

## Knowledge and Practices on Breast Cancer among Bangladeshi Female attending OPD in a Tertiary level Hospital: A Cross-sectional Study

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## Abstract

## Original Research Article

**Introduction:** Breast Cancer (BC) continues on being a significant reason for morbidity and mortality all through the world. Early location and treatment of BC builds the possibilities of survival. As per Breast Health Global Initiative guidelines for low and middle income nations, diagnosing BC right on time by promoting breast self-awareness, clinical breast examination (CBE) and asset adapted mammographic screening will diminish BC mortality. **Aim of the Study:** The aim of this study was to find out the prevalence of breast self-examination in order to protect themselves from breast cancer among Bangladeshi females attending OPD in a tertiary level hospital. **Methods:** The present study is a tertiary hospital based cross sectional study and was conducted in Dhaka city, the capital of Bangladesh. Women of reproductive age group (25- 45 years) were interviewed after taking their consent. A total of 179 women were interviewed using a pre-structured questionnaire. **Result:** In current study, majority of women were in the age group of 31-35 years (34.64%) Out of total 61 illiterate (34.08%), member of joint families (68.71%) and married (73.74%) females were included. 53.4% women had heard about BC, 28.7% women had heard about BSE and 8.5% women had ever practiced BSE. **Conclusion:** Among the women interviewed, the overall knowledge, awareness and practices were found poor. There is a need for imparting awareness regarding the preventability and early detection of breast cancer through breast self-examination and thus indirectly decreasing the morbidity and mortality.

**Keywords:** Breast cancer, breast self-examination, awareness, knowledge, practice.

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## INTRODUCTION

Cancer stays one of the main sources of morbidity and mortality worldwide [1]. Among significant sites of the cancers, breast cancer growth is the most well-known in females in U.S and likely overall as it is responsible for 21% of new cases worldwide [2]. In 2008, 1.38 million ladies were analyzed for breast cancer growth and 0.46 million died from it [3]. Out of 411,000 breast cancer deaths announced around the world in 2002, 54% were happened in low-middle income countries [6]. By 2010; larger part rate of new instances of breast malignant growth was analyzed in women of developing nations which were assessed around 1.5 million [5]. Comparatively it is assessed that the new mortality from breast cancer will grow by more than 100 percent in the developing nations by 2020 [4]. The occurrence of breast cancer is most noteworthy in Pakistan among every Asian nation and practically 83% of all such cases are in third phase of cancer [7]. In two Karachi based studies done in 1995-1997 and 2002, it

was accounted for the most elevated frequency of breast cancer for population [8, 9].

The breast improvement occurs in different stages all through a woman's life beginning from birth to puberty, during puberty, reproduction age and till the lady arrives at menopause. When ovulation and monthly cycle starts, the breast begins developing and continues to grow. Ladies may likewise encounter changes in breast texture as age progresses [10]. Breast cancer is an uncontrolled development of cells which happens because of transformations or unusual changes in the qualities liable for the development of cells and keeping them sound. Normally breast cancer growth begins in the cells of the lobules which are the milk producing glands or the ducts and the passages that drain milk from the lobules to the nipple [11]. Risk factors for breast cancer are multiple and synergistic. Family history and genetic variables are significant risk factors. Conceptive factors like early menarche, late menopause, and a late age at first labor are additionally connected with expanded

frequency of breast cancer growth. Ladies using oral contraceptive pills or hormone replacement therapy are at a greater risk than others. Lack of breast feeding is additionally connected with it. Way of life factors like diet, physical work, overweightness, and obesity additionally influence the occurrence of breast cancer [12].

The probability is higher even about 50% of cancers are curable when they are detected early and treated appropriately referring to screening which has a major role in early diagnosis [13]. In this context, Breast Self-Examination (BSE) is a useful method for identifying breast cancer at interval of periodic clinical examination [14]. BSE is relatively safe, low cost offers monthly assessment and does not require overcoming barriers associated with access to medical care system [15].

Hence, the rationale of this research is to depict the knowledge, attitude and practices of Breast Self-Examination in women. It can also be helpful in developing the strategies for awareness of prevention as well as early detection plan for breast cancer.

## OBJECTIVE OF THE STUDY

- **General Objective:** The aim of the study is to determine the basic knowledge among the female patients about breast cancer.
- **Specific Objective:** The purpose of the study is to identify the attitude and practices of BSE in women to prevent the breast cancer.

## METHODOLOGY & MATERIALS

A cross-sectional hospital based study was conducted from May 2023 to October 2023 to assess knowledge, awareness and practices regarding Breast Cancer (BC) and Breast Self-Examination (BSE) among 179 women of reproductive age group ranging 25 to 45 years attending Gynae outpatient department of Popular Medical College, Dhaka, Bangladesh. The women in the reproductive age group attending the gynaecology and obstetrics OPD at the health centre were included in the study.

