

# Research Journal of Pharmaceutical, Biological and Chemical Sciences

## Knowledge, Attitude And Practice Of Breast Self-Examination Among Female Patients Attending A Rural Health Centre In Kanchipuram District, Tamil Nadu, India.

AS Nithya\*.

Sree Balaji Medical College & Hospital, Chennai, Tamil Nadu, India.

### ABSTRACT

Breast cancer is now the most common cancer globally which accounts for 26.8% of all cancers among women in India (1). It is the second most common cancer in the rural areas (2). Breast cancer can be detected early though breast self-examination (BSE) which is a non-invasive, quick, non-irradiative procedure and hence mortality and morbidity due to the illness can be reduced. 1) To assess the knowledge of breast cancer and breast self-examination among patients attending the rural health centre. 2) To determine their attitude towards breast cancer and breast self-examination. 3) To determine the percentage of women who perform BSE correctly. A cross sectional survey of 115 female patients attending the rural health centre, the field coverage area of Sree balaji medical college, chrompet, kanchipuram district was conducted. A self-administered pre tested questionnaire was employed. Consent was obtained and assurance of confidentiality of responses was given to each respondent. Majority of the respondents, 50.4% were from the age group 30-49. 71% had heard of breast cancer and breast self-examination. Only 62.3% of the respondents thought that breast self-examination was necessary. Only 56% of the respondents knew how to perform breast self-examination correctly. 45% of the respondents said that the last time they performed breast self-examination less than a year ago. Majority of the respondents, 56.8% preferred to perform breast self-examination in the morning and 39.7% of the respondents preferred to carry out breast self-examination in front of the mirror. There was a no adequate level of awareness of breast cancer and breast self-examination among the respondents. Their attitude towards breast cancer and breast self-examination was fair though the practice was poor.

**Keywords:** awareness, breast cancer, breast self-examination, early detection, rural population

*\*Corresponding author*

## INTRODUCTION

Breast cancer is the most common cancer in women all over India and accounts for 25% to 31% of all cancers in women in Indian cities [3]. There is witness for an age lift, and the average age of developing breast cancer has shifted from 50 - 70 years to 30 - 50 years; and cancer in the young trend to be more aggressive [4].

According to GLOBOCAN (WHO), for the year 2012, an estimated 70218 women died in India due to breast cancer, more than any other country in the world [5]. According to the world cancer report, breast cancer accounts for 1.7 million cases 11.9% which is the second most common cancer diagnosed in the year 2012 [6].

As a consequence of growing and ageing populations, developing countries are disproportionately affected by the increasing numbers of cancers. More than 60% of the world's total cases occur in Africa, Asia, and Central and South America, and these regions account for about 70% of the world's cancer deaths, a situation that is made worse by the lack of early detection and delay in access to treatment [7].

### **Lack of awareness of breast cancer, lack of screening:**

Breast cancer is a non-existing entity for a majority of population till a near and dear one suffers from it. Healthcare is low on priority and even in major cities, screening is also an 'alien' word for most people. So naturally, this results in most people presenting only when symptomatic, and on an average, most 'symptomatic' cancers are stage 2B and beyond (significant numbers in stages 3 and 4). So the breast cancer patients do not tend to survive for a longer time, as their western counterparts [8].

In Western countries, majority of breast cancers (75%) present in stages 1 and 2, resulting in good survival; and there is an ever increasing numbers of patients presenting with mammography detected cancer, with no symptoms [9]. India needs to reach this achievement, and it is only with aggressive promotion of screening and awareness about breast cancer and proper treatment that India will achieve this; and will take at least a few decades to reproduce similar results. Breast cancer is distinguished from other types of cancer by the fact that it occurs in a visible organ and be detected and treated at an early stage. Breast cancer is the commonest cancer in women in Chennai [10]. Breast cancer accounts for 26.8% of all cancers in women in Chennai [11]. The 5-year survival rate reached to 85% with early detection whereas later detection decreased the survival rate to 56% [12]. The low survival rates in less developed countries can be attributed to the lack of early detection as well as inadequate diagnosis and treatment facilities.

