Original Article

# Breast Cancer Awareness: Perceived Barriers Andscope of Peer Advisor to its Early Detection among Women, In an Urban Slum of Kolkata

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## Abstract

**Background:** Breast cancer is the second-leading cause of death worldwide, reportedly responsible for 9.6 million deaths in 2018[1]. Delay in approaching health care causes late treatment while screening promotes early treatment. An assessment of the feasibility of the role of peer advisor, a member of the community to navigate breast related awareness among women at risk for breast related disease was done.

**Method:** Cross-sectional study of sample size of 100 in selected borough under Kolkata municipal ward. Pretested structured questionnaire was used on consenting eligible women in enlisted household. Data was entered and analysed in microsoft excel.

**Result:** Of the total study population 50% had heard about breast cancer, 24% had heard about breast related disease from friend and family Four percent had heard about SBE, while 10% knew about mammography. Fifty seven percent felt shy to touch breast, 36% were embarrassed to speak a doctor and 19% were shy to speak to a family member. Considering all the information willing and capable women attending health care sector from a community may be taken up for a one to one training to disseminate information to the peer women in the community.

**Conclusion:** Women are more open to discuss breast related problem / examination from similar aged peer within the comfort of their own homes. Thus, the concept of peer advisor may be explored in the next step of research to find out its feasibility and acceptability along with efficacy.

**Keywords:** Self-breast examination SBE, breast cancer awareness, community participation.

## Introduction

Breast cancer is the second-leading cause of death worldwide, reportedly responsible for 9.6 million deaths in 2018[1]. It is the most common form of cancer among women[2] World Health Organization established the Global Breast Cancer Initiative (GBCI) in 2021 which aims to reduce the global breast

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cancer mortality by: early detection; timely diagnosis and comprehensive breast cancer management. Epidemiological profile of breast cancer in India shows disease is more commonly affecting younger women in the age group of 25-50.[2].

Cancer survival becomes more difficult in higher stages and more than 50% of Indian women present with stage III or IV of this cancer. This causes significantly lower five-year survival rate of breast cancer patients in India (66%) as compared to the United States of America (90%)[3]. Awareness about symptoms and screening like BSE, mammography is important for early detection.[4]. Teaching BSE helps in creating awareness as well as early diagnosis leading to better survival rates. India being a resource poor country any process which is affordable acceptable with community participation, principles which form the pillars of primary health care can be explored towards early detection of breast cancer. The role of frontline health worker has been seen in studies by Khapre[5] where training ASHA as the person to to advise on breast related disease to women in the village was hugely successful. With the large number of responsibilities already on the ASHA the study was done to scope the suitability of recruitment of any member of community based on age availability and receptivity. Such a selected and trained member of community shallfor navigate breast related awareness among women vulnerable to breast cancer.

## Materials and Methods

A cross-sectional observational study conducted in the urban field practice area of tertiary level medical college , between August 2023 and December 2023. The study area is located in a borough under Kolkata Municipality ward area. A qualitative interview method was used. At a prevalence of 48.8%[6] at 95% CI and power 80%, with error 20%, sample size was calculated to be 100.

A pre-designed, structured interview schedule was used for data collection. From the enlisted households of the field practice area, every household was visited and if present, eligible candidate was recruited for the study. Consenting women above the age of 18 years residing study area were included. Severely ill/moribund women and women who had already been diagnosed with breast cancer were excluded from the study.

## Results

Half of the subjects had heard of breast cancer. Adequate percentage of women do attend the primary health care centre for maternal and child health related causes and other ailments. This affords scope to identify and recruit women among health centre frequenters to be trained as peer advisor. Fig 1 A shows the median age women who did have a mammography were at a higher than those who did not. Awareness of BSE as a method of screening was low being 4% only. The necessity for behavioural change communication at this level is definitely required. Fig 1B and shows the difference in median age of women who practised BSE from those who do not do so is not significantly different. Suitable trained woman can approach all age brackets for dissemination of information on breast related morbidities. The sources of breast cancer information included a highest of 24% from friend and relatives of near age.

