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Barriers to clinical breast examinations among women of low socio-economic group in Mumbai

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ABSTRACT

Background: Literature review shows barriers to clinical breast examination (CBE) are primarily due to lack of knowledge and non-availability of services. Breast cancer awareness and screening program implemented in the low socio-economic group in the city of Mumbai focussed on raising awareness levels and motivating women for CBE. The participation rate for CBE despite providing information and services was only 40%–50%. The aim of the study is to understand the barriers to undergo CBE and seek suggestions for increasing their participation.

Methods: A qualitative research study design using in-depth interview technique was conducted in women residing in a low socio-economic area in the city of Mumbai. Thirty-four women, selected using purposive sampling technique, were interviewed in a community setting using a semi-structured in-depth interview tool. Women who were between 40 and 69 years and who had received health education but had not undergone CBE constituted the study sample. Results of the study are presented by the coding of the responses of the participants into the broad thematic area.

Results: The major barriers to CBE were social reasons that included the women's priority to household chores, lack of support from family members, stress caused due to relationship problems, etc. Emotional disturbances due to family stress were attributed as a reason for not remembering the contents of health talk on breast cancer. Misconceptions despite health education sessions by the health workers prevailed.

Conclusions: Giving information may not be sufficient to change health-seeking behavior. There is a need to sensitize women to accord priority to their own health and teach them to deal with emotional stress and find ways to overcome social barriers.

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Introduction

Among all the cancers in women, breast cancer ranks number one globally. India is observing an increase in the number of breast cancers over the past few years. According to the GLOBOCAN Project reports, India has an estimated age-standardized incidence rate of 24.7/lakh population; a 5-year prevalence of 105.5/lakh population and age-standardized mortality rate of 13.4/lakh population [1]. Most breast cancers develop after the age of 50 years [2]. However, in Indian women, the age at which women get breast cancer is much lower than in developed countries, almost a decade earlier [3–5].

The various methods available for early detection of breast cancer are mammography, clinical breast examination (CBE), and self-breast examination (SBE). According to the United States Preventive Service Task Force, women between 50 and 74 years of age should undergo mammography once in 2 years [6]. There is insufficient evidence to show the benefit of CBE and SBE, as reported by American Cancer Society [7]. However, in Indian settings, due to limited facilities for mammography, the high cost of mammography, and the absence of national breast cancer screening programs, the only option seems to be CBE and SBE [8].

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Among the barriers to utilization of breast cancer screening services cited in the literature, the major barriers include poor knowledge about breast cancer and the non-availability of breast cancer screening services [9,10]. In general, awareness of breast cancer is poor in India [8,11,12]. A study by Gupta et al. [13] revealed low levels of literacy on breast cancer risk factors among Indian women, irrespective of their socio-economic and educational background.

In the Breast Cancer Awareness and Screening Project, implemented by our institute, we tried to address these barriers. Information on breast cancer was provided to the women through door-to-door home visit by the health workers using a flip chart. Services for free CBE and mammography were made available at an easily accessible site to women. Every 3–4 months, the health workers visit the women to motivate them for CBE and emphasize on the importance of doing SBE. The project focused on motivating women between 40 and 69 years for CBE. Despite all these efforts, only 40%–50% of the women underwent CBE. We, therefore, wanted to understand *Why women aged 40–69 years in urban slums are not undergoing clinical breast examination despite health education and reminder home visits.*

In-depth interviewing is a qualitative research technique that involves conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, program, or situation [14]. In-depth interview has several roles in program evaluation like exploring the boundaries of a problem, obtaining a context for a problem or issue, and evaluating potential solutions [15].

The specific objectives of the study were to identify the barriers to undergoing CBE, assess knowledge and attitude about breast cancer, assess perceived susceptibility to breast cancer, and seek suggestions for improving the utilization of breast cancer screening services.

It is hoped that knowledge about barriers to undergoing CBE identified in the study would help in designing an effective breast cancer screening program and guide the designing of the training curriculum for health care workers.

Methods

Study settings

The study was conducted in Pratikshanagar situated in the F-North ward of Mumbai after obtaining approval of Institutional Ethics Committee. Pratikshanagar is predominantly a Hindu population with a mix of slums and buildings of low- and middle-income groups.

Study population

The study population comprised of women between 40 and 69 years residing in the slums and buildings of low-income group. All these women received health education on breast cancer through the health workers of the Breast Cancer Awareness and Screening Project and were motivated to attend the free weekly Well Woman Clinic.