- **Inclusive Criteria:** Patients of reproductive age range wish to undergo study questionnaire and gave

consent clearance of the study were included in this research.

- **Exclusion Criteria:** The study did not include any individuals who have breast carcinoma or has history. Patients with any other breast disease were also excluded.

The study was conducted during a time period of 6 months during which a total of 179 women in the reproductive age, who consented to participate, were included in the study. Informed verbal consent was obtained from eligible women. Participants were explained the objectives of the study and were interviewed using a structured questionnaire. Information was obtained regarding demographic and socio-economic characteristics and reproductive history was also recorded. The knowledge regarding the causes and symptoms of the breast cancer was assessed. The knowledge regarding breast self-examination was also assessed. The collected data was entered in Microsoft Excel Data and was described in terms of percentages. Ethical clearance was taken from the Popular Medical College, Dhaka, Bangladesh ethical committee.

## RESULT

In current study, the majority of the women who participated belonged to the age group of 31 – 35 years (34.64%). Among the study population, 34.08% were illiterate, 68.71% belonged to a joint family, 69.27 % were not working outside, and 73.74% were married [Table-1]. 101 women (53.4%) had actually heard about the Breast Cancer out of total participants mostly from their friends (33.7%). The women who had heard about breast cancer were further questioned regarding their source of information, awareness about symptoms and awareness about the risk factors [Table-2]. The knowledge regarding the prevention and treatment of breast cancer was also assessed among the participants who had heard about Breast Cancer. Only 28.7% patients know that prevention is possible but 34% of the population know that it is incurable even after treatment [Table-3]. The knowledge and practice regarding the Breast Self-Examination (BSE) was assessed among the participants. According to Table-4, out of 101 subjects who were aware about Breast Cancer, 59 had heard about Breast Self-Examination.

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

| Characteristic  | Number (n=179) | Percentage (%) |       |
|-----------------|----------------|----------------|-------|
| Age (years)     | 25 – 30        | 30             | 16.76 |
|                 | 31 – 35        | 62             | 34.64 |
|                 | 36 – 40        | 45             | 25.13 |
|                 | 41 – 45        | 42             | 23.46 |
| Education level | Illiterate     | 61             | 34.08 |
|                 | Primary        | 43             | 24.02 |

| Characteristic  | Number (n=179)          | Percentage (%) |       |
|-----------------|-------------------------|----------------|-------|
|                 | Middle                  | 29             | 16.20 |
|                 | High school             | 20             | 11.17 |
|                 | Higher secondary        | 12             | 6.70  |
|                 | Graduate                | 9              | 5.03  |
|                 | Post graduate and above | 5              | 2.80  |
| Family type     | Nuclear                 | 56             | 31.28 |
|                 | Joint                   | 123            | 68.71 |
| Marriage status | Unmarried               | 47             | 26.26 |
|                 | Married                 | 132            | 73.74 |
| Working         | Yes                     | 55             | 30.72 |
|                 | No                      | 124            | 69.27 |

Table 2: Knowledge and awareness regarding breast cancer among the participants

| Classification               | Number (n=101)         | Percentage (%) |       |
|------------------------------|------------------------|----------------|-------|
| Heard about Breast cancer    | Yes                    | 101            | 53.4  |
|                              | No                     | 88             | 46.6  |
| Source of information        | TV / Radio             | 22             | 21.7  |
|                              | Family                 | 39             | 38.7  |
|                              | Friends                | 34             | 33.7  |
|                              | Others                 | 6              | 5.9   |
| Knowledge about symptoms     | Lump in the breast     | 31             | 30.69 |
|                              | Pain in the breast     | 24             | 23.8  |
|                              | Discharge from nipples | 11             | 10.9  |
|                              | Axillary lump          | 23             | 22.77 |
|                              | Don't know             | 12             | 11.8  |
| Knowledge about risk factors | OCP intake             | 14             | 13.9  |
|                              | Family history         | 33             | 33.66 |
|                              | Curse                  | 23             | 22.77 |
|                              | Diet history           | 11             | 10.9  |
|                              | Late pregnancy         | 7              | 6.9   |
|                              | Don't know             | 12             | 11.9  |

Table 3: Knowledge and awareness regarding prevention and treatment of breast cancer

| Parameter                  | Number (n=101)          | Percentage (%) |      |
|----------------------------|-------------------------|----------------|------|
| Knowledge about prevention | Check up by doctor      | 31             | 30.7 |
|                            | Breast self-examination | 29             | 28.7 |
|                            | Cannot be prevented     | 24             | 23.8 |
|                            | Don't know              | 17             | 16.8 |
| Knowledge about treatment  | Curable                 | 34             | 33.7 |
|                            | In curable              | 45             | 44.5 |
|                            | Don't know              | 22             | 21.8 |