Table 2 shows that there was significant association between source of information about breast cancer and age($p=0.002$) , the highest being information from friend/ family. Significant association was also observed with respect to median age and embarrassment felt in discussing about breast related problems with a doctor, with older age bracket feeling more embarrassment. No significant association was seen with age of those having or not having knowledge about breast cancer, mammography or feeling any embarrassment discussing breast related issue with family members.

**Table 1: Showing distribution of variables pertinent to knowledge and practise about breast cancer awareness among study population**

| N=100 | | Percent | Inference |
|---|---|---|---|
| Ever heard of breast Cancer50 | | | |
| Women accessing health care facility | Visited health care facility for MCH in last 2 years | 73 | Despite women visiting health care facilities information regarding breast screening is not shared<br>Scope of identifying PEER advisor for training |
| | Visited health care facility otherwise | 48 | |
| | Advised on breast Ca | 2 | |
| Aware of any screening method | | 12 | |
| Self-breast examination | Aware and considers useful | 4 | Awareness about simple and effective method of screening not adequate |
| | Practices | 1 | |
| | Aware but does not practise | 3 | |
| | Feels shy to touch breast | 57 | |
| | Lack of privacy at home | 1 | |
| | Ever had breast examination clinically | 6 | |
| Information on mammography | Knows about it | 10 | BCC required<br>Scope of Peer advisor available |
| | Ever had one | 3 | |
| | Considers expensive | 66 | |
| | Afraid to have one | 4 | |
| Source information of breast cancer | Doctor / health care worker | 5 | Health education strategies may involve peer representatives to address stigma fear and develop awareness as population is more comfortable with peer members |
| | Friends' relatives | 24 | |
| | Television, internet | 16 | |
| | Others | 5 | |
| | Embarrassed to speak to a doctor | 36 | |
| | Embarrassed to speak to a family member | 19 | |
| | Worried about people's opinion in case of diagnosis with breast Ca | 49 | |
| Information | | | |
| Common cause for Breast Ca as stated | • Genetic<br>• Advanced age<br>• Obesity<br>• Alcohol consumption<br>• Having no children | 10<br>11<br>4<br>3<br>3 | Acceptable trained Peer Advisor from community providing IEC |
| Common symptoms as stated | • Lump<br>• Pain<br>• Redness<br>• Thickening of skin<br>• Discharge or bleeding from nipple | 25<br>17<br>6<br>6<br>4 | |

**Table 2 showing relation of variables with respect to age knowledge and practise pattern among study population**

| **Heard about Breast Cancer** Mean age ± SD (years) | **No (n=50)** | **Yes (n=50)** | | | | **p-value** |
|---|---|---|---|---|---|---|
| | 39.86± 13.09 | 35.54± 12.62 | | | | 0.096 |
| Source of information Mean age ± SD (years) | NA (n=50) | Friends (n=24) | TV/media (n=16) | Doctor (n=5) | Others (n=5) | |
| | 39.86± 13.09 | 37.96+10.59 | 26.44 ± 7.29 | 45.6± 11.5 | 43± 20.26 | 0.002* |
| Knows about mammography Mean age ± SD (years) | N (n=90) | Y(n=10) | | | | |
| | 38.39± 13.16 | 31.5± 9.55 | | | | 0.112 |
| Embarrassment felt with family members Mean age ± SD (years) | No (n=72) | Yes (n=19) | DK (n=9) | | | |
| | 36.06± 11.57 | 43.63± 13.88 | 38.33± 18.76 | | | 0.075 |
| Embarrassment felt in speaking with doctor Mean age ± SD (years) | No(n=58) | Yes(n=36) | DK(n=6) | | | |
| | 34.67± 11.88 | 42.47± 14.12 | 38.33± 7.5 | | | 0.016* |

Significant association ($p<0.05$)* between source of information about breast cancer and age($p=0.002$). Significant association was also observed with respect to age and embarrassment felt in discussing about breast related problems with a doctor.

