

KNOWLEDGE, ATTITUDE, AND PRACTICE TOWARDS CERVICAL CANCER SCREENING AMONG URBAN WOMEN OF KANCHIPURAM, TAMIL NADU.

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Abstract

Background: Cervical cancer is the most common cause of death among women in developing countries like South America, East Africa, South and South-East Asia, and the Western Pacific. The objective of this study to assess the level of knowledge, attitude and practice regarding cervical cancer screening among women in field practice area of an urban health centre, Kanchipuram. **Materials & Methods:** A cross-sectional study was conducted among married women aged 30 to 60 years, residing in the Field practice area of Urban Health Centre of Meenakshi Medical College and Hospital Kanchipuram, Tamil Nadu. The area that was covered consists of eight streets with a total population of 10710. A total of 415 women were included in the study by population to proportion sampling. **Results:** Of the 415 study subjects, majority (76.4%) of them have heard of the term “Cancer”. Percentage of subjects who had heard about “Cervical Cancer” specifically were 89.3% (283). Out of 415 study subjects 214(51.6%) had inadequate knowledge and 201(48.4%) had adequate knowledge. Only 46.3% of the study subject were having positive attitude and 53.7% of the study subjects were not having positive attitude. Out of 283 study subjects only 56(19.8%) have undergone screening and all 56 had undergone only once. Out of 56 study subjects, 2 were positive for VIA, one underwent treatment, while other person did not seek for treatment and distance to the centre was her stopping factor. **Conclusion:** As per the present study the knowledge, attitude and practices score towards cervical cancer is very minimal. More awareness and education program need to be implemented to women about cervical cancer and screening. Cervical cancer educational program needs to be introduced in the community, screening should be available and accessible for all.

INTRODUCTION

In Indian women breast and cervix are the leading sites of cancer in 18 of 25 Population based cancer registries (PBCRS).^[1] Cervical cancer is the fourth most common cancer among women worldwide. The worldwide incidence of cervical cancer is approximately 5,28,000 new cases annually, and 2,66,000 deaths as estimated in 2012. Cervical cancer is the most common cause of death among women in developing countries like South America, East Africa, South and South-East Asia, and the Western Pacific. In low and middle-income countries death due to cervical cancer accounts to 90%.^[2] India has a population of 432.2 million women aged 15 years and

older who are at risk of developing cancer. In India Cervical cancer is the second most common type of cancer and the commonest cause of death among women.

Cervical cancer occurs early and strikes at the productive period of a woman's life. The incidence rises in 30-34 years of age and peaks at 55-65 years, with a median age of 38 years (age 21-67 years). Apart from mortality, cancer cervix also causes loss of productive life.^[3] Women aged 25 to 64 years, tend to be sole caretakers in the family, and sometimes significant contributors to family income. Occurrence of cancer cervix in such families poses a heavy economic burden. Additionally, the high costs on treatment of cervical cancer incurred by the

families further impoverish them. Most of the cervical cancer cases (85%) present in advanced stages therefore mortality is high.^[4]

Human Papilloma Virus (HPV) is the primary underlying cause of cervical carcinoma.^[5] It is reported that 80-90% of women will have this sexually transmitted infection at some point in their life time.^[6] Epidemiological studies have identified number of risk factors such as sexual intercourse at an early age, multiple sex partners ,multiparity ,longer duration of oral contraceptive usage, smoking, low socioeconomic status, micronutrient deficiency, poor sexual and menstrual hygiene and malnutrition.^[5,6]

According to a study done among rural Indian women majority of the study population had poor knowledge regarding cervical cancer.^[7]

Since one of the studies has revealed low percentage of awareness even in the urban population, the present study is undertaken in the urban setup around Kanchipuram.

MATERIALS AND METHODS

It was a cross sectional study conducted among married women aged 30 to 60 years. Study was conducted in women residing in the Field practice area of Urban Health Centre of Meenakshi Medical College and Hospital, Kanchipuram, Tamil Nadu. The area that was covered consists of eight streets with a total population of 10710.

The study was conducted during the period of April 2014 to August 2015.

Inclusion Criteria

- All married women aged 30 to 60 years.

