3.15
Duration of marriage (years)	<10	56	16.56
	10-20	72	21.30
	>20	210	62.13
Parity	None	40	10.52
	<2	272	71.52
	>2	68	17.89

Table 2: Knowledge of the respondents regarding cervical cancer (n=380).

Question	Response	Frequency	%
Source of information about cervical cancer	Health professionals	40	10.52
	Friends/relatives	236	62.10
	Electronic/print media	104	27.36
Is cervical cancer preventable	Yes	316	83.15
	No	64	16.84
Can cancer cervix be detected at an early age	Yes	210	55.26
	No	170	44.73
Most important risk factor for cancer cervix	Multiple sex partners	136	35.78
	Early coitus	102	26.84
	History of STD's	44	11.57
	Family history	25	6.57
	Prolonged OCP use	25	6.57
	Don't know	48	12.63

Continued

Question	Response	Frequency	%
Most important symptom of cancer cervix	Intermittent bleeding between periods	98	25.78
	Bleeding after intercourse	114	30.00
	Foul smelling discharge	78	20.52
	Bleeding/spotting after menopause	48	12.63
	Don't know	42	11.05
Is screening test for cancer cervix	Yes	340	89.47
	No	40	10.52
Knowledge about treatment of cancer cervix	Drug therapy	76	20.00
	Radiotherapy	74	19.47
	Surgery	150	39.47
	Don't know	80	21.05
Knowledge about persons who undergo screening for cancer cervix	Women aged 25 years or more	80	21.05
	Women with multiple sex partners	165	43.42
	Elderly women	65	17.10
	Don't know	70	18.42
Knowledge about screening frequency in cancer cervix	Once in a year	120	31.57
	Once every 3 year	95	25.00
	Once every 5 year	75	19.73
	Don't know	90	23.68

Table 3: Attitudes and practices of the respondents towards cervical cancer (n=380).

Question	Response	Frequency	%
Is it important to consult a doctor in case of bleeding between periods	Agree	148	38.94
	Neither agree nor disagree	172	45.26
	Disagree	60	15.78
In your opinion, is screening a harmless procedure for the client	Agree	238	62.63
	Neither agree nor disagree	46	12.10
	Disagree	96	25.26
If a neighbourhood lady is suffering from cancer cervix, would you keep a distance from her	Agree	120	31.57
	Neither agree nor disagree	156	41.05
	Disagree	104	27.36
If offered free screening for cancer cervix, I am willing to utilize it	Yes	296	77.89
	No	84	22.10
Health seeking behaviour in case you develop symptoms suggestive of cancer cervix	Doctor/health centre	320	84.21
	Traditional healer	60	15.78
Have you ever been screened for cancer cervix by Pap test	Yes	62	16.31
	No	318	83.68
If yes, frequency of screening	Once a year	10	16.12
	Once–two/three years	52	83.87
If not screened, the reasons	No signs and symptoms	218	57.36
	Not advised	10	2.63
	Stigma/embarrassment	70	18.42
	No knowledge	20	5.26

Table 4: KAP towards HPV and vaccination (n=380).

Question	Response	Frequency	%
Transmission of HPV infection is by sexual contact	Yes	130	34.21
	No	250	65.78
Is a preventive vaccine for cervical cancer available	Yes	135	35.52
	No	245	64.47
Have you had the HPV vaccination	Yes	19	5.00
	No	361	95.00

Continued

Question	Response	Frequency	%
Main reason for not having the HPV vaccination	Lack of knowledge about vaccine	180	49.86
	No risk as not exposed to the sexual contact	160	44.32
	High cost	21	5.81
Willingness to vaccinate your daughter against HPV	Yes	320	84.21
	No	20	5.26
	Don't know	40	10.52
If not screened, the reasons	Before sexual contact	110	28.94
	After sexual contact/child birth	76	20.00
	Any time after marriage	64	16.84
	Don't know	130	34.21

When information regarding human papilloma virus (HPV) and vaccination was elicited, only about one third knew that HPV infection was transmitted by sexual contact and almost similar proportion knew that a preventive vaccine for cervical cancer was available. Only 5% of the respondents had HPV vaccination though a whopping 84.2% were willing to vaccinate their daughter against HPV. More than one third of them though didn't know the best time to have HPV vaccination (Table 4).

DISCUSSION

The current study explored the knowledge, attitude and practices of the females who were attending the OPD of gynaecology and obstetrics department of a tertiary care teaching hospital in Jammu city of J and K state.

The results revealed that 91.56% had heard of cervical cancer and these are higher than reported by Narayana et al.[5] Since the present study was conducted in a tertiary care teaching hospital where women are able to assess better information, could be the major reason for large proportion of women having heard of cervical cancer. Also the proportion of urban respondents was higher which may be another reason for these results. In contrast to the results of the present study, Pattupara et al reported from Uttrakand that 93% had no knowledge about cancer cervix.[6] Among the studies conducted abroad, Touch et al reported 74%, Shrestha et al reported 65.7% and Tran NT et al reported more than 60% having heard of the disease in Combodia, Nepal and Korea respectively.[7-9] In the current study , friends and relatives followed by media were the main information sources for the respondents and these results are in agreement with those reported by Narayana et al and Abdullahi et al.[5,10]

More than 80% of the respondents were aware that cervical cancer was preventable and about the availability of screening test for the disease. Tran et al reported that only 36% of the respondents knew that cancer cervix could be prevented.[9] Pattupara et al reported dismal 3.25% respondents knowing about pap smear. In contrast to these studies, Narayana et al reported that more than half of population of women were aware of symptoms, risk factors and preventive measures for cervical cancer.[5,6] Similar findings were also reported from North Uganda by Mukana et al.[11] The most important risk factor mentioned by respondents in the present study was multiple sex partners which was in consonance with that reported by Bansal et al.[12] Bleeding from intercourse was the commonly mentioned symptoms in the present study whereas intermenstrual bleeding was commonly reported by Bansal et al.[12]

Attitude among half of the respondents were positive on parameters like cervical cancer being not transmitted from one patient to another and screening being a harmless procedure for the client. However, in contrast, most of the respondents showed positive attitude towards cervical cancer in the study conducted by Narayan et al.[5]

More than three fourth were willing to utilize free screening for cancer cervix if offered. The results are congruent with those reported by Touch et al and Bansal et al.[12] Only 16% of the respondents had undergone pap test screening but still this ratio was higher than reported by Bansal et al and Touch et al in their respective studies.[7,12] More than half of the respondents cited no signs and symptoms of the disease as the reason for not undergoing screening which are in agreement with the results reported by Bansal et al.[12]

Although about one third of the women knew about the preventive vaccine for cervical cancer, only 5% of them had under taken the HPV vaccination. Main reasons for not having HPV vaccination were lack of knowledge and no risk entailed due to safe sexual practices. These results are almost similar to those reported by Touch et al from Cambodia except that only 1% of had got HPV vaccination.[7]

The results of the study have revealed that more than three fourth of the respondents were aware of cervical cancer, screening as well as willingness to vaccinate their daughter with HPV vaccination. Some of the attitude parameters were not positive and there exists a gap between perception and practice. In the current hospital based study, 16.3% of respondents had undergone cervical cancer screening which is quite higher than 5

year screening prevalence (5%) estimated for developing countries by WHO.[13]

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