



Original Research Article

A Study to Assess The Level of Awareness in Terms of Opinion Regarding Cervical Cancer among Reproductive Women (15 - 45 Year) in Selected Urban Areas of Pune City

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ABSTRACT

Background: Cervical cancer is one of the leading causes of morbidity and mortality amongst the gynecological cancers worldwide, especially in developing countries. It is imperative for at least health professionals in developing countries like Pakistan to have a sound knowledge about the disease.

Objective: Objective of this study to assess the level of awareness in terms of opinion regarding cervical cancer among reproductive women (15-45year) and to associate awareness in terms of opinion with selected demographic variables in selected urban areas of Pune city, Maharashtra

Methods: A cross-sectional, interview based survey was conducted. Sample of 134 was divided between the four areas. Simple random sampling was used for sample collection.

Results: 64.2% of the reproductive women were between age group of 18-30 years. 9% of them had a pap smear and 17.2% of the women responded that a persistent vaginal discharge with unpleasant smell could be a sign of cervical cancer and 34.3% of them responded that menstrual bleeding will be heavier or longer than usual could be a sign of cervical cancer. 77.6% of the women were not aware of any sign and symptoms of cancer, 53% of them responded that Sexually Transmitted Diseases (STD) affected women have more chance of developing cervical cancer Blood in the stool could be a sign of cervical cancer was found to have significant association with education.

Conclusion: This elite group of women would require awareness on cervical cancer and its prevention with conduct of some awareness programmes

Keywords: Cervical Cancer; awareness; opinion; Reproductive women.

INTRODUCTION

According to the International Agency for Research on Cancer (IARC), India has the highest number of cervical cancer cases in the world. Cervical cancer is one of the leading causes of morbidity and mortality amongst the gynecological cancers

worldwide. ^[1] In today's world, cervical cancer is primarily a disease found in low-income countries. ^[2] Of the nearly 500,000 new cases that occur annually, 83% are in the developing world, as are 85% of the 274,000 deaths associated with cervical cancer. ^[3] The South Asian region harbors

one fourth of the burden of cervical cancer In India alone there are an estimated 132,000 new cases and 74,000 deaths each year. India bears about one fifth of the world burden of cervical cancer. More than 126,000 new cases are detected in India per year and 71000 deaths occur annually and disease causes almost 20% of all female deaths in India. About 75-85% of the cases are reported in advanced stage. Despite cervical cancer is fully preventable, but it has become major health problem in developing countries like India.

Most women with cervical cancer in these countries present with advanced disease, resulting in low cure rates. Several factors contribute to high burden of disease and advanced stage at presentation including poor knowledge about the disease furthermore there is a lack of screening among general population. [4]

The known primary underlying cause is the human papilloma virus (HPV), which is the most common sexually transmitted infection worldwide, and it is estimated that 50% to 80% of sexually active women are infected at least once in their lifetime. [5] Prevention of cancer of the cervix is achievable by preventing HPV infection and ensuring early detection and treatment which significantly reduces its morbidity and mortality. Pap smear test is one of the most reliable and effective cancer screening tests available. About 75% of women in industrialized countries have been screened for cervical cancer in the previous five years, compared to less than 5% in developing countries. [6] Low levels of awareness and poor knowledge of cervical cancer coupled with unavailability and inaccessibility of cervical cancer screening services are responsible for the very small number of women being screened in developing countries. [6]

A recent qualitative study reported a low level of knowledge on HPV and

cervical cancer among children, parents, teachers, community leaders and even health service providers of four developing countries (India, Peru, Uganda and Vietnam). Very similar results, i.e. lack of proper knowledge and awareness regarding cervical cancer, were found in several studies conducted in other countries in the world. [7-10]

MATERIALS AND METHODS

Study Design

Non experimental descriptive survey approach was used with a cross-sectional, interview based survey design. The survey was conducted among reproductive women in urban areas of Pune, Maharashtra. The sample for the present study comprised of 134 women in urban area. Simple random sampling was applied. The consent was taken from all the participants. Data collection tool consisted of 2 sections.