Fig 1A and 1B showing age wise knowledge and practise patterns regarding modes of cancer screening among study population

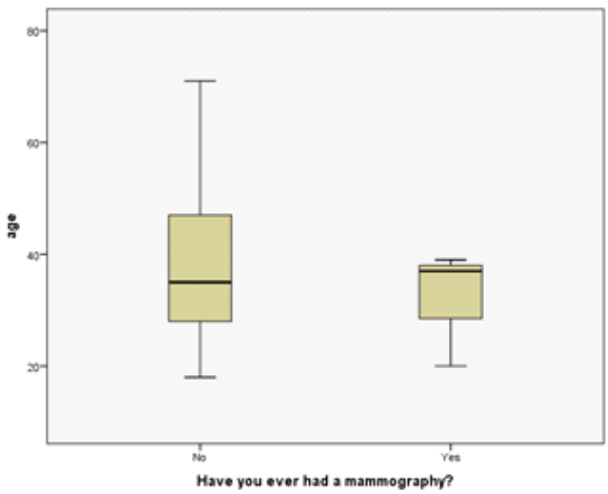


**Fig 1 AInference: The median age of having a mammography is higher than those not have had one**

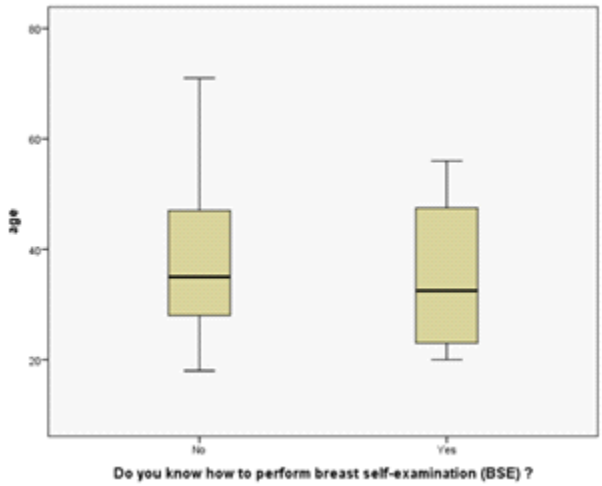


**Fig 1B Inference: The median age of knowledge of SBE do not vary greatly among those practising and those not.**

## Discussion

Awareness about breast cancer and about its screening methods were low with 50% of the women participating in the study had heard of breast cancer while only 12% of them were aware of any screening methods. Somdatta et al.,[7], in a study Delhi urban colony found 56% women were aware of breast cancer while only 11% knew about breast self-examination,

Sideeq et al.,[8] in Kashmir found 26% women had heard of breast cancer and 6.87% had knowledge of BSE.

It was seen that 73% of women who heard about breast cancer did visit a health care centre for maternal and child health causes in the last year while 48% visited for other health concerns. This seems a vast opportunity missed on imparting health education on breast examination. This opportunity may be capitalized not only as a point of start for breast related awareness but may help to develop a cadre of Peer advisor from attendees. Such a peer advisor may be trained over her repeated visits to health care centre to act as a bridge between breast related information from health care worker to community at large

Findings of Subhojit Dey et al.,[9], where less than half of the women were aware of breast cancer detection methods or clinical breast examination (CBE)/ mammography was as low as 7% parallels findings of present study where 4% were aware of BSE , 1% practising and 10% aware of mammography The median age of those knowledgeable about BSE did not vary greatly from those who did not know about it and did not practice it. This data suggests that training peer advisor from the aware group may be a useful strategy. Both peer and near peer groups can be targeted for benefit.

