



## INDO AMERICAN JOURNAL OF PHARMACEUTICAL RESEARCH



### A COMMUNITY BASED SURVEY ON ROLE OF CLINICAL PHARMACIST IN CREATING AWARENESS AMONG WOMEN ABOUT BREAST SELF-EXAMINATION KNOWLEDGE AND PRACTICES IN BANGALORE- INDIA.

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#### ARTICLE INFO

##### Article history

Received 29/07/2020

Available online  
05/09/2020

##### Keywords

Breast Self-Examination (BSE),  
Non-Invasive Technique,  
Knowledge,  
Practice,  
Educational Interventions.

#### ABSTRACT

**Background:** Breast self-examination (BSE) is simple, painless, very important, low-cost and non-invasive technique for early method for detection of Breast cancer in the initial stages. It is ought to be done for all women at all age groups. **Aim and Objectives:** The aim of this study was to assess the awareness, knowledge and practices of Breast Self Examination (BSE) as a method of prevention and early diagnosis of breast cancer among women with involvement of clinical pharmacist and providing proper counselling and educating them regularly about BSE in order to prevent further complications. **Methods:** A cross-sectional study was conducted among 189 women, among few areas in Bangalore for a period of 6 months, using self-administrated questionnaire and women aged >19 years old, who are having minimal knowledge about BSE in 2019. **Results:** Majority of the participants, were between 20 -25 years 86(44.3%) also our study reveals that 13(6.7%) had family history of breast cancer. 120 (61.8%) of the participants had heard BSE and 35(18.5%) had good knowledge about BSE. Mass media and internet were the most common source of information about breast cancer. Few of the participants 60 (30.9%) had performed BSE. Family history of breast cancer, knowledge, and attitude of BSE were found to be extensively associated with BSE practice. **Conclusion:** Health education programs are very much essential to encourage and improve women's knowledge and practice of BSE, provide proper counselling so as to prevent further complications. As the knowledge 65(33.5%) and Practices about Breast Self Examination are very poor 99 (51%) It is very important to expand health educational programs to raise awareness about BSE and breast cancer so as to practice self-breast examination. Educational interventions are compulsorily required to encourage young women to perform BSE regularly at home, so that breast abnormalities can be detected early on and mortalities can be minimized.

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Please cite this article in press as **Dr. Sushma Muchukota et al.** A Community Based Survey on Role of Clinical Pharmacist in Creating Awareness Among Women About Breast Self-Examination Knowledge and Practices in Bangalore- India. *Indo American Journal of Pharmaceutical Research*.2020;10(08).

## INTRODUCTION

Breast cancer is a public health problem and is the most common leading cause of death in women throughout the world and second among cancer diseases and fifth in terms of mortality.<sup>[1]</sup> Progression of breast cancer is more vigorous in younger women and especially of child-bearing age. More than 90% of BC can be cured if detected early.<sup>[2]</sup> There is evidence that women who are correctly practice BSE monthly are mostly expected to detect a lump in the early stage of its development, early diagnosis has been reported to influence early treatment and to yield a better survival rate.<sup>[3,4]</sup> This increase in mortality is mainly due to late diagnosis of the disease, which is a consequence of lack of knowledge and awareness regarding breast cancer, primarily in the women of developing countries. Early detection of breast cancer increases the effectiveness of the treatment, which results in a better prognosis, reducing the morbidity and mortality rates.<sup>[5]</sup> Many methods for detecting breast cancer early-on in its course are now available, of which the most convenient is breast self-examination (BSE). Several studies showed that breast self-examination (BSE) is a very simple, inexpensive, feasible way for breast cancer and does not require any specialized equipment or regular visits to the hospital, thus proving its usefulness in underdeveloped countries too, which lack resources. A number of reasons like lack of time, 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 considered as reasons for not practising BSE.<sup>[6,7]</sup> It is a kind of examination made by each woman and it is cost effective, painless, easy to apply, safe, and non invasive procedures without special material or tool requirements. It is an important noticing way of breast cancer which takes five minutes to apply. Breast cancer awareness improves the outcome of breast cancer treatment. Mammography stay as the most sensitive procedure available for early detection of breast cancer, both clinical breast examination (CBE) and breast self-examination (BSE) have the potential to advance the diagnosis of breast cancer without the expense of a mammography facility. Although BSE is a valuable and relatively simple measure, studies conducted in different countries show that the BSE was not a prevalent practice. Therefore, the World Health Organization proposes BSE as a method of enormous value for decreasing the mortality rate by early detection of breast cancer, especially in regions where mammography and regular clinical examinations are not feasible. However, despite its numerous advantages, BSE is still practiced on a very low scale, the frequency of which differs among different countries. The main intention un doing is most of the women will come to now complications at the end stage of cancers so Breast self-exam, can be an important way to find a breast cancer early, when it's more likely to be treated successfully as it is one of the top reason among women killed with cancers.