Section I consisted of seven items related to selected demographic data of sample and section II consist of the 8 items questionnaire on awareness in terms of opinion regarding cervical cancer. To ensure content validity of the tool, it was given to 11 experts. Data were collected from 134 samples who met the inclusion criteria as per the study. Written consent was taken from each sample. Ethical approval was taken from ethical review committee. Respondents were ensured about the confidentiality, they were briefed that their participation is voluntary and they have full right to withdraw from the study at any point.

The data was analyzed using both descriptive and inferential statistics on the basis of the objectives and hypothesis of the study.

RESULTS

Table 1: Description of demographic variables based on their personal characteristics in terms of frequency and percentage

N=134

Demographic variable	Freq	%
Age		
18-30 years	86	64.2%
31-40 years	25	18.7%
41-50 years	15	11.2%
Above 50 years	8	6.0%
Marital status		
Single	55	41.0%
Married/living with partner	51	38.1%
Married separated	13	9.7%
Divorced	4	3.0%
Widowed	7	5.2%
Prefer not to say	4	3.0%
Religion		
Hindu	60	44.8%
Muslim	24	17.9%
Christian	39	29.1%
Others	11	8.2%
Educational Qualification		
Illiterate	12	9.0%
Primary	11	8.2%
High School	37	27.6%
Bachelor Degree	58	43.3%
Master degree	16	11.9%
Employment status		
Employed full-time	30	22.4%
Full-time homemaker	52	38.8%
Employed part-time	49	36.6%
Retired	3	2.2%
Have you, your family members or close friends had cancer		
Yes	18	13.4%
No	116	86.6%
Demographic variable		
Condom	12	9.0%
Intrauterine devices	5	3.7%
Tube ligation	31	23.1%
Oral contraceptives	11	8.2%
None	75	56.0%
Have ever had a pap smear		
Yes	12	9.0%
No	122	91.0%

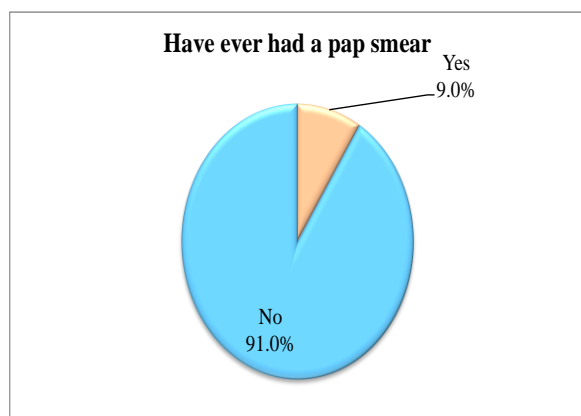


Figure 1: Have you ever had pap smear test N=134

Awareness in terms of opinion regarding cervical cancer:

Only 17.2% of the women responded that, persistent vaginal discharge that smells unpleasant could be a sign of cervical cancer. 10.4% of them responded that discomfort or pain during sex could be a sign of cervical cancer. 11.2% of them responded that they you think that persistent pelvic pain could be a sign of cervical cancer. 34.3% of them responded that, menstrual periods that are heavier or longer than usual could be a sign of cervical cancer.

Awareness and any symptom that might be a sign of cervical cancer how soon a woman would contact doctor:

Majority of 77.6% of the reproductive women were not aware of any sign and symptoms of cancer, 14.9% of them may contact doctor immediately and 7.5% of them contact doctor when they get time to make an appointment to discuss a symptom that thought that it might be a sign of cervical cancer if they had it.

Opinion of reproductive women about 'Who is most likely to develop cervical cancer in the India'

33.6% of the reproductive women responded that a woman aged 30 to 49 years is most likely to develop cervical cancer; another 33.6% of them responded that cervical cancer is unrelated to age. 21.6% of them responded that a woman aged between 50 to 69 years is most likely to develop cervical cancer; 8.2% of them opined that a woman aged 20 to 29 years is most likely to develop cervical cancer and 3% of them responded that a woman aged 70 years and above is most likely to develop cervical cancer in India.