This study noted the most common source of information on breast cancer was friends and relatives (24%) while study done in Delhi (Subhojit Dey et al. ,[9] shows media as found the most important source of breast cancer information (25%). This variation may be due to the difference in median age group of the study population and other demographic differences. Madhukumar et al.,[10] found, most women (57%) came to know about breast cancer from media, other sources being hospital staff (19%) and neighbours/ relatives (11%). Thus, there is a requirement to present breast cancer related information through an engaging platform to boost propagation of knowledge. A study done by Sadler et al[11] reported that direct mail interventions presented a more promising population based strategy for spreading awareness compared to mass media. Direct mailing was found to be an efficient and inexpensive way to reach females not exposed to mass media. On the other hand, in a country like ours mailing may not be as efficient, however, a one-on-one message delivered by peer advisor in place of individual mail may be beneficial.

The common barriers to early detection of breast cancer as perceived by the subjects were feeling shyness about breasts (57%), embarrassment to speak to a doctor (36%), Rabbani et al[12] recognised that focused Community based educational interventions successfully improved the government efforts of breast cancer control. In their study the educational interventions significantly reduced the women's fears about talking to their doctors about symptoms and made them less embarrassed. Fung et al [13] reported that context specific and culturally appropriate breast cancer educational interventions addressed these prevalent barriers by the involvement of community partners. This further supports the idea that development of trained peer advisors will help overcome the common barriers, open discussion about breast cancer and promote early diagnosis.

Knowledge about risk factors were inadequate which concurs with known evidence of low knowledge of risk factors. Somdatta et al., (2008), concludes only 35% women knew about risk factors, while Paunikar et al.[15], found 65% aware of one risk factor. Relation to menarche and menopause was identified as risk factor by 58% [10]

Present study shows, the common symptoms stated were lump (25%), pain (17%), redness (6%), Similarly, Sideeq et al.,[8] stated in their study only 21.37% women knew common presenting symptoms. Other studies [14,15] found 51% and 78.57% women respectively, were aware of at least one sign/ symptom. Overall, the awareness level regarding signs and symptoms of breast cancer was higher than awareness of the risk factors. Information material in vernacular or pictorial format if supplied by appropriately trained peer advisor from the community can be a direct source of reaching women at home, not easily approachable otherwise.

The common discernible thread for operational issue is 24% of women gathered information about breast ailment from peer group. , the median age of those practising SBE is not vastly different from those not doing so. Only 19% are shy about opening up to breast related problems to family peer as compared

to doctors which figures to 36%. Considering all the information a system of "Peer Advisor trainer" where willing and capable women from a community may be taken up for a one is to one training who can disseminate information to the community. This exercise ensures acceptance of sensitive information from an acceptable peer withing similar age bracket ultimately enhancing BSE as effective screening. The practise of annual or 5 yearly mammography being expensive may reserved for older women .The current WHO recommendations promote awareness in the community and encourage early diagnosis of breast cancer especially for women (40 – 69 years) who are attending PHC or hospitals [15] may be improvised by recruiting peer advisor from them.

Barriers to breast cancer awareness and practise of BSE were fear shyness and missed opportunities. However, the very factors which are barriers to adequate KAP about breast cancer can be used to develop a cadre of Peer advisor. She would be members of the community who frequents health care facility within 1 year trained and motivated to act as a medium to develop breast related awareness among females within her community. Considering women to be more comfortable with a member of their community, within their home premises this effort may be fruitful. The study further highlights that age wise older women are more shy and may open up on a one on one basis to a peer .

## Conclusion

The study was an initial scoping to assess the state of affairs with respect to breast related disease information and examination. The women are more open to discuss breast related problem / examination from similar aged peer within the comfort of their own homes. Thus, the concept of peer advisor may be explored in the next step of research to find out its feasibility and acceptability along with efficacy. The findings from the present study do indicate peer informer of relevant age bracket if trained may help bridge the gap between service provider and intended subject Considering India to be still resource poor, emphasis on Peer advisor may be a cheaper, acceptable, accessible primary health care approach.

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Ethical Clearance/Statement of Ethics (Institutional ethical committee of Calcutta National Medical College NO EC/CNMC /2022/8 dated 13/4/22

**Conflicts of interest:** nil

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