# Original Article

# Knowledge and Practices about Breast Cancer among Female Paramedical Staff at Sharif Medical City Hospital (SMCH), Lahore.

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**ABSTRACT**

**Objective:** To assess knowledge and practices about breast cancer among paramedical staff at SMCH, Lahore.

**Methodology:** It was a cross-sectional descriptive study in which 100 female paramedical staff personnel of SMCH were interviewed. The data was collected through a questionnaire which was analyzed by computer software SPSS (Statistical Package for Social Science) version 23.0.

**Results:** Among 100 respondents, female paramedics who had knowledge about breast cancer as the most common cancer in women were about 93%. Sixty six (66%) respondents had knowledge about the association of breast cancer with family history. Female paramedics who knew that breast self-examination (BSE) is useful in early diagnosis of cancer were 96%. They practiced BSE once in a month routinely. Respondents who had awareness about the first presentation of breast cancer as a painless lump in the breast were 94%. Those who never went for clinical breast examination were 72%. According to overall scoring of knowledge section, 71% had good knowledge about breast cancer, 11% had fair and 18% had no/poor knowledge.

**Conclusion:** The overall level of knowledge about breast cancer occurrence, signs and symptoms and early diagnosis among female paramedics of Sharif Medical City Hospital was found to be up to the mark but their level of awareness regarding practices leading to early diagnosis of breast cancer still needs attention.

**Keywords:** *Breast cancer. Knowledge and practices about breast cancer. Breast self-examination (BSE).*

## INTRODUCTION

Cancers, as non-communicable diseases, are among leading causes of death worldwide. Almost all breast cancers arise from epithelial cells in the breast, usually beginning in the inner lining of milk ducts or lobules. It is a malignant neoplasm that has the ability to metastasize to other parts of the body. According to a survey, nearly 1 out of every 9 women suffer from the breast cancer.[1] According to World Health Organization (WHO), it accounts for 10% of all the cancers diagnosed in the world and 22% of all new cancers in 2000 women. In the 21st century, one million cases were reported.[2] In Asian countries, Pakistan has the highest incidence rate of breast cancer.[3]

Breast cancer is the 2nd leading cause of death in Pakistan.[4] According to a research, the incidence of breast cancer in Pakistan is 2.5 times more than other Asian countries like India.[5] Women with breast cancer over the age of 50 are about 77%.[6] There are many reasons for its widespread presentation in Pakistan. In our healthcare system, there is no setup for data collection and recording of cases, lack of proper healthcare setup and illiteracy among women. Family history, drinking alcohol, obesity and aversion to breastfeeding are also thought to be among the major

causes. Other factors that increase the chances of breast cancer are long menstrual history, nulliparity or having the first child after the age of 30, postmenopausal hormone replacement therapy and radiation exposure.[6] Reports from Western Europe and North America stated that there is a decrease in death rate from breast cancer due to use of screening methods for detection of early disease.[7] Developing countries should arrange programs for awareness of females.[8] It is reported that the most common symptom of breast cancer is a painless lump so breast self-examination (BSE) is the first step for early diagnosis. Most of the breast cancer patients in developing countries present at terminal stages resulting in poor response to treatment. Early diagnosis of cancer affects the chances of patient's recovery and long term survival.[9,10]

Many women die due to this lethal disease. The aim of this study was to reveal the issue of breast cancer awareness although the exact cause and treatment of this malignancy is still being studied. So, in the light of above mentioned factors, it was pertinent to conduct the study.

## METHODOLOGY

It was a descriptive cross-sectional study conducted at Sharif Medical City Hospital. Lahore. Non-probability, convenient sampling technique was applied. The sample size was calculated to be 100 using statistical software. All married and unmarried female paramedics above age 15, not currently diagnosed with breast cancer were included in the study. All female paramedics currently diagnosed with breast cancer and those who refused to participate in the study were

excluded.

Data was collected using a semi-structured questionnaire which was finalized after pretesting. Female paramedics were interviewed by researcher and responses were noted on the questionnaire. Scoring was done for knowledge section where each question had a score of 1 for yes response and zero for no/don't know response. Total score for knowledge section was 17. Those scoring 70% or more were considered having good knowledge, between 40-70% as fair knowledge and less than 40% as poor knowledge.

## STATISTICAL ANALYSIS

Data was analyzed in computer software SPSS (Statistical Package for Social Science) version 23.0. Frequencies and percentages were calculated and presented in tables.

## RESULTS

Out of 100 respondents, the majority (72%) were in 15-25 years age group. Forty four (44%) were nurses. The majority (79%) were unmarried and forty two (42%) were educated up to intermediate level (Table 1). Results showed that 93% of female paramedics had knowledge about breast cancer as a frequently occurring cancer in women of Pakistan while 41% were aware about the occurrence of breast cancer more commonly in old age. Sixty six (66%) respondents had

the knowledge about association of breast cancer with family history while 26% of the population believed evil spirits to be the cause of disease. Majority of the respondents (98%) were aware that early diagnosis improves the outcome of disease and 96% had knowledge of breast self-examination (BSE). Major source of knowledge about breast self-examination was a doctor (50%) while only 17% got information from electronic media.

