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Original Article

Breast Self Examination Practice and Awareness about Breast Cancer

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Abstract

Background: To assess females' awareness about breast cancer and self-reported practice of breast self-examination.

Methods: In this population-based cross sectional study data was collected via a structured questionnaire containing questions on demographic status, family history of breast cancer, subjective knowledge about breast cancer covering its symptoms, the screening methods and practice of breast self-examination (BSE).

Results: A total of 1500 women were interviewed. The mean age of respondents was 36 ± 16.1 years. Majority (76.1%) were married. In 90.9% there was no family history of carcinoma breast. Familiarity about breast cancer was found in 15.1%. Only a few (3.2%) knew about breast cancer screening programs and most indicated that electronic media (television 8.3% and radio 4.9%) were their source of information. Only 1.9% of women said that they were conducting occasional breast self-examination. The main reason for women not doing breast self-examination was due to the fact that they did not know how to do it (97.5%).

Conclusion: Women's knowledge about breast cancer warning signs and effective screening methods i.e. breast self examination, and mammography were insufficient.

Key Words: Breast cancer ,breast self examination ,screening programs, awareness.

Introduction

Carcinoma of the breast is the commonest malignancy in females all over the world and second leading cause of death due to cancer among females. [1] Global statistics show the annual incidence of breast cancer is increasing and this is occurring more rapidly in countries with a low incidence rate of breast cancer.[2] It has been reported that each year over 1.15 million women worldwide are diagnosed with breast cancer and 502,000 die from the disease.[3] In Pakistan it is more common at a young age contrary to the West where it is more common after 60 years. Approximately one in every nine Pakistani women is likely to suffer from breast cancer. This is one of the highest incidence rates in Asia.[4,5]

All women regardless of their racial or ethnic origin or heritage are at risk of developing breast cancer. Key factors among those that affect breast carcinoma development, are the genetics, environmental factors ,reproductive experience, the effect of endogenous and exogenous hormones in females, the change in immune status, host vulnerability, and the biologic determinants of breast carcinoma.[6,7]

Breast cancer related mortality and the patients' prognostic outcome can be significantly improved by timely detection of this disease.[7] Mammography, clinical breast examination and breast self-examination (BSE) are recommended screening methods for its early detection.[8,9] Mammography requires logistic and professional manpower before its use and this imaging technique is very expensive , therefore, is not affordable for most part of the population.[10] Unlike mammography , BSE is simple, inexpensive, low in technology and teaching is possible to both health professionals and women.[11] The simplest technique of BSE is to check oneself monthly. Trained medical practitioners and nurses at health centers teach the women, how to use BSE.[12]

BSE still needs its complete acceptance. [10,11] For early detection of breast cancer, American Cancer Society recommends that BSE can be used as an option.[13] BSE makes women more "breast aware", so that she can easily notice any changes in their breasts as early as possible. [14] The rationale behind extending BSE practice as a screening test is the fact that breast cancer is often discovered by women themselves without any other symptoms.[15] For breast cancer screening, none of the above modalities could be considered as the best method for early detection and mortality reduction. These approaches have their own potential benefits and harms.[15] Thus, at present

the emphasis is to raise breast cancer awareness among women to overcome ever-increasing burden of the disease.

Subjects and Methods

This descriptive and cross-sectional study was carried out in outpatient department of Lady Aitcheson Hospital Lahore and District Headquarter Hospital Rawalpindi , from July 2015 to December 2015. The study population consisted of female of aged 20 to 70years (n = 1500). Data were collected via a structured questionnaire derived from the literature. An informed consent was obtained before conducting the interviews. The questionnaire consisted of 10 items on knowledge about breast cancer covering its symptoms, screening methods, knowledge of BSE and family history of breast cancer. Knowledge of BSE was assessed with three questions including knowledge about frequency of BSE, knowledge about appropriate time for BSE and knowledge of BSE procedure. Depending on the frequency of BSE, the participants were categorized as regular (who performed BSE every month), occasional (those who performed BSE infrequently) and none (those who never had BSE) .

Results

The mean age of the respondents was 36 $\pm$ 16.1 years and most were married (76.1%) (Table 1).The positive family history of breast cancer reported by 9.1% of women. When the respondents were asked about breast cancer in Pakistan, 15.1% said that "they have heard about the disease" .The respondents' knowledge of breast cancer symptoms was also studied. Only 13.8 %(207) had knowledge of few breast cancer symptoms (Table 2).

