

Original Research Article

## **A cross-sectional study on Awareness of breast self-examination, practice and Health seeking behavior regarding breast cancer among rural women of Pondicherry**

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**Abstract:** Breast cancer is an important health problem in India and it is easily preventable by early detection methods. Still there is high level of mortality due to lack of awareness among women regarding the early detection and screening for breast cancer. The purpose of the study is to assess the knowledge of Breast self-examination, its practice and health seeking behavior of breast cancer. It was a community based descriptive cross-sectional study done in the field practice area of SLIMS, Pondicherry. A pre-designed, structured questionnaire was used to collect the data by a house to house interview method. Information was collected regarding their socio economic status, awareness of breast cancer, breast self-examination, its practice and attitude towards breast cancer. Among 258, who were interviewed most of them (251) 97.2% were aware of breast cancer. Only (104) 40.3% were aware of breast self-examination and (88) 34.1% of them said BSE is not necessary for them at all. It was observed 17.8% (46) have performed BSE before. Regarding the age group for performing BSE was 29.5% in 20-40 years, 28.7% after 40 years and 24.5% said that they do not know when it should be done. It was reported, among the participants only 17.8% (46) has done BSE and 85.7% were interested to know about BSE and only 7.4% knew the correct method of performing BSE. The reason for doing BSE among these 17.8% was 9.3% due to pain in the breast and 7.4% for lump in the breast. 46.1% of the participants agreed that early diagnosis of breast cancer by doing BSE will definitely cure Breast cancer.

**Keywords:** Breast cancer, breast self-examination, knowledge, awareness, rural women

**INTRODUCTION:**

Breast cancer is the most common cancer type and cause of death among women in many countries. Meanwhile, the early discovery of breast lumps through BSE is important for the prevention and early detection of this disease. In some countries, survival rate has been increased due to early detection of Breast cancer, yet systemic approach to increase the awareness of breast cancer has to be established. Therefore, many women miss early detection and treatment opportunities due to lack of information, knowledge and awareness of breast cancer, as well as cancer screening practices [1].

Breast cancer presents most commonly as a painless breast lump; a smaller proportion of women have non-lump symptoms. For women to present early to hospital, they must be able to recognize symptoms of breast cancer through routine practices of screening [2]. Commonly we use three methods for early detection of

breast cancer, which includes, breast self-examination (BSE), clinical breast examination (CBE) and mammography. CBE and Mammography needs hospital visits and expertise opinion unlike SBE, which done by the individual themselves. Routine mammography cannot be recommended in developing countries for financial constraints and lack of accurate data on the burden of breast cancer in these countries.

As per the ICMR-PBCR data, breast cancer is the commonest cancer among women in urban registries of Delhi, Mumbai, Ahmedabad, Kolkata, and Trivandrum where it constitutes >30% of all cancers in females (National Cancer Registry Programme, 2001). In the rural PBCR of Barshi, breast cancer is the second commonest cancer in women after uterine cervix cancer (National Cancer Registry Programme, (2001) [3].

Several studies have been done to access the knowledge of breast cancer among women and breast screening practices. There are only few studies based on breast self-examination and their practices in our country. Therefore this study is done to elicit to know the knowledge regarding breast cancer and breast self-examination and how they practice it in their day to day life. With this basic line data on their knowledge, it will be useful for us to plan for the awareness campaign to help them detect the breast cancer at their early stages.

**METHODOLOGY:**

A cross-sectional descriptive study was conducted in the field service area of Sri Lakshmi Narayana Institute of medical college, Pondicherry, under the department of community medicine. The study was carried out over a period of 6 months from May 2015 to December 2015. A door to door survey was conducted by using a pre-tested and predesigned questionnaire. Women above the age group of 19 years were included in the study and informed oral consent was obtained before collecting the data. The individuals who were present in the house during the survey were included as the participants. The individuals who were not co-operative or the houses locked more than 3

times, during the survey were excluded from the study. The questionnaire contained information regarding the preliminary data of the participants, awareness of breast cancer, awareness of breast self-examination, its practice and attitude towards breast cancer. The data was collected by the trained paramedical workers and the CRRI, s posted in the department training centres. The data collected was analyzed by using suitable statistical methods.

**RESULTS:**

The study was conducted in the field practice area of department of Community Medicine, SLIMS, Pondicherry. The number of participants included in the study was 258, between the age group of 20 to 65 years. Majority of the participants belonged to age group of 20-29 and 30-39 years as 34% and 32% respectively with mean age of 36.2 yrs and SD was 10.1. Most of the participants (96%) follow Hindu religion, 90.7% were married, 56% had completed middle schooling, 88.4% were unskilled workers and 30% of them belong to class IV and class V socio economic class respectively according to Modified BG Prasad’s classification. The study also shows significant relationship between age group and knowledge of the participants (table 1).