Exclusion Criteria

- Women who were not willing for the study
- Those who had undergone radical hysterectomy
- Known case of cervical cancer
- Pregnant women

Sample size calculation

To determine the sample size required for the study, the following formula was used.

- $N = Z \alpha^2 PQ / d^2$
- N=The required sample size
- Z=Normal variant (1.96=2)
- P=Prevalence of the disease under study
- Q=100-P

Since the level of Awareness on cervical cancer screening is not known for the study Area. It can be assumed as 50% is the existing awareness level. P is taken as 50%, d is allowable error =10% of prevalence allowed the value of d
d=10% of 50=5%

- $N = Z \alpha^2 PQ / d^2$
- $= (1.96)^2 \times 50 \times 50 / 5 \times 5$
- $= 3.84 \times 50 \times 50 / 5 \times 5$
- $= 384$

Assuming 10% may not be available for contact, the total sample selection required for the study is 384+40=424.

Methodology

Simple random sampling technique was used. There are 8 streets in the urban field practice area. The Name, Age of the married women as per inclusion criteria were listed using family details available in health records. To form our sampling frame, street wise women population was arrived at. The required sample size is 384, an addition of 10% women need to be selected on assumption of absenteeism while making house visit. A total married woman to be selected becomes 424. The total sample of 424 women was divided for 8 streets by using population to proportion sampling method. However, after data collection, the total participants in the study were 415.

The study subjects were explained about the study and written informed consent was obtained from all the study subjects before starting interview. The pretested interview schedule was administrated to the study subjects by the investigator. The questionnaire was divided into four parts:

Part one - Socio-demographic Characteristics of the study subjects

Part two - Knowledge regarding cervical cancer and screening

Part three - Attitude towards screening for cervical cancer

Part four - Practice towards screening

Statistical Analysis

Number and codes were assigned to each variable and later, data entry was done in an excel spread sheet (Microsoft Windows 2010). Data was then transformed to SPSS Software Statistical Package for Social sciences (Version 21.0). Descriptive statistics was used to present the data. Chi-square analysis was used to compare the baseline demographic variable; P value<0.05 was considered statistically significant.

RESULTS

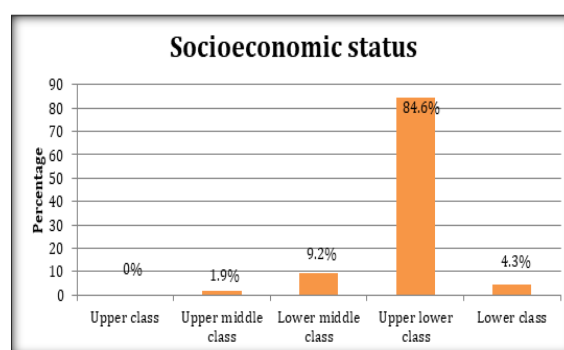


Figure 1: Distribution of the study subjects related to their socioeconomic status

It was observed that most (84.6%) of the study subjects belong to upper lower socioeconomic class (class4) and very few came from the middle class. As per Modified Kuppusswamy classification in the year 2014.

Of the 415 study subjects interviewed majority (76.4%) of them have heard of the term “Cancer”.

Percentage of subjects who had heard about “Cervical Cancer” specifically were 89.3% (283). Only 18% (51) knew about the symptoms of cervical cancer and 4.2% (12) of the study subject knew about the risk factors of cervical cancer. It was observed that study subjects gathered information about cervical cancer from various sources either from Health professional, Media or Friends and Relatives. Most of the study subjects 166(58.6%) obtained information from Friends and Relatives. The study subjects knew abnormal vaginal discharge (49%) and bleeding between menstrual cycles (31.4%) are the common symptoms of cervical cancer. [Table 1] Table 2 shows that 79.5% (225) of the study subjects have heard of cervical cancer screening, only 16(7.1%) knew about the methods available for cervical cancer screening and out of 16 all knew that pap smear is the available screening methods. Majority (83.1%) of the study subjects knew that cervical cancer can be detected early. Around 86.7% (195) of the study subjects thought that one-time cervical screening is enough to save them from cervical cancer in their life time. 65.8% (148) did not know how frequently they need to get screening done for cervical cancer. Majority of the study subjects did not know that vaccine is available for cervical cancer. 84% (189) of subjects know that cervical cancer can be treated and cured if detected early. Around 72%