Study participants

The study sample includes those women between 40 and 69 years who have not undergone CBE even after receiving health education and six to eight reminder visits over a period of 2 years. They consented to participate in the study.

Study design

It was a qualitative research study design using in-depth interview technique. In-depth interview technique seemed to be the best tool to explore in detail the barriers to undergo CBE.

Sampling method

A purposive sampling method was adopted for the study. The health workers identified women meeting the inclusion criteria, explained to them about the research, and took their verbal consent for the study. Informed written consent was obtained from the participants by the researchers at the time of interview.

Study tool

The semi-structured in-depth interview tool in English guided the interview process. Each woman was asked what she knew about breast cancer, risk factors for breast cancer, susceptibility to breast cancer, the practice of SBE, and the importance of CBE and mammography for early detection of breast cancer. Reasons for not undergoing CBE were explored in detail trying to unravel the circumstances and beliefs that were preventing her from undergoing CBE. They were also asked to suggest measures for increasing their participation in CBE.

Study duration

The study duration was 3 months from April 2016 to June 2016.

Data collection

The interviews were conducted by the first two authors who are M.D. in Community Medicine and associated as faculty in a medical college. The first and third authors have previous experience in conducting qualitative research, and the second author has undergone formal training in qualitative research. The researchers did not have any prior contact with the participants of the study and met them for the first time. The researchers being females were able to strike a chord with the women who expressed their feelings and emotions comfortably.

The researchers visited the homes of the pre-identified women and took an informed written consent before conducting the interview. Interview was conducted in the local language in the presence of the health worker. Although most of the women were alone at home at the time of the interview, in some cases, the interviews were conducted when other family members were around. Total privacy for the interview was not possible, as all of the participants resided in single room houses.

The researchers documented the interview in the in-depth interview tool capturing the participants verbatim in the local language in their notes. In addition, they made notes of their observations and impressions in the interview tool. At the end of the day, the researchers discussed with each other and finalized their notes.

Of the 37 women approached, three refused to participate due to lack of time. Each interview lasted 30–45 minutes and took a period of 1 month. After 34 interviews, data saturation was reached and the interviews were stopped.

Data analysis

The responses of the study participants were coded as they emerged in each interview. The responses were read and re-read carefully by the researchers to regroup the categories into broad thematic areas and coding them. Thematic analysis for quantification of data and actual quotes from the women are presented to substantiate the quantitative data.

The research article is written according to the consolidated criteria for reporting qualitative research (COREQ)—32-item checklist for interviews and focus groups.

Results

Demographic profile

The average age of the 34 women was 51.8 years with a standard deviation of 8.3. Only one of the participants was unmarried. Educational status was low and many women did not respond to the question on the educational status. Majority of the women did not disclose the income of the family and has, therefore, not been presented in results. Majority of the women were neither employed nor engaged in an income generating activity (Table 1).

Table 1. Demographic profile of study participants.

Variable	Number (Percentage) *n* = 34
Age	
40–49 years	15 (44.1%)
50–59 years	11 (32.4%)
60–69 years	8 (23.5%)
Marital status	
Married, living with spouse	29 (85.3%)
Widow	4 (11.8%)
Unmarried	1 (2.9%)
Educational status	
Illiterate	5 (14.7%)
1–4 years of schooling	4 (11.8%)
5–7 years of schooling	6 (17.6%)
8–10 years of schooling	5 (14.7%)
11–12 years of schooling	2 (5.9%)
No response	12 (35.3%)
Occupation	
Employed	3 (8.8%)
Self-employed	3 (8.8%)
Works at home	8 (23.5%)
Not employed	20 (58.8%)

Knowledge and attitude toward breast cancer

Twenty women said they do not know anything about breast cancer. Women stated that they forgot what the health worker had told them, saying it was long time back they had received the information. A 48-year-old woman said *I have some work or the other to do at home. I have lots of tensions at home. I did not pay attention to what she (health worker) was saying.*

Lump in the breast as a sign of cancer was cited by 14 women. A few women also mentioned about change in shape and size of the breast. Incorrect responses like a lump in the abdomen, pain in the breast, tightness of the breast, and purulent discharge were mentioned. Five women knew someone who had breast cancer, including two women whose maternal aunt was diagnosed with breast cancer. Family history increases the risk of breast cancer was mentioned by two women.