Despite the advent of modern screening methods, more than 90% of cases of cancers of the breast are detected by women themselves, stressing the importance of breast self-examination. There is also evidence that most of the early breast tumours are self-discovered and that the majority of early self-discoveries are by breast self-examination (BSE) performers.

Even though BSE is a simple, quick, and cost-free procedure, the practice of BSE is low and varies in different countries; like in England, a study by Philip *et al.* reported that only 54% of the study population practised BSE. Furthermore, in Nigeria [13], the practice of BSE ranged from 19% to 43.2%, and in India, it varied from 0 to 52%. Several reasons like lack of time, lack of self-confidence in their ability to perform the technique correctly, fear of possible discovery of a lump, and embarrassment associated with manipulation of the breast have been cited as reasons for not practising BSE [14]. With this background, the present study was designed to determine the knowledge, attitude, and practice (KAP) regarding BSE in patients attending a rural health centre in kanchipuram district.

### **Objective of the study**

- To assess the knowledge of breast cancer and breast self-examination among patients attending the rural health centre.
- To determine their attitude towards breast cancer and breast self-examination.
- To determine the percentage of women who perform BSE correctly.

**MATERIALS AND METHODS**

A cross-sectional descriptive study was conducted among patients attending the rural health centre in sripuram, a field coverage area of SreeBalaji medical college, kanchipuram district, India, regarding their knowledge, attitude and practice of BSE.

Sample size was calculated based on previous similar studies conducted in rural areas of Tamilnadu and it was estimated to be 115. Convenient sampling method was used. Participation was on voluntary basis. Ethical clearance was obtained for conducting the study. A total of 117 female patients were included in the studies, who were attending the rural health centre for various health problems between the months of November to December 2014.

Data were collected by a self-administered pretested close-ended questionnaire. Questions were partly drawn using information on breast cancer from the literature. Additional questions were adapted, after modification, from questionnaires used in similar studies conducted earlier in the country. Data were analysed using SPSS software (version 17).

**ANALYSIS**

The data were evaluated by descriptive statistics and chi-square. The differences between the three variables were considered significant if the p-value was less than 0.05.

**Table 1: Demographic profile of respondents**

VARIABLE	FREQUENCY	PERCENTAGE (%)
<b>AGE(in years)</b>		
19 – 29	40	34.7
30 – 49	58	50.4
50 and above	17	14.8
<b>MARITAL STATUS</b>		
Single	33	28.7
Married	82	71.3
<b>EDUCATIONAL QUALIFICATION</b>		
ILLITERATE	6	5.21%
PRIMARY SCHOOL	16	13.91%
HIGHER SECONADRY SCHOOL	24	20.86%
GRADUATE	55	47.82%
POST GRADUATE	14	12.17%
<b>FAMILY HISTORY OF BREAST CANCER</b>		
YES	22	19.1
NO	93	80.8

Table 1: shows the demographic profile of the respondents. Majority of the respondents, 50.4% were from the age group 30-49 while 34.7% of the respondents were between 19-29 years. 71.3% of the respondents were married while 28.7% were single. 47.82% of the respondents were graduates and majority of them were working women, while 5.21% of them were illiterate. 19.1% of them had a family history of breast cancer 80.8% of them did not have history of breast cancer in the family.

**Table 2: Respondent’s knowledge of breast cancer and breast self-examination**

Knowledge of breast cancer	% of correct answers
Have you heard of breast cancer	71%
is it common in India	59%
Can it be detected early	57%
Can early detection improve chance of survival	65.2%
Have you heard of breast self-examination	60%
Who should perform BSE? Male or female individual	21.7%

Female individual only	78.2%
At what age should BSE begin	
< 19 years	39.1%
>19 years	60.8%
How often should BSE be performed?	
-weekly	28.6%
-monthly	39.1%
-yearly	32.1%
When should a women with regular menstrual cycle do BSE	
- Regular day of each month	53.9%
- Within 5 days after menstruation	46%

Table 2 above shows the level of breast cancer and breast self-examination awareness of the respondents. Most of the respondents, 71% had heard of breast cancer and 60% of them have heard of breast self-examination. 59% of the respondents knew it is common in our environment, 57% knew it can be detected early and 65.2 % knew that early detection increases chances of survival. 60% of the respondents heard of breast self-examination at home.