(162) of the study subjects knew that free screening procedure is available in the government hospital. [Table 2] Out of 415 study subjects 214(51.6%) had inadequate knowledge and 201(48.4%) had adequate knowledge. [Table 3] It can be observed that 58% of the study subjects were not willing to regularly consult a doctor for screening for cervical cancer. While majority of them stated lack of interest (37.8%) and lack of awareness (26.3%) as reasons for not screening, few other reasons like pain, fear, cost, lack of time and distance was stated by study subjects. [Table 4] Attitude score was calculated with two attitude questions. Those who said correct response was taken into consideration and total score was calculated. Then attitude was categorized with total score of the study subjects as positive and not positive attitude. Only 46.3% of the study subject were having positive attitude and 53.7% of the study subjects were not having positive attitude. [Table 5] Out of 283 study subjects only 56(19.8%) have undergone screening and all 56 had undergone only once. Out of 56 study subjects, 2 were positive for VIA, one underwent treatment, other person did not seek for treatment and distance was her stopping factor of the centre. [Table 6]

Table 1: Knowledge regarding cervical cancer with source of Information among study subjects (N=415)

Questions		Frequency	Percentage
Have you ever heard of the term cancer?	Yes	317	76.4%
	No	98	23.6%
If yes, have you heard about cervical cancer specifically?	Yes	283	89.3%
	No	34	10.7%
Do you know anybody who has been diagnosed with cervical cancer?	Yes	38	13.4%
	No	245	86.6%
Do you know about the Symptoms of cervical cancer?	Yes	51	18.0%
	No	232	82.0%
Do you know the possible Risk factors for cervical cancer?	Yes	12	4.2%
	No	271	95.8%

Table 2: Knowledge regarding cervical cancer SCREENING among study subjects (N=283)

Questions		Frequency	Percentage
Have you ever heard of cervical cancer screening?	Yes	225	79.5%
	No	58	20.5%
Do you know about screening methods available for cervical cancer?	Yes	16	7.1%
	No	209	92.9%
If yes what are the available screening methods?	Pap smear test	16	100.0%
	VIA*	0	0.0%
	VILI*	0	0.0%
Do you know that cervical cancer can be detected early?	Yes	187	83.1%
	No	38	16.9%
Do you think symptom less women need to be screened for cervical cancer?	Yes	197	87.6%
	No	28	12.4%

VIA-Visual inspection with acetic acid

*VILI-Visual inspection with Lugol’s iodine

Table 3: Adequacy of knowledge of the study subjects about cervical cancer and screening

Knowledge	Frequency	Percentage
Inadequate	214	51.6%
Adequate	201	48.4%
Total	415	100%

Table 4: Attitude of the study subjects towards cervical cancer screening (N=283)

Variable	Frequency	Percentage	
What would you do in case of vaginal bleeding between periods?	No vaginal bleeding till date	167	59.0%
	Consult a doctor	16	5.7%
	Go to health center	15	5.3%
	Will Ignore	0	0%
	Already Attained menopause	85	30%
Are you willing to regularly consult a doctor for screening of cervical cancer?	Yes	119	42%
	No	164	58.0%
During screening procedures what difficulties you think you will face?	Pain	34	12%
	Discomfort	81	28.6%
	Bleeding	5	1.8%
	Not known	146	51.6%
	No difficulty	17	6.0%
Would you be worried if you were found to have early signs of precancer?	Yes	260	91.9%
	No	23	8.1%

Table 5: Attitude Score of the study subjects towards cervical cancer screening

Attitude	Frequency	Percentage
Not positive	152	53.7%
Positive	131	46.3%
Total	283	100%

Table 6: Practice regarding cervical cancer screening among the study subjects (N=283)