Table 1.Demographic characteristics of the study sample (n=1500)

Age groups (years)	Number (%)
20-29	836 (54.3%)
30-39	471 (30.6%)
40-49	119 (7.7%)
50-59	53 (3.4%)
>60	21 (1.4%)
Marital status	
Single	358(23.2%)
Married	1142(74.2%)
Family history of breast cancer	
Yes	136(9.1%)
No	1364(90.9%)

Only 3.2% of the respondents knew about breast cancer screening methods:1.9% knew about breast self-examination and about 1.3% about mammography. The remaining 96.7% claimed that they know nothing about breast cancer screening methods.When the respondents were asked about breast self-examination, 1.9% reported that they practice breast self-examination occasionally'.No one said that 'they do regular breast self-examination'. When it was investigated to find out women's reasons for not doing breast self-examination, 97.5% claimed that 'they do not know how to do it'.

Table 2: Respondents' knowledge of breast cancer and self-reported practice of breast self-examination (n = 1500)

Variable	Yes Number(%)	No Number (%)
Have you heard about breast cancer in Pakistan?	227(15.1%)	1273(84.9%)
Do you know about Breast cancer symptoms	207(13.8%)	1293(86.2%)
Do you know method of BSE*	38(2.5%)	1462(97.5%)
Do you know the importance of BSE	47(3.1%)	1453(96.9%)
Do you know the timing of BSE	009(%)	1500(100%)
Any of your friend/relatives affected by breast carcinoma	136(9.1%)	1364(90.9%)
Do you have the knowledge about the treatment of breast carcinoma	125(8.3%)	1375(91.7%)

*BSE=Breast self examination

Discussion

Educated health habits can have profound, long-term implications on health. One of these habits is BSE.[5] A number of studies from the developing countries reported Lower rates of BSE practices. A study from Saudi Arabia found that only 30.3% of the women were aware of breast self-examination and 18.7% reported they practiced BSE within the previous year.[8] A Nigerian study demonstrated that women did not had sufficient knowledge about breast cancer and only 34.9% claimed to ever-practiced BSE. [11] While a study of BSE behavior among Chinese immigrant women living in San Francisco indicated that 80.9% reported having heard of BSE and 53.9% of the women had performed BSE during the past year. Comparing the figures with that of developed countries clearly

suggests that there are obvious differences. In United States, about 75% of the women conduct BSE and its adequate quality was rated in 27%. Also higher duration, frequency and quality of BSE were predictors of further diagnostic investigations .

An Australian study reported that about 31% of women examined their breasts thoroughly . In present study only 13.8% of women said that painless lump is a common symptom of breast cancer. The remaining 86.2% indicated that they know nothing about breast cancer symptoms. Only 1.9% and 1.3% had respectively heard about breast self-examination and mammography. This is consistent with other studies from developing countries and women from minority ethnic groups.[11,16] A study from U.K showed that 70% of women were aware of breast cancer symptom.[18] A British study reported a significant lack of the prerequisite knowledge and confidence to detect a breast change among older women aged 63 to 73 years. [17,18]

Though, these variations may be due to cultural differences, the role of some other underlying factors on breast health awareness in women should not be ignored.[19] A Turkish study indicated that theoretical educations about breast cancer awareness and BSE training were quite helpful even in illiterate and low-educated women.[19]

Studies indicated that media continued to be an important source of information about breast cancer and BSE and highlighted the cooperation between public health educators and the media in dissemination of breast cancer information and BSE practices . [11]Use of mass media is quite helpful in raising awareness about cancer.[18] In most developing countries, mass media are governed by the 'states'. These programmes often receive less attention in public media because of some religious and cultural reasons.[19] A low proportion of women indicated that they had received any information from their doctors. Primary health care providers can play vital role in transmitting accurate knowledge about breast cancer . This study revealed that there is no significant difference between personal and family history of breast cancer and performing BSE as compared to women without personal and family history of breast problems. This is contrary to other studies that have shown women with a family history of breast cancer do excessive BSE.[18,19]

Conclusion

1. Awareness of females about breast cancer warning symptoms and screening methods i.e. breast self-examination and mammography is insufficient.

2. Screening and awareness programs should be planned and implemented in collaboration with governments.Media should be used to increase awareness among general population.

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