



## BREAST CANCER: REASONS FOR NOT PRACTICING BREAST SELF EXAMINATION AMONG WOMEN IN LUCKNOW, NORTH INDIA

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### ABSTRACT

Breast cancer is a major global health issue and was the most important reason behind morbidity and mortality among women. It remains a significant public health concern in both developed and developing countries. Works of literature have shown that in most of the developing countries breast cancer is detected in advanced stages when put up next with developed countries and thus has a poor outcome and high mortality rate. Less than one-fourth (22%) of women in Lucknow had heard about breast self-examination. Few women (19%) were practicing Breast self-examination (BSE) once in a while and therefore the common reason for not practicing Breast self-examination was unaware of the requirement and as they don't have any breast-related problems. Awareness of breast self-examination was poor collectively in rural and urban areas of Lucknow. Breast self-examination is had not been appropriately practiced but the curiosity to learn BSE is high.

**KEYWORDS:** Awareness, Breast Cancer, Knowledge, Screening, Breast Self-examination, Practices

According to World Health Organization (WHO), Breast cancer is the most commonly found cancer in women, and countless women are affected all over the world. Cancer is a predominant explanation for death everywhere in the world accounting for 10 million deaths in 2020. The most common in 2020 (in terms of new cases of cancer) were breast (2.26 million cases), lung (2.21 million cases), colon and rectum (1.93 million cases), prostate (1.41 million cases), skin (non-melanoma) (1.20 million cases), and stomach (1.09 million cases). (WHO, 2020)

According to Globocan, Breast carcinoma is one-fourth (25%) of all cancer and (15%) of all cancer-related deaths among women. Aging populations globally and risk factors remain among the most common factors leading to this increase in cases (Globocan 2020 statistics)

Now for the first time, female breast carcinoma has now ahead of lung cancer due to high prevalence in low- and middle-income countries (LMICs). The most common age group of Breast cancer in developed countries is above the age of 50 years, as compared to India, where it occurs in a younger age group. Cancers within the young (15–34 years) tend to be more aggressive which may be a reason behind concern as this denotes the requirement for awareness programs of younger women's early as 18 years, to implement early practices of breast self-examination (BSE) into their lifestyle. Breast cancer in developing countries is half of

total breast cancer cases in the world and around (60%) of breast cancer death occurs in developing countries. The incidence in developing countries is low but mortality is high due to late presentation, due to lack of awareness of screening methods and practices related to it. (WHO)

Detection of Breast cancer in the early stage plays a very important role in the prevention of breast cancer. The 5 year survival rate has reached approximately (85%) with early detection, whereas later detection has decreased the survival rate to (56%). (ICMR)

For early detection, there are screening methods like BSE, Clinical breast examination (CBE), and Mammography but the use of these methods is limited due to lack of infrastructure, trained manpower, and limited knowledge. So, BSE is preferred in low-income countries as it is simple, easy, and cost-effective for early detection of the lump (Malvia *et al.*, 2017)

American cancer society (ACS) recommends BSE practice and education for women ( $\geq 20$  years) but it does not mention BSE as a tool to increase survival of breast cancer. (ACS Guidelines)

In the study, Gangane *et al.*, (2015) stated that Breast self-examination is hardly practiced in developing countries like India, though the curiosity to learn is high.

According to Breast Health Global Initiative guidelines for low and middle-income countries, BSE

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remains the tool for decreasing mortality with Breast cancer in low and middle-income countries, in actual practice its application is low.

Although breast cancer is the most prevalent cancer in India, there is no organized national breast cancer screening program. Local studies on the burden of breast cancer are essential to developing effective context-specific strategies for an early detection breast cancer program. This study assessed practices related to self-breast examination and reasons for not practicing Breast-self-examination among women in Lucknow, North India.

## MATERIALS AND METHODS

In the present study reasons for not practicing BSE among women in Lucknow, North India was assessed. The study is also geared towards suggesting measures for improving the knowledge and practices associated with Breast carcinoma among women in Lucknow if required.

An extensive search of literature published was conducted in the electronic databases of PubMed and Google Scholar. All English language studies including information on knowledge, awareness and practice of breast carcinoma and its screening were reviewed.

The present study was conducted on 400 women, aged  $\geq 20$  years, selected randomly from Lucknow District (U.P) from 2 rural and 2 urban areas of Lucknow. A pre-tested structured questionnaire was accustomed to collect the knowledge from the respondents with an aim to satisfy the objectives of the proposed study. In-depth interviews were conducted with participants to extract their knowledge and beliefs of early detection methods and screening practices of breast self-examination. The age group, marital status, education level, occupation, and socioeconomic status of all the respondents were noted and their beliefs of screening practices including BSE were studied and reasons for not practicing BSE. For calculating socioeconomic status, modified Prasad scale was used. Responses to

numerous queries were encoded in numbers and their statistical distribution was calculated using SPSS software. Chi-square was applied to check the importance level of differences between responses of various socio demographic classes of respondent

## RESULTS

The present study was done to assess the reasons for not practicing self-breast examination among women in Lucknow, North India. The study also aims to suggest measures for improving the practices related to self-breast examination. Present study results can be classified into the following sub-groups: Socio-demographic characteristics of the respondents, practices of BSE, reasons for not practicing BSE and association of BSE with socio-demographic characteristics.

