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ORIGINAL ARTICLE

Do We Need to Increase Community Awareness Regarding Self-Breast and Clinical Breast Examination in Pakistan?

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ABSTRACT

Background: Pakistani women have high odds of developing breast cancer. This risk begs health education and health literacy regarding breast cancer for women. The cornerstone for timely access to healthcare lies in women being educated about the disease and having positive healthcare seeking behaviors.

Methodology: This was a cross-sectional study done at a tertiary care public sector hospital in Lahore. The study was conducted in the breast clinic. Women were enrolled from May 2021 till June 2021. De-identified data regarding demographics and awareness, knowledge and practice regarding breast cancer, self-breast examination, clinical breast examination and mammography were recorded.

Results: Less than 20% of women had education at or above an undergraduate degree. 22% of women had a positive family history of breast cancer. All participants knew of breast cancer, 42% identified friends as information source. Only 24% had heard of breast self-examination. 26% correctly identified how to perform one.

Conclusion: Advocating health literacy by teaching women from the community how to perform breast self-examination through social media and breast clinics are needed in Pakistan.

Keywords: Breast Cancer; Lahore; Community; Awareness

INTRODUCTION

Data from the U.S show how South Asian populations constitute the largest minority, and are a community identified to have an increasing incidence of breast cancer. Even in the U.S this population subset is identified as needing increased awareness especially if their stay has been less than 10 years. The effect that migrancy brings is that socio-cultural norms, beliefs and practices tend to migrate with the individual[1,2].

In Pakistan the risk of women developing breast cancer is estimated at being 1 in every 9 women, which is particularly high for the South Asia region[3]. In India breast cancer is now the most common female cancer with high mortality rates and an incidence of 25.8 per 100,000; some have quoted that 1 in 28 women are likely to develop breast cancer in India[4]. Similarly in Afghanistan, in women breast cancer is found to be the leading cause of cancer in women[5].

With these high incidence figures and women at risk women from these countries should be well versed at a community level with knowledge of breast cancer, how to do a self breast examination, what a clinical breast examination is and what breast imagining is. This knowledge leads to empowering women with early healthcare decisions which could be life saving. Especially in context of the Pakistani woman, where barriers to healthcare exist from travel to decreased autonomy in decision making; the more well versed they are in being able to identify they have a problem timely the more likely they will access healthcare timely[6].

Pakistan has 4 provinces, each with its different socio-cultural norms and healthcare problems. A study done in Peshawar from the KPK province found that less 20% of women were aware of signs of breast cancer and a negligible amount practiced self-breast examination[7]. There is a scarcity of community level data of breast cancer awareness in Pakistan, with studies being done for doctors, university students or certain population subsets and these have also found poor awareness and knowledge especially regarding breast self examination and practice[8].

We conducted this study to see the level of awareness amongst women in the community in the city of Lahore in Pakistan.

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METHODOLOGY

This was a cross-sectional study done at a tertiary care public sector hospital in Lahore. After hospital Ethical Review Board approval, this study was conducted in the breast clinic. Women come to the breast clinic for various different reasons including concerns over adolescent breast changes, mastalgia, lactation consultancy and malignancy. These women predominantly belong to a lower to middle socio-economic class. Women were enrolled in the study with informed consent over the months of May 2021 till June 2021. De-identified data regarding demographics and awareness, knowledge and practice regarding breast cancer, self breast examination, clinical breast examination and mammography was recorded on a proforma. Women identified as having gaps in their knowledge and practices were counseled by a member of the research team in the clinic after filling the proforma. All ethical considerations under declaration of Helsinski were followed, the study commenced after ethical review approval. Data was analysed using SPSS V24.0.

RESULTS

Demographics: Fifty women were enrolled in the study. The mean age was 34.5 S.D 14.7 years. 41(82%) of women were married and 9(18%) were unmarried. The majority of women 38(76%) were housewives, 10(20%) were students, one participant was a teacher and one participant was an office employee constituting 2% each.

