

Assessment of Knowledge, Attitude and Practice on Breast Cancer among Women - Coimbatore City

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Abstract

Background: Among the Cancer diseases the most widespread is breast cancer among women throughout the Globe. In India, Mortality rate is rising rapidly because a woman has lack of awareness about the causes of breast cancer. If the risk factors are determined accurately at the early stages the breast cancer can be prevented effectively and controlled. The purpose of the study is to facilitate understanding and assess the Knowledge, Attitude and Practice about Breast Cancer among women. **Objectives:** (a) to inculcate the knowledge and awareness about the cause and effect of cancer in the modernized world among women. (b) to determine the knowledge, attitude and practice towards breast cancer and screening examination among women fertility. **Methodology:** Online based study was carried out around Coimbatore District with a sample of 241 women respondents aged from 18 to 60 years. A standardized, confidential, internet questionnaire was conducted in Google form. The questionnaire is comprised with socio demographic details followed by assessing Knowledge Attitude and Practices of the women towards Breast Cancer (BC) and screening procedures such as Breast Self-Examination (BSE) and Clinical Breast Examination (CBE). The respondent's data was analysed using Statistical Software- SPSS Version 23. **Results:** The socio demographic characteristics of respondents are shown in Table 1. In this, 49% of the respondents are below 25 years of years and in that 53% were the unmarried women. In this 21st century most of the respondents prefers nuclear family due to the advent of literacy rate showing that 42% of the respondents had Under Graduation. **Conclusion:** The results of this study suggest that women are generally aware of the breast cancer and less practice in self and clinical examinations. Hence more awareness programs and campaigns to be initiated at the early years of school education as well as higher education institutions, organizations and other sectors.

Keywords: Breast Cancer (BC), Breast Self-Examination (BSE), Clinical Breast Examination (CBE)

Introduction

Cancer has become a Global killer and India ranks third among nations in terms of highest number of cancers leading to hub of cancer. According to National Cancer Registry Programme (NCRP) estimates the number of cancer cases is likely to increase from 13.9 lakhs in 2020 to 15.7 lakhs by 2025, by increase of nearly 20% is presented and mortality of 87,090 deaths occurring annually. Sedentary lifestyles, increase in urban pollution, in addition to rise in obesity, tobacco and alcohol consumption, are said to be the reasons behind the rise. The Indian Council of Medical Research (ICMR) estimates that there will be a 12% rise in cancer cases in India by the next five years. The most common forms of cancers affecting the people of India are breast cancer, Cervical Cancer and Oral Cancer. Globally, breast cancer is the most frequently diagnosed cancer and the leading cause of death. As per GLOBOCAN 2020 survey, it was estimated that nearly 13.25 lakh people were diagnosed with cancer. In the current year 8,51,678 patients are likely to die due to cancer, but more are focusing on Covid-19 deaths only. Breast cancer is the major health concern across Indian cities, especially in metropolitan cities like Delhi, Bengaluru and Chennai. In India, the systematic collection of cancer data is being carried by the population Based Cancer Registries (PBCR) established since 1981 under the National Cancer Registry Programme (NCDIR) of Indian Council of Medical Research (ICMR), (ICMR-NCDIR-NCRP), Bengaluru.

Breast Cancer (BC) presents most commonly as a painless breast lump and a smaller proportion with non-lump symptoms. Women must be aware about the symptoms of BC and able to recognize through routine practice of touching and seeing the breast by self-examination. Early stage is usually asymptomatic but the changes in size, shape or feel and the hardness of the breast or nipple may leads to BC. Among the numerous risk factors associated with BC, one of the major risk factor is increasing age and family history. But it can be achieved by performing the examination procedures which includes BSE, CBE and Mammography. BSE is inexpensive and carried out by women themselves in day today habit, whereas CBE and mammography require hospital visit, expertise doctors and specialized equipment's.

