

# Breast Cancer Screening Practice Among Patients and Nurses at Nishtar Hospital Multan

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## ABSTRACT

**Objectives:** To determine knowledge about breast cancer, breast cancer screening practices and risk factors of breast cancer among nurses and patients attending Nishtar Hospital, Multan.

**Study Design:** Cross sectional study

**Place and Duration of Study:** This study was conducted at OPD and Nurses, Indoor of Nishtar Hospital, Multan from July 2016 to November 2016

**Materials and Methods:** Total participants were 253 and the data was collected by Convenient Sampling Method using structured questionnaire which were self-administered.

**Results:** Total participants were 253, out of which 130 were nurses and 123 patients. 105(85%) pt. were married and 86(66.15%) nurses were unmarried. 86(69.9%) pt. and 115(88.5%) nurses had the H/O regular menstruation. 24(19.5%) pt. and 11(8.5%) nurses had positive H/O breast cancer. 33(26.8%) pt. and 13(10%) nurses use contraceptives. 76(67.7%) pt. and 124 (95.4%) nurses had knowledge of breast cancer out of which 43(35%) pt. and 104(80%) nurses have knowledge of signs and symptoms. Audiovisual was commonest source of information for patients 36(29.3%), while 100(76.92%) nurses got to know about it during their training. 42(34.1%) pt. and 112(86.2%) nurses have good knowledge about BSE. 46(35.38%) nurses often perform BSE. 54(43.9%) pt. and 115(88.5%) nurses had knowledge about CBE. 13(14.6%) pt. 25(19.2%) nurses had CBE done. 10(8.1%) pt. and 21(16.2%) nurses ever had mammography and 101(82.1%) pt. and 113(86.9%) nurses considered it useful. Regarding risk factors of breast cancer, 86(69.9%) pt. and 112(86.2%) nurses considered positive family history, 31(25.2%) pt. and 51(39.2%) nurses considered early menarche and 54(43.3%) pt. and 83(63.8%) nurses considered contraceptives as risk factors for breast cancer.

**Conclusions:** It is concluded that majority of patients do not have adequate knowledge of breast cancer and its screening practices, and have many misconceptions regarding its risk factors. On the contrary, majority of nurses have proper information of breast cancer, screening practices and its causative factors.

**Key Words:** Breast Cancer, Screening, Nurses, Patients

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## INTRODUCTION

Breast cancer comprises 22.9% of invasive cancers in women and 16% of all female cancers<sup>1</sup>. In Pakistan 90,000 cases of breast cancer cases out of which are almost 40,000 deaths per year<sup>2</sup>. The primary risk factors for breast cancer are female sex, age, lack of childbearing or breastfeeding, higher hormone levels, race, economic status and dietary iodine deficiency. Survival rates in developed countries are very good. However, survival rates in developing countries are much poorer<sup>1</sup>. The most pragmatic solution to early detection lies in breast cancer education of women and use of screening practices by them. In year 2000, 67% of Korean American women had Clinical breast examination done and 58% had mammography done<sup>3</sup>.

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According to another research: In year 2007, 10% of health care professionals in Turkey had had mammography done at least once, rate of getting clinical breast examination done was 24.7% and rate of performing breast self-examination was 24.8%<sup>4</sup>. In 2003, the American Cancer Society recommended annual mammography beginning at age 40 years, annual CBE after the age of 40 years<sup>5</sup>.

The mainstay of breast cancer treatment is surgery when the tumor is localized, followed by chemotherapy, radiotherapy and adjuvant hormonal therapy (when indicated). Depending on the staging and type of the tumor Lumpectomy or Mastectomy can be done<sup>6</sup>. Breast cancer screening is done in an attempt to achieve earlier diagnosis with the assumption that early diagnosis will improve outcomes. Screening must be encouraged by physicians especially after 40<sup>7</sup>.