A few women felt that eating good food and green leafy vegetables will prevent breast cancer

while few mentioned that eating oily fried food is a risk factor. Tobacco addiction is another risk factor as cited by women. Women perceived that any lump formed during breastfeeding or a lump that is neglected has the potential to turn into a cancerous lesion. A 58-year-old woman said *During breastfeeding, if lumps are formed, they can turn into breast cancer. If after delivery, the women go out immediately, she increases her risk of breast cancer.*

Few women mentioned the importance of SBE. Six women were practicing SBE and that too occasionally. A 52-year-old woman said *One should do self-breast examination regularly. If any abnormality is detected, one should immediately go to the doctor for checkup.* Fourteen women mentioned benefits of mammography while some perceived its importance only if there was an underlying disease. A 48-year-old woman said *Yes, it (Mammography) will benefit. If there is some disease, one will come to know. If there is a problem, there will be a solution to it*. Another woman of 62 years old said *If there is no disease what benefit is it (Mammography) going to have.*

Perceived susceptibility to breast cancer

Majority of the women (23) did not perceive themselves at risk. A few women felt that anybody can get breast cancer, some considering it as destiny and feeling helpless about it. A 45-year-old woman said *No! How can it happen to anybody?* There were some misconceptions as well. Having positive thoughts, working hard, and being postmenopausal decreases the risk of breast cancer according to some of the women. A 58-year-old woman said *Delivery is over. I no longer get my periods, so how can it happen to me.* A 60-year-old woman said *If one has positive thoughts, nothing will happen to that person. I always think positively and good about others. I will not get breast cancer.* A 45-year-old woman said *I work very hard, so how can I get it. Those who do not work or eat outside food will get the disease. Good food is a must.*

Barriers to CBE

The reasons for not undergoing CBE could be broadly categorized into five groups: knowledge related; fatalism; clinic related; social reasons; and personal reasons.

Knowledge related

Poor knowledge and misconceptions seem to be a major reason for not undergoing CBE (Table 2). Thirteen women cited reasons that reflected poor knowledge and misbeliefs about the disease. Women considering it as *not so big a disease* to the absence of symptoms, fear of visiting the hospital/doctor, and fear of being diagnosed with the disease were all grouped under this category. Women were also apprehensive of all the hassles that they would have to go through and incur expenses if some problem is detected. Seven women cited that since they did not have any symptom, they did not think it was necessary to undergo CBE. A 55-year-old woman who knew that family history of breast cancer is a risk factor said *My mother does not have breast cancer, so I will also not get it. I do not have any negative thoughts or feelings, so I will not get it.* She also perceived that her quality of positive thinking would prevent her from getting the disease.

Fatalism

Two women considered that if it was written in their destiny, nothing can be done about it. One has to just accept it. A 53-year-old woman said *Everything is okay, by the grace of God. If something goes wrong I will come to know.*

Clinic-related issues

Four women cited clinic-related issues like lack of faith in allopathic treatment, long waiting time, and previous bad experience with the hospital and inconvenient clinic timing. A 45-year-old woman said *I do not have faith in doctors. I do not have faith in English (allopathic) medicines.*

Social reasons

Nineteen women reported social barriers to undergoing CBE (Table 2). Social barriers included reasons like responsibilities of household chores, lack of family support for visiting the clinic, stress due to relationship problems or health problems of a family member, and other social responsibilities like preparing for marriage, attending to the guests in their house, etc. Women also mentioned that their family members dissuaded them from going to the clinic or were not available to accompany them.

Personal reasons

It includes health problems, disinterest, shyness to undergo CBE, and the inability to take time off from work (Table 2). Physical and emotional health problems seem to be another deterrent to health-seeking behavior as mentioned and inferred from the conversation with six women. Three of the

Table 2. Barriers to CBE as stated by study participants.