Variables	Frequency	Percentage	
Have you ever been screened	Yes	56	19.8%
	No	227	80.2%
If yes when did you first undergo your screening test?	Recently	39	69.6%
	3 years ago	15	26.8%
	Long ago	2	3.6%
If yes what type of cervical cancer screening did you have?	VIA	27	48.2%
	VILI	0	0.0%
	Pap smear	9	16.1%
	Don't know	20	35.7%
If yes how many times have you been screened ?	Thrice	0	0.0%
	Twice	0	0.0%
	Once	56	100.0%
If yes where you screened for cervical cancer screening?	Government hospital	50	89.3%
	Health camp	3	5.4%
	Private hospital	3	5.4%
	Don't know	0	0.0%
If yes what is the result of your cervical cancer screening?	Negative	54	96.4%
	Positive	2	3.6%
	Don't know	0	0.0%

DISCUSSION

The objectives of the study were to assess the level of knowledge, attitude and practice regarding cervical cancer screening among 415 women in field practice area of urban health centre Kancheepuram.

The socio demographic characteristics of 415 women who participated in the study were urban dwelling, married (84.3%), literate (64.4%), in the age group of 30 to 60 years with a mean age of 42.29 years and unemployed (62.4%). Majority (97.1%) of the study subjects were Hindus and most (84.6%) of them belonged to the upper lower socioeconomic class. Similar findings were reported in the study done by Aswathy et al in 2012. [8]

In this study 201(48.41%) of the study subjects were married at an early age of 13 to 18 years, 147(36.07%) had their first child at the age of 14 to 19 years and 125 (30%) had more than three children. The current study revealed that majority 76.14% (317) of the study subject were aware of Cancer in

general and this was consistent with the report of Robin Marie Beining et al's study in 2012.[9] In this study About 89.3%(283) of the study subjects were aware of the term Cervical Cancer. This is slightly higher than the previous studies done. Ashwathy et al's study in 2012 reported 72%8, Mani. G et al's study in 2014 reported 74%10. The slightly higher percentage could be due to the literacy levels, urban surroundings and an available of regional cancer centre in Kanchipuram.

In this study the main source of information about cervical cancer reported by the study subjects was from friends and relative 58.6% (166) followed by mass media 21.5% (61%). This finding is similar to the reports given by Raychaudhuri et al study in 2012. [11] It was reported that 18% (51) of study subjects were aware about the symptoms of cervical cancer and all of them mentioned abnormal vaginal discharge and bleeding between menstrual cycle as the most important symptoms. Only 4.2% (12) knew about the risk factors of the disease. The main risk

factors mentioned by the study subjects were many child births, abortions and family history of cervical cancer. In a similar study done in Kancheepuram district by Mani G et al, showed that 29.7% of the study subjects knew about the symptoms, and 1.3% knew about the risk factors of the disease.^[10] As both the studies were done in Kancheepuram, the variations in the results could be attributed to the effectiveness of mass media, literacy levels and rural or urban background.

In this study out of 283 study subjects 119 (42%) were willing to undergo periodic screening for cervical cancer and 164(58%) were not willing for periodic screening. This report is similar to the report given by Ashwathy et al in her study in 2012 where 2/3rd of the study population out of 809 were not willing for periodic screening.^[8]

When asked for the reasons for not undergoing periodic screening, 26.3% of the subjects told they were unaware of the importance of periodic screening and 37.8% of subjects stated lack of interest. Other reasons told by the study subjects were pain, fear, cost, lack of time and distance. Similar reasons were given in many previous studies done by Ashwathy et al in 2012 in Kerala,^[8] Mona Al Sairafi et al in 2008 in Kuwait.^[12]

The overall attitude of the study subjects towards screening was reported that out of 283 ,53.7% (152) not having positive attitude and 46.3% (131) having a positive attitude.

In this study 56(19.8%) of the study subjects had undergone screening for cervical cancer earlier, which is considerably higher than the previous studies done by Ashwathy et al in Kerala.^[8]

Among the 56 study subjects who underwent screening earlier 9(16%) had got PAP test done and 27(48.2%) had got VIA test done, and the all 56 study subjects had undergone screening only once, which is similar to the reports given by Varadheshwari. T et al's study in perambalur.^[13]

CONCLUSION

As per the present study the knowledge, attitude and practices score towards cervical cancer is very minimal. More awareness and education program need to be implemented to women about cervical

cancer and screening. Cervical cancer educational program needs to be introduced in the community, screening should be available and accessible for all. Media can play a major role in information, education and communication.

Conflict of Interest: None declared.

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