Sim HL et al in their paper reported their findings by conducting a self-administered questionnaire based survey on 1,000 Asian women. The scores were high for general knowledge and disease progression but poor for risk factors, screening, symptoms and treatment. Hence, it was concluded that knowledge affects

practice. Public education is required to correct misconceptions and focus on women with poor knowledge<sup>8</sup>.

To determine the level of knowledge regarding breast cancer and to increase awareness about screening practices among a group of eighty women Shradha Ahuja and Nilay Chakrabarti carried out a cross sectional study. Though a major portion of the study population had heard about breast cancer, only a moderate fraction of the women were aware of the importance of the breast cancer screening techniques as a protective factor against the disease<sup>9</sup>.

To investigate breast cancer knowledge, attitudes, and use of breast cancer preventive screening among U.S. Latina and Mexican women Banegas MP et al conducted a cross-sectional study according to which although Mexican women had higher levels of knowledge than US Latinas but U.S. Latinas had significantly increased odds of having ever received a mammogram. Thus, breast cancer screening services should be made easily accessible to women along the US-Mexico border<sup>10</sup>.

Worldwide breast cancer is raising issue both in developed and developing countries. It can be prevented by maintaining healthy life style and use of screening practices. Early diagnosis reduces mortality and various screening practices help in early diagnosis.

## MATERIALS AND METHODS

This cross sectional study conducted in July 2016–November 2016 among patients attending OPD and nurses of indoor of Nishtar Hospital, Multan included 250 patients attending OPD and nurses of indoor of Nishtar Hospital, Multan.

A pre-tested self-administered questionnaire was the tool for data collection for nurses and interview based questionnaire was used for the patients. Informed consent was obtained from the respondents. All data collected was made anonymous.

The questionnaire focused on basic knowledge and practices of breast cancer screening methods. Basic demographic variables such as age, occupation, educational level, monthly income, marital status, and parity, history of menstruation and smoking and use of contraception were included. The questionnaire contained questions regarding breast screening practices i-e breast self-examination, clinical breast examination, mammography and risk factors for breast cancer.

The data was entered into statistical package for the social sciences (SPSS), analyzed and the frequency and percentages of variables were obtained. A p value of < 0.05 was considered to be statistically significant.

## RESULTS

There were a total of 253 participants, out of which 130 were nurses working in the indoor of Nishtar Hospital,

Multan. and 123 were female patients from all outdoor departments of Nishtar Hospital, Multan. The mean age of nurses was 25.68 years and that of patients was 33.76 years.

The demographic profile of patients and nurses 109(88.6%) patients were house wives and only 3(2.3%) nurses were staff nurses. Majority of patients, 105(85%) were married while majority of nurses, 86(66.15%) were unmarried.

86(69.9%) patients and 115(88.5%) nurses had regular menstruation. The survey found that 24(19.5%) patients and 11(8.5%) nurses had positive breast cancer history. 33(26.8%) patients. 76(61.7%) patients and 124(95.4%) nurses had knowledge of cancer. Out of which, 43(35%) patients and 104(80%) nurses were aware of its sign and symptoms. 80(65%) patients and 54(41.5%) nurses had no knowledge of methods of screening while 76(58.46%) nurses had knowledge of all of the available methods. Audiovisual was the commonest source of information for the patients as told by 36(29.3%) of them while 100(76.92%) nurses read or heard about them during their training and practice.

Regarding BSE, approximately one third 42(34.1%) patients and more than two thirds of nurses 112(86.2%) had a good knowledge of Breast Self-Examination. Out of these, 23(18.7%) patients and 109(83.8%) nurses had an adequate knowledge of procedure of BSE. 97(78.8%) patients never performed BSE while 46(35.38%) nurses often performed it. Only 14 (11.4%) patients and 18 (13.8%) nurses ever noticed any abnormality in breast.