### Aim:

The aim of this study was to assess the awareness, knowledge and practices of Breast Self Examination (BSE) as a method of prevention and early diagnosis of breast cancer among women with involvement of clinical pharmacist.

### Objectives:

1. To assess knowledge status in women regarding Breast self examination to prevent the complications in future.
2. To identify the areas of gap in knowledge and practices of BSE among women who are not aware to perform BSE through proper counselling methods involved.

## MATERIAL AND METHODS

In this study only female were involve, Data collection was conducted using self administered questionnaires. The questionnaire consists of three parts, demographic data, knowledge about BSE and practice of Breast-self-examination.

### Study sample:

194 women with age group of > 19 years to 50 years were considered into the study to know their knowledge about BSE. [N=194 Patients.]

### Study Design:

It is A Community-based, Prospective, cross-sectional and observational study

### Study Period:

The present study was conducted for a period of 8 months from July 2019 to February 2020.

### Study site:

The present study was community based study so conducted in some random areas of Bangalore, Karnataka, India.

### Study Criteria:

#### Inclusion criteria:

All women who are willing to participate in the study and who are aware about BSE  
Age group >19 years were included in the study.

#### Exclusion criteria:

The patients who are not willing to participate and who are not aware of BSE were excluded.  
Women > 50 years were excluded from the study.

**Source of Data:****Method of collection of data:**

All the patients satisfying the inclusion criteria were selected after explaining the study to the subjects then included in the study. Informed Consent was taken from each and every women. Tool of data collection Structured interviewing questionnaire was designed to collect data. A self-administered questionnaire was developed by the authors based on an extensive review of the literature.

**Statistical tools:**

The obtained data tabulated and analysed in terms of objectives of the study, by using inferential and descriptive statistics. Sample size is calculated and The surveyed questionnaires were collected and coded in a MS Excel database and analyzed by using the SPSS statistical package, version 17.0.

**Questionnaire to identify awareness of Breast Self-Examination (BSE):**

S.No	Questionnaire regarding Breast Self-Examination (BSE)
1.	Do you know performing Breast Self-Examination can help in early detection of any abnormal changes in your breast?
2.	At what age do you think should Breast Self Examination started?
3.	How often one should perform Breast Self-Examination?
4.	How a Breast Self-Examination is done?
5.	Where do you usually perform Breast Self Examination?

**RESULTS:****Table :1 Basic demographic details of the patient.**

S.No	Demographic details	Number	Percentage (%)
1.	<b>Age</b>		
	<19	41	(21%)
	20-25	86	(44.3%)
	25-30	38	(19.5%)
	30-35	14	(7.2%)
	35-40	10	(5.1%)
	40-50	5	(2.5%)
2.	<b>Education status</b>		
	Educated	76	(60.8%)
	Uneducated	118	(39.1%)
3.	<b>Marital status</b>		
	Married	101	(52%)
	Unmarried	93	(47.9%)
4.	<b>Residence</b>		
	Rural	82	(42.2%)
	Urban	63	(32.4%)
	Slum	49	(25.2%)
5.	<b>Occupation</b>		
	Employee	80	(41.2%)
	Unemployee	114	(58.7%)
6.	<b>How old were you when you started your period</b>		
	<15 Years	159	(81.9%)
	>15 years	35	(18%)
7.	<b>Do your family have history of breast cancer?</b>		
	Yes	13	(6.7%)
	No	181	(93.2%)
8.	<b>Number of Pregnancy</b>		
	0	29	(15.3%)
	1	57	(30.1%)
	2	62	(32.8%)
	>2	41	(21.6%)
9.	<b>Is Your Menstrual Cycle Regular</b>		
	Yes	121	(64%)
	No	68	(35.9%)
10.	<b>Do you exercise?</b>		
	Regularly	30	(15.4%)
	Not regularly	68	(35%)

11.	Not at all	96	(49.4%)
	<b>Family Annual Income</b>		
	< 3 lakhs	60	(30.9%)
	3-5 lakhs	109	(56.1%)
	>5 lakhs	25	(12.8%)

Table:2- Knowledge about breast self-examination.