**Table 1: Knowledge of Breast Self-Examination of the respondents**

Knowledge of BSE	Present N (%)	Absent N (%)	P value
<b>Age Group (Yrs.)</b>			
< 30	36 (34.6)	52 (33.7)	X <sup>2</sup> = 10.4, d.f. = 3, p = 0.016
30 -39	42 (40.3)	42 (27.3)	
40 - 49	24 (23.1)	44 (28.6)	
≥ 50	02 (1.9)	16 (10.4)	
<b>Total</b>	<b>104</b>	<b>154</b>	
<b>Education</b>			
Primary School	12 (11.5)	16 (10.4)	X <sup>2</sup> = 6.40, d.f. = 4, p = 0.171
Middle School	53 (50.9)	93 (60.4)	
Higher Sec. School	10 (9.6)	8 (5.2)	
Dip/Deg.	14 (13.5)	10 (6.4)	
Illiterate	15 (14.4)	27 (17.5)	
<b>Total</b>	<b>104</b>	<b>154</b>	
<b>Marital Status</b>			
Married	95 (91.3)	139 (90.3)	X <sup>2</sup> = 0.145, d.f. = 2, p = 0.930
Single	02 (1.9)	04 (2.5)	
Widower	07 (6.7)	11 (7.1)	
<b>Total</b>	<b>104</b>	<b>154</b>	

\* Breast Self-Examination

Among 258, who were interviewed most of them (251) 97.2% were aware of breast cancer, whereas only (104) 40.3% were aware of breast self-examination and (88) 34.1% of them said BSE is not necessary at all. It was observed 17.8% (46) have performed BSE before as shown in table 2. When asked who should perform

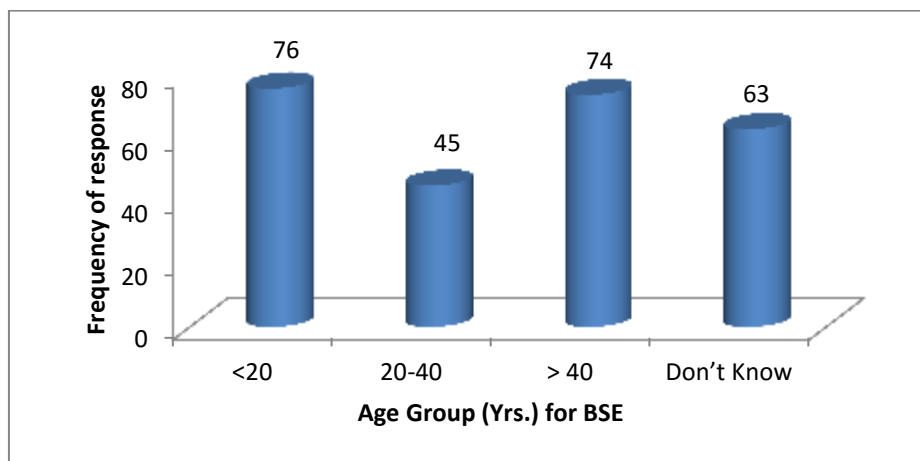
the BSE, it was reported as females in 59.3%, both males and females in 30.2% and don’t know in 10.5%. 38.8% of the participants said BSE must be performed once a month, 14% weekly and 30.2% replied don’t know.

**Table: 2 Awareness of Breast Self-Examination of the respondents.**

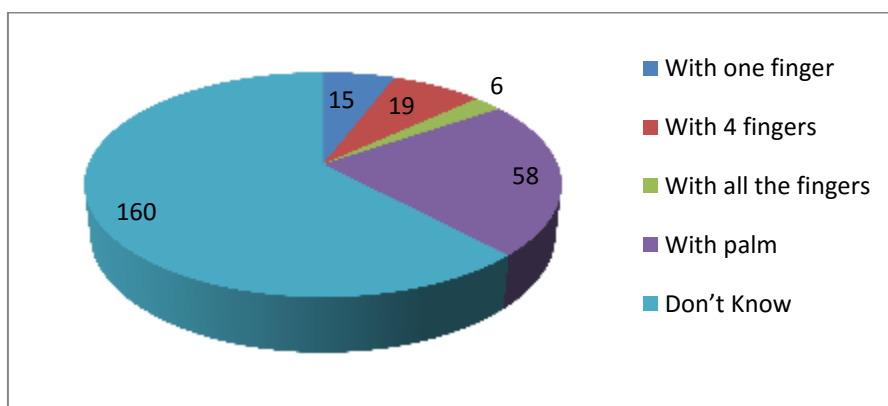
Awareness	No (%)	Yes (%)
BSE*	154 (59.7)	104 (40.3)
BSE needed	88 (34)	170 (65.9)
<b>Who should do BSE</b>	<b>N (%)</b>	
Female	153 (59.3)	
Both	78 (30.2)	
Don't Know	27 (10.5)	
<b>Duration for BSE</b>		
Daily	18 (7.1)	
Monthly	100 (38.8)	
Weekly	36 (14)	
Yearly	26 (10.1)	
Don't Know	68 (30.2)	