Knowledge related
A 45-year-old woman said *I am scared of being diagnosed with cancer.*
A 45-year-old woman said *In checkup, if they find something, it will result in unnecessary expenditure.*
A 62-year-old woman said *I am not sick. If there is nothing serious, why should I go to the hospital.*
A 54-year-old woman said *I don't have any such problem. My blood test reports are fine.* I don't have blood pressure or diabetes. *I don't have any lump. If there is any problem, then only I will go to the hospital.*
Social reasons
A 60-year-old woman said *There is tension in the house. So many problems in the house, that I don't remember to go.*
A 52-year-old woman said *I am too busy taking care of my grandchildren and doing the household chores. I don't have time.*
A 43-year-old woman said *My husband does not let me go. He says why you are leaving the household chores and going for checkup.*
Personal reasons
A 58-year-old woman said *It is difficult for me to walk to the clinic. My vision is poor and I have giddiness as well.*
A 50-year-old woman said *I am old now. My children's life is more important than mine.*
A 41-year-old woman said *I run a food stall in the evening from 4 pm, and am busy, so I cannot go for checkup*.

women appeared to have depression and did not have any desire to do anything. Four women cited the lack of interest in undergoing CBE. Three women had a very casual or care-free approach to life, perceiving that they would decide what to do when the time comes. Two women were shy to undergo CBE. Women also did not perceive their life as important. Six women expressed their inability to go for a checkup as their working time clashed with the clinic timings or they had to meet their targets and deadlines while working from home.

Suggestions to improve participation

Women suggested running the clinic in the morning hours, keeping the clinic on a holiday, and reducing the waiting period.

Discussion

Among the women interviewed, almost all were married, more than half were not engaged in any income generating activities, and many of them had low literacy levels.

Knowledge and attitude toward breast cancer

Knowledge on symptoms of breast cancer was absent in the majority of the women. Most women seem to be forgetting the information received, suggesting the need for repeated health education and reminders. Identifying stress in women and teaching women stress management would need to be included in the interventions being designed for breast cancer screening programs.

Knowledge about symptoms of breast cancer seemed to be limited to lump in breast among almost half of the women. The findings are similar to the study conducted by Elobaid et al. [16] and Dey et al. [17]. Misconceptions prevailed in the women despite having received information. Overall the knowledge of breast cancer is poor, which was similar to the findings of other studies [16–18]. While designing interventions for breast cancer screening, one should keep in mind that misconceptions prevailing in the community could be hindering utilization of the services.

Two-thirds of the women did not perceive themselves at risk of breast cancer and even those who did perceive the risk attributed it to fate. As noted in the Caribbean study, fatalism thus seems to be a barrier to undergoing CBE [10].

Very few women were occasionally doing a SBE. The findings are similar to the findings in other research studies [17–19]. Lack of privacy could be one of the reasons for not doing SBE. Regarding mammography, only half of the women felt that it has benefits and can detect even small abnormalities. However, none of the women had undergone mammography though mammography services were being provided free of cost through mobile mammography unit.

Barriers to CBE

Social reasons topped the list of a barrier to CBE. Lack of time due to household chores, lack of family support for visiting the clinic, and stress due to relationship problems with family members were some of the reasons cited by women. Dey et al. [17] reported that women tend to postpone their own affairs for the sake of family members and household responsibilities. Women also mentioned that their family members dissuaded them from going to the clinic or were not available to accompany them. Parsa et al. [19], in his study, states that women's health is considered trivial. This implies that family members should also be sensitized.

It is seen that knowledge does not necessarily translate into health-seeking behavior. In the present study, women expressed that they would not go for CBE unless they had symptoms. In a study in Egypt, 81% of women said that they would not go to the doctor unless they were ill [20].

Physical and emotional health problems, lack of interest, and a casual approach to life were some of the reasons identified in the study. Few women expressed shame of undergoing CBE. Similar findings were reported by other researchers [17,18,20].

The present study revealed the fear of diagnosis and fear of undergoing examination. The findings are similar to the findings of other researchers which highlighted barriers like fear of results, fear of treatment, and fear of the test itself [17,18]. Women felt that it is better to remain unaware about the diagnosis as it could lead to hassles and unnecessary expenditure.

Clinic related issues were reported by a few women. Long waiting time is a barrier that was identified in a study by Tripathi et al. [18]. In the present study, especially waiting period seemed to be an issue with the older ladies. These findings suggest clinic schedule should meet the needs of the majority of the women.

Conclusion

The study identified lack of awareness, social reasons, the lack of priority for one's own health, stress, perceived fear and insusceptibility, and clinic systems as barriers to CBE. Breast cancer prevention programs should be designed to address as many barriers (knowledge, attitude, social, and emotional) as possible. A multi-pronged approach targetting not just the women but the community at large would help to improve the utilization of breast cancer screening programs.

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Conflict of Interest

None.

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