Table 2: Opinion about cervical cancer among reproductive women. N=134

Item		Yes		No		Don't know	
		Freq	%	Freq	%	Freq	%
1	Do you think vaginal bleeding between periods could be a sign of cervical cancer?	38	28.4%	76	56.7%	20	14.9%
2	Do you think persistent lower back pain could be a sign of cervical cancer?	44	32.8%	74	55.2%	16	11.9%
3	Do you think a persistent vaginal discharge that smells unpleasant could be a sign of cervical cancer?	23	17.2%	81	60.4%	30	22.4%
4	Do you think discomfort or pain during sex could be a sign of cervical cancer?	42	31.3%	75	56.0%	17	12.7%
5	Do you think menstrual periods that are heavier or longer than usual could be a sign of cervical cancer?	46	34.3%	71	53.0%	17	12.7%
6	Do you think discomfort or pain during sex could be a sign of cervical cancer?	14	10.4%	91	67.9%	29	21.6%
7	Do you think menstrual periods that are heavier or longer than usual could be a sign of cervical cancer?	34	25.4%	69	51.5%	31	23.1%
8	Do you think persistent diarrhea could be a sign of cervical cancer?	40	29.9%	77	57.5%	17	12.7%
9	Do you think vaginal bleeding after the menopause could be a sign of cervical cancer?	29	21.6%	88	65.7%	17	12.7%
10	Do you think persistent pelvic pain could be a sign of cervical cancer?	15	11.2%	94	70.1%	25	18.7%
11	Do you think vaginal bleeding during or after sex could be a sign of cervical cancer?	30	22.4%	87	64.9%	17	12.7%
12	Do you think blood in the stool could be a sign of cervical cancer?	33	24.6%	101	75.4%	0	0.0%
13	Do you think unexplained weight loss could be a sign of cervical cancer?	35	26.1%	99	73.9%	0	0.0%

Table 3: Opinion of reproductive women about 'What things do you think affect women chance of developing cervical cancer. N=134

Item	Agree		Disagree		Not sure	
	Freq	%	Freq	%	Freq	%
Infection with HPV (human papillomavirus)	9	6.7%	48	35.8%	77	57.5%
Smoking any cigarettes	30	22.4%	37	27.6%	67	50.0%
Weakened immune system	43	32.1%	42	31.3%	49	36.6%
Long term use of the contraceptive pill	33	24.6%	36	26.9%	65	48.5%
Sexually transmitted Diseases (STD)	71	53.0%	36	26.9%	27	20.1%
Sexual partner who is not circumcised	6	4.5%	27	20.1%	101	75.4%
Having sex at a young age	11	8.2%	35	26.1%	88	65.7%
Having many sexual partners	13	9.7%	19	14.2%	102	76.1%
Having many children	47	35.1%	46	34.3%	41	30.6%
Sexual partner with many previous partners	36	26.9%	22	16.4%	76	56.7%
Not going for regular smear (Pap) tests	7	5.2%	46	34.3%	81	60.4%

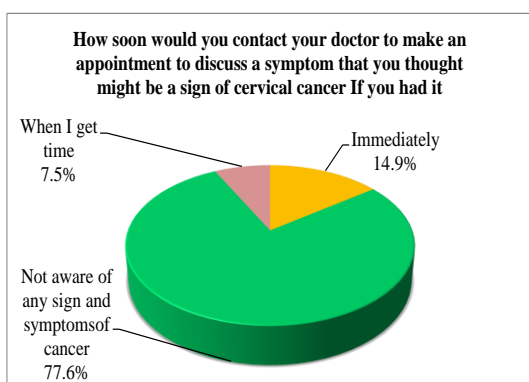


Figure 2: How would you contact your doctor: N=134

Awareness of Cervical cancer screening program and HPV vaccination

26.9% of the reproductive women were aware of NHS program and 20.1% of the reproductive women were aware about HPV vaccination.