**Table 3: Attitude of respondents to breast self-examination**

S.NO	ATTITUDE OF BREAST SELF EXAMINATION	% OF CORRECT ANSWERS
1.	Do you think that BSE is necessary	62.3%
2.	Have you done BSE before	56.6%
3.	If yes, why?	
4.	1)To examine my breast regularly for abnormality	78.3%
5.	2)I have a family history of breast cancer	7.2%
6.	Others	8.6%
7.	If no, why not?	
	1)I don't know how to do it	32.3%
	2)I don't think it is important	23.6%
	3)I don't think I should touch my body like that	10.2%
	4)I don't believe in the efficacy of the test	6.1%
	5)I don't have any symptom	28.5%
	6)I know I can never have cancer	9.2%
	7)I am scared of being diagnosed to have breast cancer	5.7%

**Table 4: Respondents' practice of breast self-examination**

S.NO	Practice of breast self-examination	% of correct answers
1.	How often do you perform BSE in a year	63.2%
2.	At what age did you start BSE	
	<19 years	34.33%
	>19 years	65.67%
3.	When was the last time you performed BSE	
	< a week ago	15%
	< a month/ 3 weeks ago	45%
	< a year	45%
4.	What time of the day do you perform BSE	
	-MORNING	56.8%
	-AFTERNOON	12.3%
	-EVENING	30.9%
5.	Where do you usually perform BSE	
	1)In front of mirror	39.7%
	2)Lying on bed	25.6%
	3)In the bathroom	34.7%

Majority of the respondents, 56.8% preferred to perform breast self-examination in the morning followed by evening with 30.9%. 39.7% of the respondents also preferred to carry out breast self-examination in front of the mirror, 25.6% preferred lying on the bed while 34.7% preferred performing it in the bathroom

## DISCUSSION

The age of the respondents ranged from 19 years to 56 years and above with the mean age group as 35 years. The study was appropriate in this age group as most of them were young adults who should find out more information on breast cancer and breast self-examination before they reach the age of common occurrence of the disease. Only 21.7 % knew that both male and female are required to perform breast self-examination, with 39.1 % of the respondents having the view that breast self-examination should start at less than 19 years similar to the results obtained in the study[ 13] done by Elamurugan Sujindra which is 47.5%. 60.8% were of the opinion that it should start at over 19 years of age which is very low compared to the results obtained in the study done by Sreedharan J, among nurses in United Arab emirates[14] which is 96.1% .

The findings of this study suggests that only 71% of the respondents surveyed had heard of breast cancer and 56.6% claimed they knew how BSE is done which is similar to the reports from other Indian states done by Shradha Ahuja in a tertiary hospital in Mumbai which claimed to have an awareness about performing BSE of only 52%. The respondents also felt that breast self-examination should be performed weekly (28.6%), some monthly (39.1%) while it is 56.3% knew that BSE has to be done monthly in the study done by Elamurugan Sujindra [13] and some yearly (32.1%). Of those that have never performed breast self-examination, 28.5% did not because they do not have any symptom, 23.6% felt it was not important, 32.3% did not know how to do it, 9.2% felt they can never have cancer, 10.2% of the respondents felt they were violating themselves by touching their breast and 6.1% did not believe in the efficacy of the test and 5.7% of the respondents were scared of being diagnosed with breast cancer.

Table 3 above shows the respondents' attitude to breast self-examination. 62.3% of the respondents thought that breast self-examination was necessary while 56.6% of the respondents have carried out breast self-examination. Similar results were obtained with the study done by Elamurugan Sujindra [13] which showed that 93.3% felt it was necessary to do BSE and 87.5% have done BSE before. Of those that have carried out breast self-examination before, 78.3% did it to examine their breasts regularly while 7.2% did it because they have a family history of breast cancer.