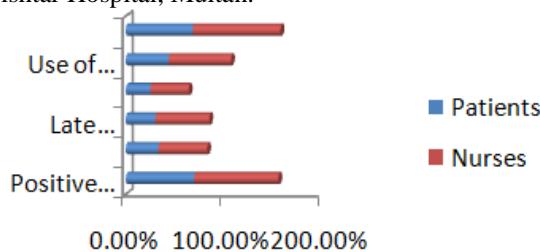
With respect to CBE, 54 (43.9) patients and 115 (88.5) nurses had knowledge of it. While majority of nurses had knowledge of CBE, not even one-third of them 25(19.2%) ever had it and an even lower percentage of patients 18(14.6%) ever had CBE in their life. Out of those who had CBE, only 15(4.1%) patients and 15(11.5%) nurses got it many times while 11(8.94%) patients and 19(14.6%) nurses got it for 1-2 times. The most common reason cited by the patients for not getting CBE done was that they did not feel any need of getting it, given by 103(98.1%) patients. As compared to the patients, majority of nurses who never got CBE done cited the reason of not feeling any change in their breasts 103(98.1%) nurses.

10(8.1%) patients and 21(16.2%) nurses ever had mammography done. Out of which, 8(80%) patients and 14(66.67%) nurses got it done on advice of a doctor. 86(76.1%) patients and 109(94.78%) nurses had not got mammography done ever in their life. The most common reason cited by them was that they felt no need for getting mammography done. Other reasons cited were lack of facility as said by 12 patients and 4 nurses and being never advised by doctor as retailed by 15(13.3) patients and 2(1.47) nurses. More than two-thirds of patients 101(82.1%) and nurses 113(86.9%) believed that mammography is a useful diagnostic

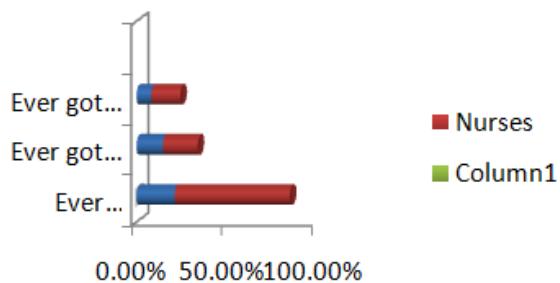
procedure for breast cancer. 27(22%) patients and 52(40%) nurses ever got encouragement by doctor for screening. While 110(89.4%) patients and 120(92.3%) nurses were interested in screening education.

A fair proportion of patients, 86(69.9%), and nurses, 112(86.2%), considered positive family history a risk factor for breast cancer. 38(30.9%) patients and 72(55.4%) nurses also considered late menopause a risk factor while only 31(25.2%) patients and 51(39.2%) nurses considered early menarche to be a risk factor. Less than half patients, 54(43.9%), and more than half nurses, 83(63.8%), think of contraceptive pills as a risk factor. Breast injury was considered a risk factor by approximately two-thirds of patients 84(68.3%) and majority of nurses 117(90%).

Figure 1 shows the comparison of use of breast cancer screening practices among patients and nurses and Figure 2 shows the percentages of knowledge of risk factors of breast cancer among patients and nurses of Nishtar Hospital, Multan.



**Figure No.1: Knowledge of risk factors among patients and nurses of Nishtar Hospital.**



**Figure No.2: Comparison of use of various breast cancer screening practices among patients and nurses of Nishtar Hospital.**

## DISCUSSION

Lack of awareness about cancer can cause delay the presentation of cancer and also delay its diagnosis. The study is related to the frequency of breast cancer screening practices and the awareness about them among the patients and nurses at Nishtar Hospital, Multan. While According to Bilal maqsood et al study majority of patients had knowledge of breast cancer and different types of screening practices. However, none of the respondents could name more than two risk factors for breast cancer<sup>11</sup>.

