Students' Corner

Breast Cancer Screening Practices and Awareness in Women admitted to a Tertiary Care Hospital of Lahore, Pakistan

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Abstract

Objective: To assess the awareness and practices of women with regard to breast cancer and its different methods of screening.

Methods: A descriptive cross-sectional study was carried out in the inpatient wards of Fatima Memorial Hospital, Lahore. By convenience sampling, 200 female inpatients were selected. An interviewer based pre-tested questionnaire was used to ask questions regarding knowledge and practices about breast self-examination, clinical breast examination, and mammography.

Results: A total of 189 patients gave consent to be interviewed. One hundred and sixty one (84%) patients had heard of breast cancer, 35% were aware of one or two major risk factors while 65 % knew at least one major sign or symptom of breast cancer. Eighty five percent of respondents believed that early detection of cancer improved survival. Of the 101 participants > 40 years of age, 36.9 % practiced Breast Self Examination, 6.9 % Clinical Breast Examination and only 4.9 % had had a mammogram at some point in their life. Most patients did not practice breast cancer screening because they had either never heard of the screening tests, or did not feel the need to perform them.

Conclusions: The results of this study revealed lack of awareness regarding breast cancer and its screening practices. Most women did not practice breast cancer screening. Increased awareness should be made through health education and doctors' encouragement of BSE, CBE and Mammography practice (JPMA 59:418; 2009).

Introduction

Currently, cancer is the cause of 6 million deaths every year-or 12% of deaths worldwide.[1] The situation is more worrisome for the developing world; since it is projected that by the year 2020, 74% of all cancer related deaths will occur in the developing world as compared to the current 60%.[2] With the bulk of health resources used for combating communicable diseases, cancers still feature low on the health priorities of developing nations.

For women, breast cancer is the most commonly occurring cancer.[3] It is also the most common cause of cancer deaths among women and thus needs to be dealt with comprehensively. Globally there are more than a million new cases of breast cancer resulting in about 375,000 deaths each year.[3] As many as 60% of all cases of breast cancer occur in women aged over 60 years.[4]

Breast cancer also constitutes a significant problem in South Asia though representative data is lacking.[5-7] Early detection of cancer greatly increases the chances of successful treatment and decreases the health burden of morbidity and mortality. Therefore WHO recommends regular breast screening for women using mammography. Breast cancer mortality may be reduced by up to one third with the help of mammography through early detection and treatment.[8] Breast self examination (BSE) and clinical breast examination (CBE) are other screening methods often advocated.

It is therefore important to assess the awareness of the screening target group before devising strategies to make the screening programme more effective. A large number of studies investigating these beliefs have been conducted in western settings to examine the utilization of these screening tools and to understand the obstacles to their underutilization if at all. Such factors range from poor awareness about cancers and their screening methods, poverty, cultural issues, old age, lack of facilities, perceptions of fear towards screening, perceived insusceptibility to developing cancer and concerns about privacy.[4,8-10] However, few similar studies have been conducted in Pakistan. This study was carried out with the aim of generating data that can help doctors to promote breast cancer screening practices.

Patients and Methods

It was a descriptive cross-sectional study. The subjects were recruited through convenient sampling method from amongst adult (≥ 18 years) female patients

admitted at Fatima Memorial Hospital, a tertiary care health facility in Lahore, Pakistan. Those with a history of gynecological cancer, hysterectomy or those who were admitted for a gynecological issue were excluded.

The information was collected on a pre-tested structured questionnaire comprising 29 items constructed in the light of previously published studies. The content of the items was also examined by clinical experts and subjected to peer-review. A set of questions pertained to the socio-demographic characteristics of the respondents. Then a series of questions were asked which assessed the respondents' awareness of breast cancer and its screening. Questions regarding breast cancer practices in terms of getting screening tests done or not, were asked only from patients > 40 years of age. The questionnaires were filled through a face to face interview by seven trained female individuals familiar with the objectives and protocol of our study. The questionnaire was in the native Urdu language so as to make it easier for the subjects to comprehend.

Ethical approval for the study was received from the Review Committee of the Center for Health Research, Lahore. The study was conducted in compliance with 'Ethical principles for medical research involving human subjects' of Helsinki Declaration.[11] An informed verbal consent was obtained from all the subjects before accrual in the study. Complete privacy was ensured during the interview and confidentiality was maintained by not recording the names of the patients on the questionnaires.

Data was entered and analyzed using Statistical Package for Social Sciences 13.0 (SPSS 13.0). Descriptive statistics were computed for all variables.

Results

Two hundred patients were approached for the study but 189 were finally recruited since 11 patients refused consent. The mean age of the sample was 42 ± 14 years. None had history of any malignancy. One hundred one patients were above the age of 40 and answered questions about breast cancer practices. Other demographic information of the study population is shown in Table.

One hundred and sixty one (84%) patients had heard of breast cancer. None of the respondents could name more than two risk factors for breast cancer. In fact only 35% were aware of even one or two major risk factors with old age, family history and lack of breast feeding being most commonly mentioned. As many as 66 (35%) respondents believed that breast cancer was a result of "God's will" while 5 (2.6%) thought it was a product of black magic.

One hundred and twenty three (65%) knew at least one major sign or symptom of breast cancer, with 104 (55%) mentioning lump in the breast as the major symptom while 19 (10%) mentioned non-lump symptoms. As many as 66 (34.9%) respondents could not name even a single symptom of breast cancer. Only 85% of respondents believed that early detection of cancer improved survival.

Table 1: Demographic features of the respondents.