The majority of the respondents belong to the age range 20-30 years (73.8%) followed by the age group 31-40 yr (20.3%). The majority of women (91.3%) were married and were Hindu (77.1%). Only (33.8%) belong to the general category, most of the participants were from OBC category while most of the subjects were housewife/unemployed category (84.8%). There were more respondents from class IV and class V SES (30.8% and 31.5) (Table 1).

For those who know about the screening methods to detect early Breast cancer, only (19%) were practicing it but the majority of the (81%) women were not practicing. Almost half of the women (51.2%) were practicing it occasionally and (7.3%) did it rarely. 20-30 yr was the major age at which respondent started doing a Breast self-examination (51.2%) while major examination technique applied during BSE by the respondent was inspection and palpation of the breast (36.6%). (Table 2)

The majority of women who had knowledge but were not practicing BSE were (81%) and the most common reason cited by them was unaware of need which was 55.5% followed by an absence of Breast related symptoms (12.3%). (Table 3)

**Table 1: Distribution of participants according to Socio-demographic characteristics (n=400)**

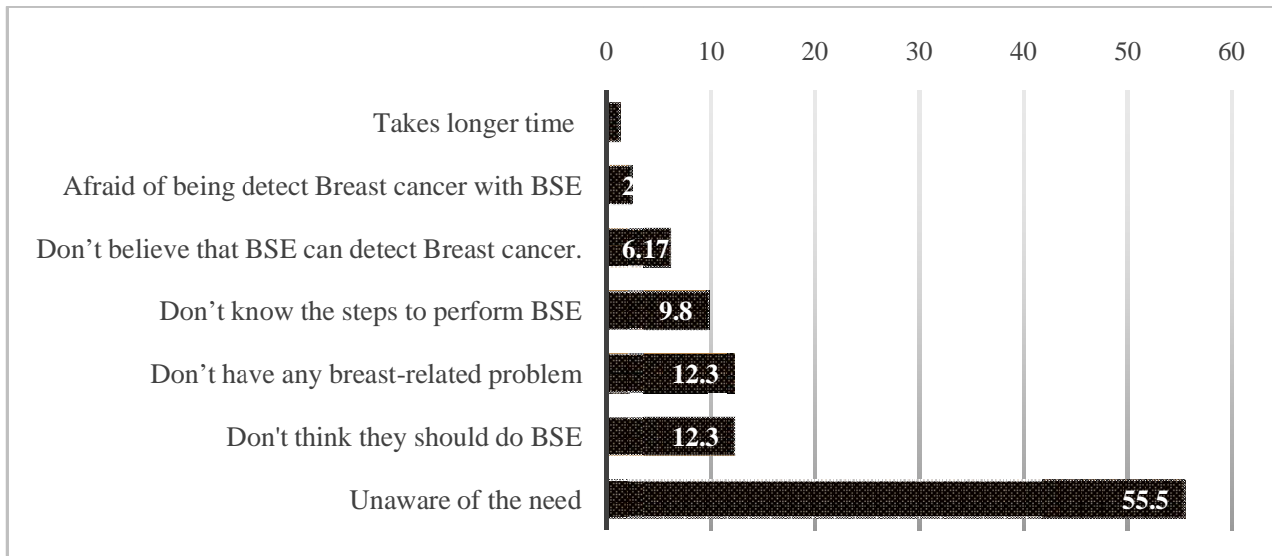
Socio demographic characteristics	Frequency	Percentage
	(n)	(%)
<b>Age( in completed years)</b>		
20-30	295	73.8
31-40	81	20.3
41-50	20	5.0
50-60	4	1.0
Mean age $\pm$ SD	28.32 $\pm$ 6.72 yr	
<b>Marital status</b>		
Single/Never married	31	7.8
Married	365	91.3
Widowed	4	1.0
<b>Religion</b>		
Hindu	310	77.5
Muslim	88	22.0
Sikh	1	.3
Christian	1	.3
<b>Category</b>		
General	135	33.8
OBC	152	38.0
SC/ST	113	28.3
<b>Educational qualification</b>		
Illiterate	78	19.5
Up to Primary school	47	11.8
Middle school	78	19.5
High-School	74	18.5
Senior secondary school	42	10.5
Graduate and above	81	20.3
<b>Occupation</b>		
Professional/technical/administrative/managerial, clerical, sales and services	10	2.5
Skilled manual, semi-skilled, unskilled manual	39	9.5
Agriculture	2	.5
Unemployed/Housewife	339	84.8
<b>Residence</b>		
Rural	200	50.0
Urban	200	50.0
<b>Socioeconomic status (modified B.G Prasad's classification)</b>		
Class I	15	3.8
Class II	67	16.8
Class III	69	17.3
Class IV	123	30.8
Class V	126	31.5