Majority of the respondents had knowledge about signs and symptoms of breast cancer, about 94% were aware of presentation as a painless lump in the breast. Eighty seven (87%) were aware about breast self-examination as an early diagnostic technique. According to overall scoring of knowledge section, 71% had good knowledge about breast cancer, 11% had fair and 18% had no/poor knowledge.

## DISCUSSION

In our study, it was encouraging to know that 90% of respondents had knowledge about breast cancer as the most common cancer in women. Similar results were found in a study conducted by Noreen et al. in which most of the non-medical (73%) and medical (80%) students were aware of the fact that breast cancer is among the most prevalent cancers in women of Pakistan.[11] Similarly, 60% of respondents claimed breast cancer as a disease with a hereditary basis which is in

**Table 1: Socio-demographic characteristics of respondents**

| Characteristics Age (in years) | Frequency | Percentage |
|---|---|---|
| 15-20 | 36 | 36.0 |
| 21-25 | 36 | 36.0 |
| 26-30 | 24 | 24.0 |
| 31-35 | 2 | 2.0 |
| 36-40 | 1 | 1.0 |
| 41-45 | 1 | 1.0 |
| **Working Status** | | |
| Staff nurse | 18 | 18.0 |
| Charge nurse | 18 | 18.0 |
| Student | 44 | 44.0 |
| Teacher | 5 | 5.0 |
| Helper | 15 | 15.0 |
| **Educational Status** | | |
| Matric | 22 | 22.0 |
| Intermediate | 42 | 42.0 |
| Above Intermediate | 36 | 36.0 |
| **Marital status** | | |
| Married | 21 | 21.0 |
| Unmarried | 79 | 79.0 |

**Table:2 Responses about different aspects of knowledge about breast cancer**

| Different aspects of knowledge | Poor knowledge | Fair knowledge | Good knowledge |
|---|---|---|---|
| Causes of breast cancer | 07(7%) | 27(27%) | 66(66%) |
| Signs and symptoms of breast cancer | 26(26%) | 06(6%) | 68(68%) |
| Diagnostic techniques of breast cancer | 13(13%) | 08(8%) | 79(79%) |
| Early diagnosis improving the outcome | 02(2%) | 0(0%) | 98(98%) |

contrast to another study in which 85% medical students were sure that family history makes a woman more vulnerable to breast cancer.[11]

It was distressing to know that 26% of the respondents blamed evil spirits as a cause of breast cancer in a study conducted by Okobia et al.[12] In our study, 40% of the participants claimed evil spirits to be the cause of breast cancer which seems to be ridiculous as the modern research has totally negated these baseless and futile concepts. Early diagnosis of any disease always improves the outcome, it was apparent from the study that 98% of the respondents had knowledge of the better outcome of breast cancer if diagnosed at very initial stages leading to decreased mortality and morbidity.

Breast self-examination (BSE) is one of the very popular and potent methods for early diagnosis. It was very encouraging that 96% of respondents were having knowledge of breast self-examination which is in contrast to study conducted by Okobia et al. in which only 43.2% of study participants admitted to carrying out the procedure in the past year.[12]

Our results showed that only 28% of participants had clinical breast examination (CBE) in past year. Similar results were found in other studies.[11,12]

The signs and symptoms are of paramount importance for the diagnosis and subsequent treatment of a disease. Majority of respondents (94%) had knowledge about the lump in the breast as the first presentation of disease which was in line with the study conducted by Noreen et al. According to them, 90% students were familiar with the fact that the presence of a lump in breast tissue can be an early warning sign.[11] As we know that discharge from the breast is also early signs of breast cancer but only 48% of respondents were aware of this. Similarly, 74% of respondents claimed the discoloration/dimpling of the breast as one of the early signs.

It was distressing to know that only 17% respondents got knowledge of breast self-examination from television. Another study conducted in Punjab showed that television and school/college education were most cited sources of information regarding breast cancer. Similarly, 50% of respondents got knowledge from a doctor which need further strengthening regarding this important issue.

## CONCLUSION

The overall level of knowledge about breast cancer occurrence, signs and symptoms and early diagnosis among female paramedics of Sharif Medical City Hospital was found to be upto the mark but their level of awareness regarding practices leading to early diagnosis of breast cancer still needs attention.

Role of media in imparting knowledge about practices regarding early diagnosis of breast cancer was deficient as most of the respondents obtained this knowledge from a doctor or other organizations. Social and cultural barriers as shown by the discomfort of the respondents in breast examination by a male doctor also play their role to increase the burden of disease.

## RECOMMENDATIONS

▪ Health education should be channeled through women friendly agencies/organizations such as hospital, antenatal and postnatal clinics, religious organizations and feminist organizations.

▪ Awareness seminars especially family awareness programs must be conducted not only to educate women but also involving male members to provide necessary economical and psychological support in coping with the disease.

▪ The education regarding monthly breast self-examination with accurate technique and daily observation of any visual changes should be provided through pamphlets, brochures, talks and publications for the people at all healthcare institutes.

▪ Routine breast cancer screening programs must be designed.

▪ Role of media, both print and electronic needs to be enhanced in spreading awareness about breast cancer prevention and diagnosis at early stages.

▪ Due to religious and cultural constraints, most of the women refuse or feel discomfort to visit male doctors for clinical breast examination so more female doctors must be made available in the field to cope with this difficulty.

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