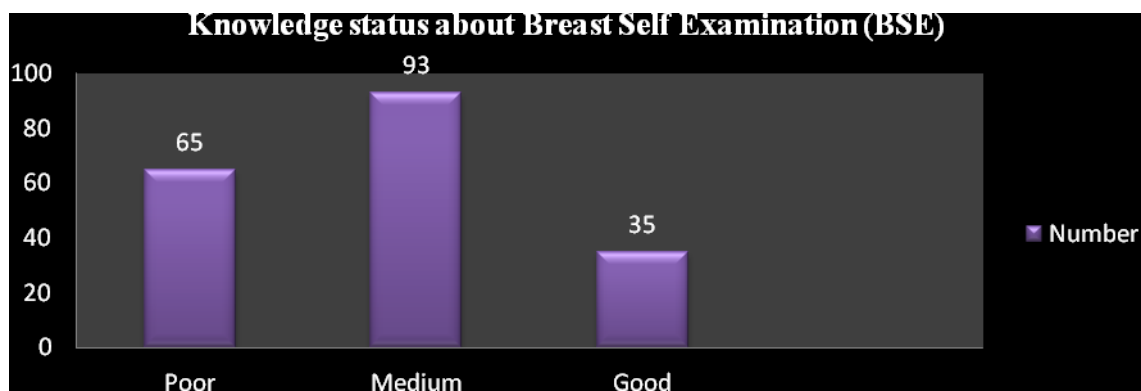
S.No	Knowledge Criteria about BSE	Number	Percentage (%)
1.	Do you know breast cancer is one of the commonest cancer afflict women from age 19 yrs		
	Yes	96	(49.4%)
	No	40	(20.6%)
	I Dont Know	58	(29.8%)
2.	Have you ever heard of Breast Self Examination before ?		
	Yes	120	(61.8%)
	No	74	(38.1%)
3.	Who should perform BSE		
	Males	5	(2.5%)
	Females	152	(78.3%)
	Both	21	(10.8%)
	Don't know	16	(8.2%)
4.	How do you hear about it?		
	(a) Friends or family members	Yes – 40	(20.6%)
	(b) Mass media	Yes - 53	(27.3%)
	(c) Newspaper	Yes - 10	(5.1 %)
	(d) Books	Yes - 8	(4.1%)
	(e) Internet	Yes - 62	(31.9%)
	(f) Health care professionals	Yes - 21	(10.8%)
5.	Do you know Breast Self-Examination can be the early detection of any abnormal changes in your breast or breast cancer?		
	Important - 112		(57.7%)
	Unimportant - 82		(42.2%)
6.	At what age do you think should Breast Self-examination started?		
	< 19 years old	86	(44.3%)
	>19 years old	108	(55.6%)
7.	How often a person should perform Breast Self-Examination?		
	Daily	19	(9.7%)
	Weekly	36	(18.5%)
	Monthly	48	(24.7%)
	Yearly	91	(46.9%)
8.	How a Breast Self-Examination is done?		
	Palpate with one finger	10	
	Palpate with palm and minimum 3finger	45	
	I don't know	139	
9.	Appropriate time to perform Breast Self Examination?		
	A week before menstruation	19	(9.7%)
	A week after menstruation	43	(22.1%)
	During menstruation	12	(6.1%)
	Don't know	120	(61.8%)
10.	Overall Knowledge of BSE		
	Good	35	(18.5%)
	Medium	93	(47.9%)
	Poor	65	(33.5%)

**Table:3- Practices about Breast self-examination.**

S.No	Self care Practice	Number	Percentage(%)
1.	Have you performed BSE before		
	Yes	60	(30.9%)
	No	134	(69%)
2.	If yes, what is the purpose to perform it		
	Advice from any of ur family members	56	(28.8%)
	Medical reason	62	(31.9%)
	Family history	36	(18.5%)
	Routine checkup	17	(8.7%)
	Others	23	(11.8%)
3.	Reasons of not performing BSE		
	Fear of detecting	23	(11.8%)
	Too expensive	19	(19 %)
	Not necessary	55	(28.3%)
	Busy	36	(18.5%)
	Don't know the how to examine	61	(31.4%)
4.	How do you prefer your BSE to be done		
	Nurses/doctor	60	(30.9%)
	By yourself	134	(69 %)
5.	I usually do armpit examination as well to check any lumps in the Breast	69	(35.5%)
6.	I press on nipple also to examine any unusual discharge is seen.	76	(39.1%)
7.	Sometimes I detect any unusual change in shape and size of the breast.	54	(27.8%)
8.	Have you ever done with mammography		
	Yes	50	(25.7%)
	No	144	(74.2%)

**Table: 4- Knowledge Status of Breast Self examination.**

S.No	Criteria( Knowledge)	Number	Percentage
1.	Poor	65	(33.5%)
2.	Medium	93	(47.9%)
3.	Good	35	(18.5%)

**Figure: 1- Knowledge Status of Breast Self examination.****Table: 5- Practice Status of Breast Self examination.**

S.No	Criteria (Practice)	Number	Percentage
1.	Poor	99	(51%)
2.	Average	56	(28.8%)
3.	Good	39	(20.1%)