**Table 2: Distribution of the participants based on practices of breast self-examination (BSE)**

Variable	Frequency(n)	Percentage (%)
<b>Women's practicing Breast self-examination (N=50)</b>		
yes	9	19
no	41	81
<b>Frequency of practicing Breast self-examination (N=41)</b>		
rarely	3	7.3
monthly	13	31.7
yearly	4	9.8
occasionally	21	51.2
<b>Age at which respondent started doing breast self-examination (N=41)</b>		
From puberty	6	14.6
from 20 years	6	14.6
20-30yrs	21	51.2
more than 35 yrs	6	14.6
Never done	2	4.9
<b>Which examination technique applied during BSE by the respondent (N=41)</b>		
Inspection of breast	4	9.75
palpation of breast	17	41.4
inspection and palpation of breast	20	48.78
<b>How the palpation of lump should be done during breast self-examination</b>		
Palpate with one finger	2	4.9
palpate with palm	9	22.0
Palpate with minimum of three fingers	19	46.3
Hold breast in between fingers	3	7.3
Don't know	8	19.5

**Table 3: Distribution of the participants based on reasons for not breast self-examination (BSE)**

Variable	Frequency(n)	Percentage (%)
<b>Women's practicing Breast self-examination (N=50)</b>		
yes	9	19
no	41	81
<b>Reason for not practicing BSE</b>		
Unaware of the need	45	55.5
Don't have any breast-related problem	10	12.3
Don't know the steps to perform BSE	8	9.8
Don't think they should do	10	12.3
Afraid of being detect Breast cancer with BSE	2	2.4
Takes longer time	1	1.23
Don't believe that BSE can detect Breast cancer.	5	6.17



**Figure 1: Graph showing reasons for not practicing breast self-examination (BSE)**

## DISCUSSION

The present study was thus conducted on women of Lucknow to assess reasons for not practicing Breast self Examination (BSE) among women in Lucknow district.

The majority (73.8%) of the women were from age group 20-30yr of age which was similar to the study by (Paul *et al.*, 2015) where women from 18-30yrs were (66%). Overall mean age was  $28.32 \pm 6.72$  yr. which was found in agreement with the study by (Dahiya *et al.*, 2018) where the mean age was  $30.1 \pm 23.9$  yr it shows that both the study focused their study observations on women around 25 yrs (reproductive age). More women were Hindu (77.5%) which was similar with the study by (Paul *et al.*, 2015) where Hindu women were (92.6%). The majority of the women in the present study were housewives (85%) in contrast with the study conducted by (Dey *et al.*, 2015) where the majority of women (52%) were employed.

In the present study, less than one-fourth of women (22.2%) had heard of BSE which was found in agreement with the study by (Somdatta and Baridalayne, 2013). The Knowledge and performance of BSE in the present study is (22.2 % and 18 %) which was similar to the study in Varanasi by (Paul *et al.*, 2015) where it was (16% and 15.6%) respectively. These findings were in contrast with the study done (Fotedar *et al.*, 2013) done on nursing students which were (97% and 54%).

For those who had knowledge about the Breast self Examination (BSE) to detect early Breast cancer, only (19%) were practicing it but the majority of the (81%) women were not practicing. Almost half of the

women (51.2%) were practicing it occasionally and (7.3%) did it rarely on the contrary in one of the studies by (Dahiya *et al.*, 2018) where Breast self-examination (BSE) was regularly practiced at least once a month by (41.4%) of the participants.

In the present study, less than one-fourth of women (18%) perform BSE while (81%) were not performing BSE as the reason given by them were they feel it is unaware of the need ( 55.5%) which was similar to the study by (Zavare, 2015) where (57.3%) believe that they feel it unnecessary which was in contrast with the study by (Dahiya *et al.*, 2018). where almost one-fourth of women (20.7%) believe not to be needed. Nearly (12.3%) half of the quarter women feel they don't have any Breast related problem which was in contrast with the study (Zavare, 2015) where (64.7%) believe that they don't have any symptoms so they don't think they should perform (12.3%) which was a slightly higher side than in the study by (Dahiya *et al.*, 2018). which was (5%). Another reason cited by them as they don't know how to do BSE (9.8%) which was in contrast with the study (Dahiya *et al.*, 2018) where a quarter of women (24.8%) believe that they don't know how to perform BSE. In the present study, some women (6.17%) don't believe that BSE can detect Breast cancer and few (2.4 %) women were afraid of being detected of Breast cancer by BSE. Only (1.23%) some women believe BSE steps take a longer time.

## CONCLUSION AND RECOMMENDATIONS

The major reason for not practicing BSE was unaware of the necessity and they don't have Breast-related problems as they responded. There wasn't much

of the difference in BSE practices among rural and urban women of Lucknow. Breast self-examination is hardly practiced, though the willingness to learn is there. Health education in young women should be done more aggressively regarding various aspects starting from risk factors too numerous methods of screening, as younger age is more at risk to developing breast carcinoma in developing countries like India. BSE needs to get promoted mainly in the female having a family history of Breast cancer. We should always have major policy changes to increase future screening programs and health education schemes, which might have an overall positive impact on reducing the disease burden.

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