Table 4: Opinion of reproductive women about 'How confident that you would notice a cervical cancer symptom?' N=134

How confident are you that you would notice a cervical cancer symptom?	Freq	%
Not at all confident	30	22.4%
Not very confident	18	13.4%
Fairly confident	49	36.6%
Very confident	37	27.6%

DISCUSSION

In the present study, 64.2% of the reproductive women were between age 18-30 years. 41% of them were single and 38.1% of them were Married/living with partner. 44.8% of them were Hindu and 29.1% of them were Christian. 27.6% of them had high school education and 43.3% of them had bachelor degree. 38.8% of them were Full-time homemaker and 36.6% of

them were employed. 13.4% of them had their family members or close friends having cancer. 23.1% of them were using tube ligation, 56% of them were not using any contraceptive method and only 9% of them had a pap smear.

Awareness and opinion about cervical cancer:

Warning signs of cervical cancer are persistent vaginal discharge, abnormal menstrual bleeding, pain or discomfort during sex, vaginal bleeding during or after sex, vaginal bleeding during or after sex, Back Pain, Unexplained Loss of Weight and Fatigue, Unusual Bleeding and Irregular Urination. [11-13] In present study 17.2% of the reproductive women answered that a persistent vaginal discharge with unpleasant smell could be a sign of cervical cancer and 10.4% of them responded that discomfort or pain during sex could be a sign of cervical cancer. 11.2% of them said that persistent pelvic pain could be a sign of cervical cancer. 34.3% of them responded that menstrual periods that are heavier or longer than usual could be a sign of cervical cancer.

A woman who experiences with any symptom of cervical cancer, she must consult doctor immediately to discuss about her experience. In this study 77.6% of the reproductive women were not aware of any sign and symptoms of cancer, 14.9% of them immediately contact doctor and 7.5% of them will contact doctor when they get time to make an appointment to discuss about a symptom that they thought might be a sign of cervical cancer.

A woman aged between 25-64 years is most likely to develop cervical cancer in the India.(National cervical Screening programme) In this study 33.6% of the reproductive women said that a woman aged 30 to 49 years, 21.6% of them responded that a woman aged 50 to 69 years, 8.2% of them opined that a woman aged 20 to 29 years, 3% of them responded

that a woman aged 70 years are most likely to develop cervical cancer in the India and another 33.6% of them responded that cervical cancer is unrelated to age.

Infection with HPV (human papilloma virus) Smoking any cigarettes, Weakened immune system, Long term use of the contraceptive pill, Sexually transmitted Diseases (STD), Sexual partner who is not circumcised, Having sex at a young age, Having many sexual partners, Having many children etc are the major causes of cervical cancer. [11] In the present study 53% of them said that STD may cause women chance of developing cervical cancer. 35.1% of them opined that having many children affect women chance of developing cervical cancer. 32.1% of them opined that weakened immune system affect women chance of developing cervical cancer, only 6.7% of the reproductive women responded that infection with HPV (human papilloma virus) affect women chance of developing cervical cancer.

Reproductive women are having less awareness on identification of cervical cancer. In the present study only 36.6% of the reproductive women were fairly confident, 27.6% of them were very confident, 13.4% of them were not very confident and 22.4% of them were not at all confident in noticing a symptom of cervical cancer. 26.9% of the reproductive women were aware of National cervical screening programme and 20.1% of the reproductive women were aware about HPV vaccination

In this test association of awareness with selected demographic variable was done using Fisher's exact test. The summary of Fisher's exact test results shows that blood in the stool could be a sign of cervical cancer was found to have significant association with education. Unexplained weight loss could be a sign of cervical cancer was found to have significant association with 'family members or close

friends had cancer'. Use of contraceptive methods was found to have significant association with 'unexplained weight loss could be a sign of cervical cancer. It is finally concluded that this elite group of women would require awareness on screening test for cervical cancer and its prevention with conduct of some awareness programmes

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