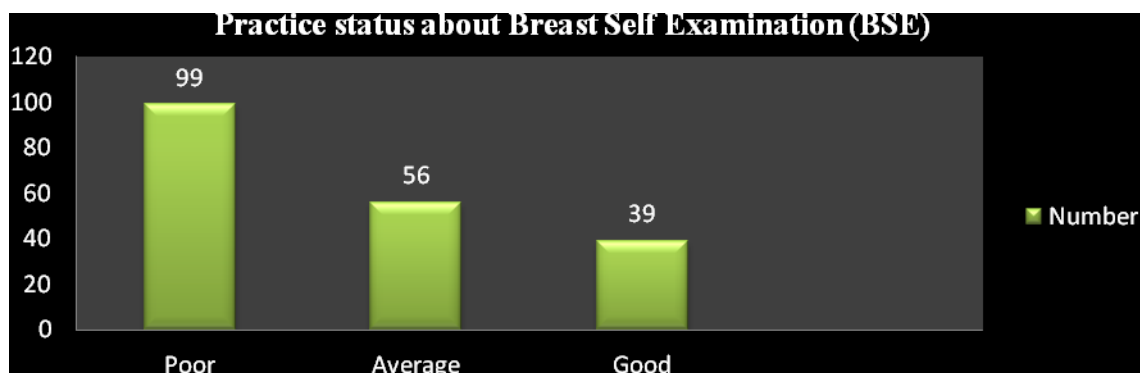


Figure : 2 - Practice Status of Breast Self examination.

## DISCUSSION

Most of the studies have found that breast cancer detected by BSE are lesser than those identified without screening and are more likely to be confined to the breast. Since breast cancer is difficult to prevent, it becomes increasingly important to find ways to detect it at an early stage, as that has been shown to progress patient mortality.<sup>[8]</sup> The medium knowledge and poor practice 99 (51%) of almost half of the participants in our study 65 (33.5%) regarding BSE was comparable with the results of a study done in Turkey, where it was seen that only 34.6% of the population was well attentive of the procedure of BSE and correlates with our study.<sup>[9]</sup> A Furthermore, Lack of knowledge on BSE was cited as the main reason for not performing BSE with is similar to a study performed in Iraq.<sup>[10]</sup> On adding, two-thirds of the population were on outlook that the ideal time to perform BSE was after their monthly cycle<sup>[11]</sup> and before menopause<sup>[12]</sup> which correlates with our study respectively. Limited knowledge regarding reality of breast cancer and lack of knowledge about the importance of self-examination and how it is performed are the main barrier of not practicing BSE.

## CONCLUSION

The present study results confirm that knowledge and practices are poor among women participated in BSE. Awareness on how, when to perform BSE are important and useful to detect breast cancer were the predictor factors of practice of BSE. There was a low prevalence of sufficient BSE knowledge 35 (18.5%) and practice 39(20.1%) among women in Bangalore. Effective health education campaigns should be prepared to elucidate awareness and practice of BSE. The implication for public health practice is desirable to build up and adopt appropriate proven educational and skills building interventions to inform and educate rural women on BSE targeting all women. Health education programs are essential to encourage and improve women's knowledge and practice of BSE. There is need to improve knowledge of breast cancer and BSE so as regular self examination may prevent the further complications like breast cancer and prior education is mandatory ,target all age groups in Future Researches and breast cancer awareness programmes to be done about Breast Self Examination as it is important and Recommended.

## Recommendations:

1. Breast self-examination should be recurrently taught to women.
2. A full discussion of breast self-examination, including risks, should be provided for the woman who requests it.

## Limitations of the study

There were some problems faced while collecting the data as the following: Some women felt embarrassed to discuss about the topic, some are not cooperative, and few are busy and had no time to fill in the sheet, no suitable place was there to interact with women and to collect the data. Though it has limitations such as small number of women involved incomplete questionnaire; however this study revealed an imbalance between the knowledge and practice of BSE among women. Hence, repetitive community-based awareness programs are needed so that all women can know and practice BSE, which in turn helps to alert to any abnormal changes in the breasts and provoke to seek medical advice immediately. It is just observational study but no interventions are performed since women are lagging with KAP of Breast Self Examination.

## ACKNOWLEDGMENTS

We all are grateful would like to express deepest gratitude to the participants involvement in the study and my beloved friends for constant support in doing this research article.

## ABBREVIATIONS

- BSE - Breast Self Examination  
 KAP - Knowledge, Attitude and Practice  
 CBE - Clinical Breast Examination

**Funding: No funding source**

**Conflict of interest: None declared**

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