Regarding the age group for performing BSE was 29.5% in 20-40 years, 28.7% after 40 years and 24.5% replied don't know as shown in figure 1. Among the participants only 17.8% (46) has done BSE, 85.7% were interested to know about BSE and only 7.4% knew the correct method of performing BSE (figure 2).

The reason for doing BSE among those 17.8% was pain in the breast (9.3%) and lump in the breast (7.4%). 46.1% of the participants agreed that early diagnosis of breast cancer by BSE will definitely cure Breast cancer. Nearly 90% of them were not aware that males can also get breast cancer.



**Fig. 1: Response of the participants, the age group to perform BSE**



**Fig. 2: Methods for Self Examination**

Questions were also asked regarding their attitude, if in case they get breast cancer, to observe their response. 95% of them responded that they will go to the doctor in case of breast cancer and 68.6% of them

will cooperate with the male doctors if they were to examine for breast cancer, whereas 31.4% of the women objected male doctors examining them in table-3.

**Table: 3 Practice of Breast Self-Examination of the respondents.**

<b>BSE Done Before</b>	<b>N (%)</b>
<b>Yes</b>	<b>46 (17.8)</b>
Lump	19 (7.4)
Pain	24 (9.3)
Family History	3 (1.2)
<b>No</b>	<b>212 (82.2)</b>
Don't Know	48 (18.6)
No Family History	18 (7.0)
Fear/Shy/Not Necessary	52 (20.1)
No Symptoms	58 (22.5)
Not knowing	36 (14.0)
<b>Interested to Know</b>	
No	33 (12.8)
Yes	221 (85.7)
Don't Know	4 (1.6)
<b>Curable</b>	
No	46 (17.8)
Yes	119 (46.1)
Don't Know	93 (36.0)
<b>Do Male get BC<sup>#</sup></b>	
No	114 (44.2)
Yes	31 (12.0)
Don't Know	113 (43.8)
<b>If you get BC?</b>	
Go to Doctor	245 (95.0)
Fear	3 (1.2)
Pray to God	6 (2.3)
Don't Know	4 (1.6)
<b>Examination to male Doctor</b>	
No	81 (31.4)
Yes	117 (68.6)

<sup>#</sup> Breast Cancer

**DISCUSSION:**

The present study suggests that the people in rural Pondicherry have very good knowledge of breast cancer (97.2%), but still lack in the awareness of screening procedures like BSE and only 40.3% were aware or had knowledge of BSE. Similar studies have been done in various part of our country [2], where low level of knowledge has been reported in other developing countries too [4, 5].

This study shows there was no significant relationship between their knowledge and education and marital status of the individuals. But it was found that there was significant relationship between their knowledge of BSE and their age group (p value = 0.016) more or less similar results were obtained by Dr. M.O. Balogun *et al.*; study conducted among Nigerian female traders [6]. The findings shows only 17.8% have

done BSE before and many (85.7%) were interested to know, how to perform the BSE, which are concurrent with Kuwait [7] and Iran [8] study. Multiple studies done in developed countries showed awareness and knowledge of breast cancer and BSE are better when compared to developing countries. The study showed that only 7.4% knew the correct method of performing BSE and BSE was done for pain (9.3%) and 7.4% for lump in the breast. It was observed that 68.6% of the participants are willing to have breast examination and take treatment for breast cancer. However 50% of the participants agreed that the treatment for breast cancer is long and painful process in a study done by Muhammed A. Hadi among Malaysian students [9]. Our study reports 46.1% of the individuals agreed that the early diagnosis of breast cancer is curable, which was supported by the study done at Delhi urban settlement colony [1]. Studies have shown that formal

training programme has profound effects on regular BSE performance with a correct technique [10, 11].

#### CONCLUSION:

Our study reveals majority of the participants had good knowledge/of breast cancer, but lacked awareness regarding breast self-examination and its practice. This may be due to lack of felt need to examine their breast for breast cancer. BSE should be made a part of the existing health programmes by demonstrating correct method of BSE by using audio visual methods. The educational programmes should be designed in their own work place, as it may create an opportunity to have such valuable and lifesaving information to them as well as to their loved ones.

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