The practice of BSE is satisfactorily good among the respondents which is 63.2% who said they perform breast self-examination regularly which is very low to that results obtained by Sreedharan J [14] in women among UAE which is as high as 84.4%. Since the current study was carried among the general population where illiterate population was 5.1% and hence the difference. 34.33% of the respondents started performing breast self-examination at less than 19 years while 65.67% started performing at over 19 years of age. 15% of the respondents said that the last time they performed breast self-examination was less than a week ago, 45% last carried it out less than three to six months ago while 45% last carried theirs out less than a year ago.

The least reported primary source of information on breast cancer in the study was the home of the respondents (23%). This is one of the gaps existing in family life education as parents and care givers have no time to discuss pertinent health issues with their children. It might also be due to the fact that some of the parents have no information or knowledge on some of these topics and as such have little or nothing to discuss (Pravin N Yerpude)2013 [12].

## CONCLUSION

Only 62.3% of the respondents believed that it is necessary to perform breast self-examination. This showed that the level of concern about screening for breast cancer is low among the respondents. 56.6% of the respondents claimed to have carried out breast self-examination before; this demonstrates that some attention is being given by the young adults in this study to check their breast for early onset of lump and other symptoms of breast cancer, though not regularly as nearly half (45%) of the respondents had not examined their breasts in nearly one year. This may partly be because of the assumption that they are free

from breast pathology. As a result of this ignorance, little emphasis may be placed on regular BSE by such respondents.

### RECOMMENDATION

The mass media should be used to disseminate information on BSE to enhance effectiveness particularly among the study group who has been found to be well educated enough for adequate impact. Health workers should intensify health education on the importance of BSE when they come in contact with women such as Antenatal and Immunization clinic sessions.

There is need for further study to address the knowledge gaps on breast cancer and breast self-examination so that positive attitudes can be developed by the young adults towards breast self-examination, to assist in early breast cancer detection as well as reducing late breast cancer presentation.

### REFERENCES

- [1] WHO, Global Burden of Disease (2000- 2012).
- [2] Elamurugan Sujindra, Thirthar Palanivelu Elamurugan. International Journal Of Educational And Psychological Researches 2015;1:71-74
- [3] Shalini, Divya Varghese, and Malathi Nayak. Indian J Palliative Care 2011;17(2):150–154
- [4] P Christmas, S Nicholas. Health Education J 1982;41: 61 – 68.
- [5] World Health Organisation. 2013. Latest world cancer statistics Global cancer burden rises to 14.1 million new cases in 2012: Marked increase in breast cancers must be addressed; The World Health Report. WHO Geneva.
- [6] DM Parkin, CS Muir, SL Whelan et al. 1992; 120: 13 -16.
- [7] V F Semiglazov and V M Moiseenko. Bull World Health Organisation 1987;65(3): 391–396
- [8] Anderson BO et al. Cancer 2008;113:2221–43.
- [9] DM Parkin. Cancer Surveys 1994;19/20:519 – 555.
- [10] Saurabh Ram Bihari Lal Shrivastava, Prateek Saurabh Shrivastava, Jegadeesh Ramasamy. American Journal of Public Health Research 2013;1.6:135-139
- [11] Anantha Lakshmi Satyavathi Devi Kommula, Surendranath Borra, Vani Madhavi Kommula. 2014;3(1):394
- [12] Pravin N Yerpude, Keerti S Jogdand. National J Comm Med 2013;4(2):329-332.
- [13] S Ahuja, N Chakrabarti. The Internet Journal of Public Health 2009;1(1).
- [14] Sreedharan J, Muttappallymyalil J, Venkatramana M, Thomas M. Asian Pacific Journal 2010;11(3):651-4
- [15] Anyanwu SN. West Afr J Med 2000; 19:120-
- [16] Balogun MO and Owoaje ET. Annals of Ibadan Postgraduate Medicine 2005; 3:52-6.
- [17] David B Thomas, Dao li Gao, Roberta M. Ray. Journal of the national cancer institute 2002;94(19): 1445-1457.
- [18] Sadler GR, Dhanjal SK, Shah RB, Ko C, Anghel M, Harshburger. Public Health Nursing 2001;18:357-363