In recent years, studies related with breast cancer to examine the knowledge, attitude and practice of women towards BC in other Countries like Nigeria, Saudi Arabia, Tehran, etc. are carried out. According concluded that the educated women can present a warning signs, symptoms and strive for improvement of health behaviour, which may drag down high incidence and mortality rate from breast cancer. BSE is simple and good screening process that can help to screen tumours, cysts, other abnormalities in the breasts and one can do at home by self to check for lumps in and around breast. Now, a self-exam is considered to be less effective than other techniques, such as regular mammograms. However, self-examination makes to familiarize the shape, size and structure of the breast and able to determine/identify the normal nature of the breast. The practice of BSE monthly once makes oneself to realize the changes in the breast and able to detect early sign of disease. BSE will have a great value in terms of awareness and

motivating women to see a health care provider and find a lump. The early detection is respond to the symptom may reduce the cancer stage in the diagnosis process. In addition to this, BSE is one of the best effective tools in the breast health education, especially at the early age of adult women.

The ability to perform a thorough and accurate breast exam is an important skill for medical practitioners of many levels and specialties. CBE is a key step in the diagnosis and surveillance of a number of benign and malignant breast diseases. When used as part of a multimodal evaluation, the breast exam provides important information used in both the workup and management of many diseases of the breast. Current recommendations for breast cancer screening intervals and tests vary; however, many guidelines agree that a clinical breast exam is warranted for women with abnormal findings on mammography and as part of annual screening for certain groups of women at increased risk for breast cancer. The main goal of the present work was to assess knowledge, attitude and practice about BC, BSE, CBE and Mammography as early detection tools among women in and around Coimbatore. Also to compare the findings of the study with the related studies done in other place that helps to design a structured scheme regarding breast cancer among young adult women.

Methodology

The study was an Online-Based Survey with Google form, with designed questionnaire comprising 45 questions with four sections. In the questionnaire, there are various items to assess the level of knowledge, attitude and practices towards BC, BSE, and CBE. Eligible respondents of the study were all women between the age group of 18 to 60 years. Except for the section of socio-demographic characteristics, most of the questions were designed to elicit “yes”, “no” or “don’t know” answers. In the first section, the respondents had to provide the socio-demographic questions like age, job, education level, marital status, family history of BC, etc. Second section comprised of 16 questions on the respondents knowledge towards BC. The third section was designed with 7 questions on the respondents attitude towards BC, BSE and the fourth section was enquired with questions about the practice undergone in BC, BSE and CBE.

Answers of the respondents were transferred to a spread sheet for analysis; each was coded numerically to be entered in SPSS (IBM SPSS Statistics for Window, Version 23.0). The data were analyzed with Descriptive and Inferential Methods, in Descriptive Statistics (Frequency and Percentage) and correlation are used, whereas in inferential statistics Chi-square is used to test the statistical significance with $P \leq 0.05$.

1. Results

The socio demographic characteristics of study respondents are shown in Table 1. Among the 241 respondents the majority of respondents age are below 25 years 118 (49%) followed by 52 (22%) who were between 25-35 years. 128 (53%) were unmarried and 109 (45%) married. In terms of the education level, most of the respondents has completed their Under Graduate Education 101 (42%) followed by Post Graduate Education 97 (40%) and 36 (15%) had a Doctorate. Most of the respondents are from Municipal Corporation areas 126 (52%) and 171 (71%) respondents prefers Nuclear family.

Table I
Socio-demographic characteristics of respondents (n=241)

Characteristic	Frequency	Percentage
Age		
(below 25 years)	118	49
25 – 35 years	52	22
36 – 45 years	44	18
above 45 years	27	11
Marital Status		
Married	109	45
Unmarried	128	53
Others	4	2
Types of family		
Nuclear	171	71
Joint	70	29
Place of residency		
Municipal corporation		
Municipality	126	53

Punchayat	51	21
	64	26
Education		
UG	101	42
PG	97	40
PhD	36	15
Others	7	3
Occupation		
Teachers	65	27
Students	101	42
Housewife	24	10
Others	51	21