Demographic features of the patients		n (%)
Marital status	Single	37 (19.3)
	Married	155 (80.7)
Place of residence	Urban	124 (64.6)
	Rural	68 (35.4)
Income (Rupees)	<5,000	114 (59.4)
	>5,000	78 (40.6)
Occupation	Working	38 (19.8)
	Non-working	154 (80.2)
Education	None	85 (44.3)
	Primary	40 (20.8)
	Matriculate	51 (26.6)
	Graduate	16 (8.3)

BSE was practiced by 36.9% of the participants (> 40 years), 6.9% CBE and only 4.9 % had had a mammogram at some point in their life.

The patients who had never performed a BSE were 24 (36.9%). This was because they did not feel the need to do so. Other reasons cited for not doing a BSE were that they had never heard of BSE (36.9%), did not know the method (10.8%) or simply forgot to do it (3.1%).

Similar reasons were given by people who had never got a CBE, with 60 (63.8%) of them saying they never felt the need for it, 23 (24.5%) saying they had never heard about it and another 4 (4.3%) reporting that this had never been suggested to them by a doctor. Of those who had never got a mammography, 59 (61.5%) said they had never heard about it while 33 (34.4%) said they did not feel the need to get it done.

Discussion

Our study reveals lack of awareness regarding breast cancer and its screening practices among women at a tertiary care hospital, Lahore. Even though most of the respondents had heard of breast cancer, it was shocking that as many as 16% had not even heard of it. Even those who had heard of breast cancer demonstrated poor knowledge of risk factors, and signs and symptoms. Mostly women either didn't know of the risk factors or perceived God's will as its cause. False beliefs like black magic leading to cancer was reported by a minority of women. Similar studies in Nigeria indicated low knowledge of risk factors which is similar to our study but a large proportion (40%) believed evil spirits as the cause of breast cancer.[12] This difference might be due to the fact that in Pakistan, religion plays a major role in life and beliefs whereas in Nigeria the older concept of evil spirits still prevails. However, the low degree of knowledge of risk factors in both these developing

countries might be due to low population literacy rates, lack of funding for preventive care as well as a collapsing health care system.

The same study reported the participants' knowledge about symptoms to be poor as only 21.4% knew that breast cancer commonly presents as a painless breast lump.[12] On the other hand, more participants in our study knew that a lump was a possible symptom of breast cancer. Few Nigerian women were able to respond correctly to questions on non-lump symptoms of breast cancer which is in line with our findings as well. As many as 85% of women in our study believed that early detection of cancer improved survival, compared to only 41.4% Nigerian women.[12] A similar study in Turkey also showed that while most subjects (76.6%) had heard of breast cancer, only 56.1% had sufficient knowledge of it.[13] Lack of awareness regarding breast cancer is also reported studies from other developing nations.[4,14-17]

However, as expected, our results sharply contrast with reports from the western world. A study in Britain[18] noted that 90% women were able to quantify the relative risk of breast cancer associated with family history, 70% with previous history of breast cancer and 60% with smoking. The same authors found that over 70% of the surveyed women were able to identify painless breast lump, lump under the armpit and nipple discharge/bleeding as symptoms of breast cancer. It should however be noted that a much smaller proportion of these women were able to recognize other non-lump symptoms such as dimpling of the breast skin, inversion/pulling in of the nipple, and scaling/dry skin in the nipple region. This is similar to our study that shows that the knowledge of non-lump symptoms was low.

Several studies suggest that BSE practice on a regular basis influences treatment, prognosis and survival rates.[19,20] Although most patients in our study believed that early detection of cancer could improve survival, a much smaller proportion actually practiced BSE or underwent a CBE or mammography. The common reasons for not doing BSE were lack of knowledge and the belief that there's no need to perform BSE as they were not diseased. Similar studies among Iranian teachers revealed that only 6% of them reported that they are performing BSE on a regular basis. In Iran too, the most common reasons for not doing BSE were lack of knowledge and the belief that it was not necessary.[21] Similarly, only 12% of the participants practiced BSE monthly in a study carried out on South-Asian immigrants to Canada.[22] The low practice of BSE as well as the lack of need felt to perform BSE by respondents in our study, as well as in Nigeria,[12] Canada and Iran, might correspond to the suggestion that if health is viewed as the absence of disease, BSE may be perceived as looking for trouble.[23]

In this study, few respondents named CBE as means to detect cancer and even fewer had ever had a CBE. Similarly, only 4.9% of our respondents had had a mammogram for screening purposes.

Similar studies in developing countries indicate poor CBE and mammography practices. In a study from Nigeria, only 9.1% had had CBE in the past year and none ever had a mammogram.[12] Another study reported that 34.3% of Nurses in Lagos had had a CBE although majority of their study participants did not know the correct time or technique for carrying out the procedure.[17] The higher rate of CBE among nurses is most likely due to their role as health care workers with increased knowledge of screening tools.

As noted above, data from developed nations contrasts with the results of our study.[24-25] In a study from Germany, 82.8% of the women had expert breast examination at least once a year. Furthermore, 55.5% of the women had had a mammography of which 72.5% gave screening as a reason for a mammogram.[24] A study in Texas showed that 55% of respondents had performed a BSE, 45% of patients received a CBE, and 45% of respondents had received a mammogram at some point in their life (although only 15% of respondents had a mammogram during the previous year).[25]

Conclusion

The results of this study revealed lack of awareness regarding breast cancer and its screening practices. Women are mostly unaware of the common risk factors, as well as the signs and symptoms of breast cancer. The use of screening practices is infrequent and needs to be promoted by imparting greater health education and encouraging preventive medicine. Women must be educated regarding the importance of BSE, CBE and mammography after the appropriate age.

Doctors need to be more proactive in suggesting regular screening tests for breast cancer to women of appropriate age. Demonstrations of correct technique of BSE using audio and visual aids should be done while a CBE as part of routine physical check up might help in making women more "breast health aware". Breast cancer awareness education should be integrated into existing health education programs within hospital settings and at government level.

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