Table 1: Frequency distribution of level of education of participants from primary school upto post-graduate education (n=50)

Level of education	%age	Frequency
Primary School (Upto grade 5)	18	9
Middle School (Grade 5 till 8)	4	2
Matriculation (Upto grade 10)	38	19
High School (Upto grade 12)	20	10
Undergraduate	10	5
Tertiary School Completed	8	4
Masters Education	2	1

Personal and Family History related to Breast Cancer: Women were found the have a mean age of 12.4 S.D 0.73 years when they had they their first menstrual period. Participants were asked if they had been identified ever in the breast clinic to be at a higher risk of having breast cancer, 12(24%) responded yes. Women were asked if they had been diagnosed with breast cancer after

identification of risk, 12(24%) responded yes. All of these women had had a breast biopsy done. 4(8%) of women had a single biopsy done, 8(16%) had two biopsies done. Women were asked if they had any family member with breast cancer; 5(10%) identified an aunt with breast cancer, 2(4%) identified a grandmother, 2(4%) identified a mother, 2(4%) identified a sister. 22% of participants had a positive family history of breast cancer. None of our participants had ever had any genetic testing done for BRCA 1 or 2 nor other oncogenes. None of the participants had a personal history of ovarian or uterine cancer.

Knowledge, awareness and practices pertaining to breast cancer, self breast examination, clinical breast examination, and mammography: All our participants had heard of breast cancer and were aware it existed. Participants were asked what their sources of information were regarding breast cancer including books, media (TV, Radio, Internet), Hospital, Friends, Lectures, and Conferences or seminars. The following were their responses:

- Books, Media, Hospital, Friends: 4%
- Books, Media, Lecture, Hospital, Conferences: 2%
- Books, Media, Lecture, Hospital, Conferences, Friends: 2%
- Friends: 32%
- Hospital: 20%
- Media: 4%
- Media, Lecture, Hospital, Conferences, Friends: 4%

Forty two percent of participants heard about breast cancer from their friends, 32% of participants gained their information from the hospital and 12% from media sources. 12(24%) had heard of a breast self examination, and these women had also been diagnosed with breast carcinoma. None of the participants practiced a BSE. None of our participants were aware that breast self examination was useful for early detection of breast cancer. None of our participants had been taught how to do one. Participants could not identify what age to start a BSE and the best time to do a BSE was.

When asked who should do a breast self examination from a selection of options, 62% said they were unsure, 6% said a doctor should do it, and 32% said the individual themselves should perform it.

Participants were given a multiple choice selection on how a breast self examination should be done and were asked to pick what they think was best. 48% chose feeling the breast with the hand, 4% chose feeling breast and armpit, 10% chose inspecting breast in mirror, 4% chose inspecting in mirror and feeling with hand, 26% chose inspection in mirror and feeling breast and armpit with hand, and 8% chose can not decide.

Participants were asked if they felt an abnormality in their breast, what would you do? 4% responded nothing, 4% responded x-ray imaging and 92% responded they would see a doctor. None of our participants had heard of a clinical breast examination or knew what particulars are related to it. 88% of our participants had heard of mammography. 76% were able to identify that it was a tool used to detect breast cancer early. 54% of participants felt mammography should be done when a breast lump is found, 16% felt every 3 years, 4% felt monthly, 10% felt yearly and 16% answered they did not know. 42% of participants had had a mammogram done in the past. Women who had not had a mammogram responded with either they did not need one or were not old enough for a mammogram.

DISCUSSION

Education and information play an interlinked role. Health literacy and the appropriate and timely use of healthcare services is linked to higher levels of education which inherently breeds awareness[9]. To begin with we found in our results that only 20% of women in our cohort had attained education beyond high school. Of those 80% who had varying degrees of education till high school, only 20% had completed high school. It is thus not surprising that the level of awareness was dismal in our cohort and women only knew that breast cancer existed and that mammogram is used as a screening tool. Likely this is also due to the fact that most campaigns for breast cancer awareness in Pakistan have focused on mammography and breast cancer and less on self breast examination and clinical breast examination and what they entail. Female literacy in Pakistan is still less than 50% and less than their male counterparts. The gross enrollment in higher education in Pakistan is 10%. Thus a large proportion of the country does not receive an education beyond high school. Understanding these statistics are important for healthcare workers who are endeavouring to build health literacy at the community level in Pakistan[10].