Ten questions with “yes”, “no”, or “don’t know” responses were designed to elect respondents knowledge. Table 2 shows the respondents knowledge about the BC. The majority of the respondents know that BC is a common cancer in women 189(78%), 166(69%) says it will affect all the age group. 122(51%) says it not a hereditary disease and at the same 113(47%) respondents says it will not affect the next generation. 225(93%) has a knowledge that BC is curable when detected early. 175(73%) respondents says initial two stages of BC will cure the disease and 152(63%) says surgery can cure BC. 176(73%) respondents says all lumps are not cancer. 158(66%) of the respondents says that they have heard of Breast Self-Examination. 181(75%) of the respondents feels that self-examination will surely give some idea about Breast Cancer.

Table II
Respondents Knowledge about Breast Cancer (N =241)

Question	Frequency	Percentage
BC is the common Cancer in women		
Yes	189	78
No	39	16
Don’t know	13	6
BC will affect all the age group		
Yes	166	69
No	52	22
Don’t know	23	9
BC is a hereditary disease		
Yes	75	31
No	122	51
Don’t know	44	18
BC affects next generation		
Yes	81	34
No	113	47
Don’t know	47	19
BC is curable when detected early		
Yes	225	94
No	8	3

Don't know	8	3
Initial two stages of BC will cure the disease	175	73
Yes	12	5
No	54	22
Don't know		
Surgery can cure BC	152	63
Yes	41	17
No	48	20
Don't know		
Whether all lumps are Cancer	15	6
Yes	176	73
No	50	20.7
Don't know		
Have you heard of BSE	158	66
Yes	63	26
No	20	8
Don't know		
Self-Examination will give an idea about BC	181	75
Yes	29	12
No	31	13
Don't know		

Seven questions with “yes”, “no”, or “don't know” responses were designed to elect respondents attitude. Table 3 shows the attitude about BC. In terms of attitude 123(51%) of the respondents says that BC patients can lead a normal marriage life. 135(56%) respondents does not know BC patients can breast feed or not. 146(61%) says BC patients can play sports and 131(54%) can swim. 99(41%) of the respondents does not know changes in the size of the breast is the symptoms of BC. 196(82%) says that BSE is necessary for early detection. 127(53%) says that BC is not contagious disease.

Table III
Respondent's Attitude towards Breast Cancer

Questions		Frequency	Percentage
Patients with BC can lead a normal marriage life	Yes	123	51
	No	28	12
	Don't know	90	37
Patients with BC can breast feed	Yes	28	12
	No	78	32
	Don't know	135	56
Patients with BC can play Sports	Yes	146	61
	No	16	6
	Don't know	79	33

Patients with BC can Swim

Yes	131	54
No	17	7
Don't know	93	39

BSE is necessary for early detection

Yes	196	82
No	13	5
Don't know	32	13

BC is not Contagious disease

Yes	127	53
No	30	12
Don't know	84	35

Two questions with “yes”, “no” responses were designed to elect respondents practice. Table 4 shows the practice towards BC. Respondents have not examine their breast periodically 138(57%) and also 225(93%) of the respondents have not undergone any CBE. 103(43%) of the respondents have examined their breast periodically and 16(7%) of the respondents have undergone CBE.

Table IV
Practice of Breast Cancer

	Do you examine your Breast periodically?		Have you undergone any CBE?	
	Frequency	Percentage	Frequency	Percentage
Yes	103	43	16	7
No	138	57	225	93

Table 5 represents the respondents practice towards BSE and CBE. 136(56%) of the respondents says that they don't have a practice in self-examining. 52(38%) of the respondents says that they don't know the technique, 8(6%) of the respondents are afraid of finding a lump, 7(5%) of them thinks that it is not benefit. In this busy world maximum respondent says that they don't have time to examine their breast. 105(44%) of the respondents says that they practice in self-examining. Among them 44(42%) once in a month they practice their breast, 27(26%) once in two months they practice their breast, 23(22%) of them practice once or twice in a year. 127(53%) of the respondents says that they don't know that they should do CBE. 109(45%) of the respondents explains that they don't have breast problem.