According to the study, it was found out that literacy rate was one important factor ruling the amount of awareness among the selected population as a whole, the patients being less knowledgeable than the nurses. Majority of the nursing health professionals did not know about causative factors. Only a minority had knowledge about the screening techniques. A major fraction (about two-thirds of patients) did not know about the screening practices at all. A quantitative cross-sectional interview survey was conducted by Tam Truong Donnelly et al on 1,063 Arabic women. The study revealed higher knowledge of breast cancer among women while there were much lower levels of awareness of breast cancer screening activities. The most common reason for lack of participation was lack of knowledge regarding these activities<sup>12</sup>.

Among nurses, although the statistics were better as compared to the patients, they were still not satisfactory enough as must be among the health professionals. Nurses studying the medical education as part of their field and professional life should be more cognizant about the alarming health issues and the practices in general. They should have extremely clear information regarding the health subjects as they are expected to act as role models and educate public. Similarly it was also observed that lower socioeconomic group had lower scores of knowledge.

As regards the breast cancer screening techniques, the knowledge and use of Breast self-examination among patients was very poor. Nurses were obviously better informed on the subject. Clinical breast examination proves to be an important diagnostic method for early detection and cure of the breast cancer, sadly only a little more than a third of the patients had ever heard of the procedure, many having no idea of its importance. Nurses showed better level of knowledge regarding this. Nabila Kadaoui et al conducted a postal survey among 1400 general practitioners. For women aged 35 to 49 years majority of practitioners reported using practices deemed adequate, except for instructions in breast self-examination and referral for genetic counseling (the percentage of which was much less). For improvement of these practices actions must be taken upon physician's attitudes and skills<sup>13</sup>. The study by Maryam Ahmadian and Asnarul khadi Abu Samah show that behavioral factors like modesty against physical examination of body parts, cultural obstacles like prohibition to talk and lack of communication with the physician, psychosocial elements like faith, false beliefs, and demographic factors like income, education, social support and social class<sup>14</sup>.

Mammography is the only in screening that can detect cancer early and decrease mortality. Nevertheless, only a few among the patients knew about mammography and its usefulness .A Study by Akinloa, Kikelomo et al observed a small percentage had their mammography done in actual and majority of them were unaware about the specificity and sensitivity of the mammography<sup>15</sup>. In order to gather knowledge about mammographic screening practices among Chinese-Australian women, Kwok C et al conducted a descriptive cross-sectional study which revealed that around seventy four percent of these women had a recommendation of mammography twice a year. It was also found out that the women following their checkups and recommendations had a better attitude and a better understanding towards protecting themselves from breast cancer<sup>16</sup>.

The role of physicians was found to be lacking in this regard as most of the women from both study groups were alerted about the breast cancer and the screening practices through the media and the audio and visual awareness campaigns rather than their regular physicians or doctors. Palmer R, Sanson R, and co-workers study showed that physicians of Primary care have a major role in making patients aware of the breast screening techniques available and their opinion holds great value in providing information to people especially women<sup>17</sup>.

There is need of overcoming this mortality rate by increasing awareness among women which is very deficient at present. This lack of knowledge may be because the educational materials are too complex for their understanding or due to a lack of interest and learning on their part. Samina Khokhar et al conducted a study through administration of a questionnaire to investigate the knowledge, attitude and preventive practices of women for breast cancer. According to this study although majority had an idea about issue under discussion but only a minority had thorough knowledge about it<sup>17</sup>.

The precaution is better than cure as is always said. There is need to practice caution in this particular situation and that would result in the saving of hundreds of precious lives only if women of our era and our country are made better equipped with knowledge and wakefulness to combat this rising issue.

## CONCLUSION

Women at large should be made aware of the screening techniques like breast self-examination. Clinical breast examination should be made a part of the general physical examination or regular checkups done by physicians as there is a lack of knowledge n inadequate

use of breast cancer screening practices among general public.

**Conflict of Interest:** The study has no conflict of interest to declare by any author.

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