In our cohort of women we found that 24% of women who had come to the breast clinic had malignancy. Another study done in Pakistan had found that in their breast clinic, nearly 16% of women who presented had malignancy[11]. This shows the high prevalence rate of breast cancer in women presenting to the breast clinics in tertiary care hospitals in Pakistan. It stresses and highlights the role of breast clinics needing to start an ancillary service in the clinic of teaching self-breast examinations, the role of clinical breast examinations and when to seek care to all women who present. Teaching these women coming from the community-whether they present for mastalgia, mastitis or a breast lump- will allow them to screen themselves for breast lumps and to teach other women in their family and friends how to do a self breast examination. Health literacy advocacy in this manner may increase the incidence of early detection of breast cancer in Pakistan. This is important keeping in view that patients in Pakistan will likely present to clinic with advanced breast cancer and a significant proportion will be T4 lesions or metastatic[12].

Most women knew about breast cancer from their friends or from a hospital setting. The role of media was a small percentage in women belonging from a lower socio-economic class. Information from friends may be lacking or incomplete or may even be riddled with myths[13]. Women gaining information from the hospital would be associated with presenting to the hospital with a breast complaint. The role of the media has place to develop in Pakistan to gain better outreach to women in the community. This may be either though televised campaigns or engaging celebrities in raising awareness about breast cancer and breast self examination. Health literacy campaigns and engaging the media may raise awareness amongst women in the community, and self breast examination may be taught through media in a culturally respectful way. Such health literacy may impact increasing breast cancer survival rates through early detection by 30-35%[14].

Women in our study who knew about a breast self examination had also been previously diagnosed with breast cancer. Thus, women who had not been diagnosed with breast cancer had not been taught how to examine the contralateral breast and those who had were not well versed or comfortable in performing one. Whereas women who had not been diagnosed with breast cancer had not been taught how to a breast examination. This may in part be due to an over-burdened public healthcare system where for every 1 doctor there are 1300 patients. This burden has increased after the COVID-19 pandemic[15]. Thus perhaps training nurses, medical students, or specific doctors who are assigned specially to the breast clinic and given space to teach women how to do a BSE may be one way to tackle this problem so that doctors who are seeing a large amount of patients in a limited timeframe are able to see all the patients without compromising care, yet as an ancillary service a focal person is deployed to teach BSE to the women presenting to the breast clinic. Fortunately 92% of women mentioned that they would see a doctor in case they felt there was an abnormality with their breast, however in the authors local experience, women who may feel a lump may present only when it becomes painful. This narrative also needs awareness that painless lumps are not necessarily benign entitites.

Studies done in India show that women in the community with lower socioeconomic status and educated women both had below average knowledge regarding breast cancer awareness and regarding self breast examination and that a very small percentage of women practiced self breast examination. However, health education delivered does increase knowledge and may increase readiness to practice[16-18]. This may well be translated into the Pakistani community. Some expert argue that a breast self examination is not helpful in detecting breast cancer and may not decrease the incidence of late presentations. In South Asian developing countries women face barriers to health care and are less likely to come for regular clinical breast examinations. In this situation, breast self examinations may still play a modest role in ensuring women with a palpable lump present for a clinical breast examination[19].

Our study has noted low levels of information regarding breast self examination and a clinical breast examination in women from the community and found that women from the community do not practice a breast self examination. Considering the success of awareness campaigns in ensuring women know that breast cancer exists and mammogram is a screening test used for it, we believe that awareness campaigns should include breast self examination and the importance of regular clinical breast examination in their campaigns. Women in breast clinics in Pakistan should be taught how to perform a BSE regardless of the reason they present. Social media campaigns showing how to perform a breast self-examination in a culturally appropriate manner may have a positive influence on the practice and knowledge of BSE at the community level.

CONCLUSION

Advocating health literacy by teaching women from the community how to perform a breast self-examination through social media and breast clinics are needed in Pakistan. Awareness campaigns need to address the importance of self-breast and clinical breast examinations in their message.

Conflict of interest: Nil

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