Table V
Distribution of respondents according to Practice of BSE and CBE

Question	Frequency	Percentage
Practice of Breast Self-examination		
Yes	105	44
No	136	56
If yes, frequency of practice of BSE?		
Once a month	44	42
Once in two months	27	26
Once or twice a year	34	32

If no

Afraid of finding a lump	8	6
I don't know the technique	52	38
I don't trust my examination	6	4
I don't think it is of benefit	7	5
No time	63	47

Reasons for not practicing Clinical Breast Examination

I don't have breast problem	109	45
I don't know that I should	127	53
It may lead to some complications	5	2

Table 6 outlines the Chi-square and Correlation values of practice factors with some selected demographic variables with BSE and CBE. It is found that practice had a significant relationship between BSE and age ($P=0.000$) with 3 df, marital status ($P=0.003$) with 2 df and occupation ($P=0.000$) with 3 df. There was no relationship between education and BSE ($P=0.070$) with 2 df. It is found that practice had a significant relationship between CBE and age ($P=0.000$) with 3 df, and occupation ($P=0.016$) with 3 df. There was no relationship between marital status ($P=0.532$) with 2 df and Education ($P=0.824$) with 2 df.

It is found that practice had a significant correlation between BSE and age ($P=0.000$), marital status ($P=0.016$) and education ($P=0.005$). There was no correlation between occupation and BSE ($P=0.750$). It is found that practice had a correlation relationship between CBE and age ($P=0.002$) and occupation ($P=0.015$). There was no relationship between marital status ($P=0.145$) and education ($P=0.338$) with 0.05 and 0.01 level of significance.

Table VI
Respondents Practice regarding their Breast Examinations

Socio-demographic	Practice regarding their Breast Examinations					
	BSE			CBE		
	Yes Frequency	No Frequency	Correlation (Sig.)	Yes Frequency	No Frequency	Correlation (Sig.)
Age						
Below 25 years	35	83		5	113	
25 – 35 years	26	26	0.258**(.000)*	2	50	
36 – 45 years	29	15		2	42	-0.195**(0.002)*
Above 45 years	15	12		7	20	
	$\chi^2=20.668, df=3, P=(0.000)^*$			$\chi^2=18.268, df=3, P=(0.000)^*$		
Marital Status						
Married	60	49		10	99	
Unmarried	42	86	0.155*(0.016)*	6	122	0.094(0.145)
Others	3	1		0	4	
	$\chi^2=13.809, df=2, P=(0.003)^*$			$\chi^2=2.201, df=2, P=0.532$		
Occupation						
Teachers	40	25		1	64	
Students	26	75	-0.021(0.750)	4	97	
Housewife	14	10		5	19	-0.157*(0.015)*
Others	25	26		6	45	
	$\chi^2=36.377, df=3, P=(0.000)^*$			$\chi^2=18.798, df=3, P=(0.016)^*$		
Education						
Under Graduate	34	67	-0.179**(0.005)*	5	96	-0.062(0.338)

Post Graduate	48	49	7	90
Others	23	20	4	39
	$\chi^2=10.173, df=2, P=0.070$		$\chi^2=2.176, df=2, P=0.824$	

*Correlation is significant at the 0.05 level **Correlation is significant at the 0.01 level

*Significant result, the result is significant at $P \leq 0.05$

Conclusion

This study revealed a significant association between some socio-demographic and knowledge towards Breast Cancer. Attitude and Practice towards Breast Self-Examination, Clinical Breast Examination. According to the outcome of the result, most of the respondents had appropriate Knowledge towards Breast Cancer prevention. The Attitude and Practice of BSE, CBE is very low among the respondents. Most of the respondents do not know the technique to practice BSE. Information on how to perform BSE, and time to undergo CBE should be considered as priority interventions in women. Hence it is need of the hour in the Region, District, State and National based to organise relevant awareness campaigns and educational programmes among the younger generations. More efforts are needed to develop a positive attitude towards the Breast Self-Examination and Screening practices among the women fraternity for the healthy society.

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