Table 4: Knowledge and practice regarding the breast self-examination (BSE)

| Parameter                           | Number                    | Percentage (%) |       |
|-------------------------------------|---------------------------|----------------|-------|
| Heard about BSE (n=101)             | Yes                       | 59             | 58.4  |
|                                     | No                        | 42             | 41.6  |
| Practice of BSE ever (n=59)         | Yes                       | 5              | 8.5   |
|                                     | No                        | 54             | 91.5  |
| Cause of non-practice of BSE (n=35) | Fear                      | 7              | 20    |
|                                     | Embarrassment             | 16             | 45.71 |
|                                     | Lack of knowledge         | 9              | 25.71 |
|                                     | Forgetfulness or too busy | 3              | 8.57  |

## DISCUSSION

In accordance to the current study, majority of the study subjects had no knowledge of BC prevention. Most of the aware female have heard of BSE but lots of them are shy to practice BSE.

If diagnosed in early stages, Breast cancer is one of the preventable cancers. Treatment and survival of this disorder is directly related to the stage at diagnosis. The earlier the breast cancer is diagnosed the better the survival rates. There is thus considerable potential for reducing mortality from breast cancer in populations by detecting breast cancer early [16]. In India, most of the women seek medical care at the advance stages when the mortality rate is high. Several reasons for late reporting have been found in a study, of which lack of awareness, poor health seeking behaviour as well as shyness on part of patients are major ones [17]. As there are no known proven steps to prevent breast cancer, our reliance on the methods for early detection in order to improve patient outcomes increases [18]. Undoubtedly, screening can be efficient in reducing the mortality in two malignancies viz breast and cervical carcinoma. In developing countries, for example, India, proper information and demeanor of the local area might be most important necessity for early detection and screening program of breast cancer [19]. Another review of the literature reveals low breast cancer literacy with regard to risk factors among Indian women, irrespective of their socio-economic and educational backgrounds, with little correlation between awareness levels and strength of evidence of the risk factors [20].

In Pakistan, majority breast cancers presented at an advanced stage. The breast cancer diagnosis in Pakistan can be improved through practical interventions that are realistic and cost effective. Breast Self-Examination is one of the effective measure for early detection of breast cancer plan [21]. A study conducted in Lahore in 2009 showed lack of awareness regarding breast cancer and its screening practices. That study consisting 189 patients were surveyed, out of which 84% had heard of breast cancer, 35% of the total subjects were aware of at least one risk factor, 65% had the knowledge of at least one major sign and symptom and majority (85%) believed that early detection of breast cancer improved survival chances. Out of these 189 women, 101 women who were >40 years of age practiced breast self-examination [22].

A research, based on Yemen women, on knowledge and practices of BSE, out of 425 females only 58.6% knew about BSE and only 17.4% performed it. Majority (55.9%) mentioned lack of knowledge about technique of BSE as a barrier for not performing it [23]. Comparative outcomes were gotten from an exploration which presumed that ladies actually have absence of

information about breast cancer, malignant growth recognition, and risk factors. Moreover, females neglect to practice BSE according to current guidelines [24]. A Karachi based study results show a lot of low information about BSE. As indicated by a review results, out of the 412 cases, just 94 (22.8%) respondents had some awareness of it. Anyway out of these, 93 (98.9%) rehearsed BSE. Out of these 41.1% did it fortnightly or month to month [26]. As seen by another research, which related the degree of information on essential prophylaxis with the degree of instruction. Out of 300 females reviewed, half realized what mammography is [25]. A study showed that, education has a fundamental part in all perspectives with the exception of the recurrence of breast assessment and information on mammography ( $p < 0.001$ ). It was likewise seen that the period of patients assumed no huge part in identifying the information, mentality and practice of BSE. However, marital status plays a significant role in detecting the knowledge on BSE when contrasted with unmarried ( $p < 0.03$ ) [26]. A Karachi based study showed that ladies had extremely limited information on breast self-assessment. The information about the risk factors additionally emerged to be exceptionally low, where 27.2% respondents had close to zero insight into any risk factors. Family history (40.0%) was consider as a significant risk factor, trailed by personal history (35.4%), being women (30.6%) and early or no pregnancy (25.2%). Larger part of respondents (74.0%) had no clue about preventive measures, but the majority of them (71%) considered breast taking care of and some (43.9%) felt that children at early age will bring down the possibilities of breast cancer growth [26].

### Limitations of the Study

The study population was selected from a selected hospital in Dhaka city and the number of the patients was limited, which may affect results of the study causing less accurate reflection than the exact picture of the country.

## CONCLUSION AND RECOMMENDATIONS

This study has shown that however mindfulness regarding breast cancer was considerable yet there was lack of information about risk factors and screening test. Breast self - assessment which is most sensitive and cost effective method for early identification of cancer was known by couple of females and not many of them practiced it consistently. In this way it is vital to teach the women about breast cancer and its risk factors, eliminate the misconception and promote screening for early detection.

**Declaration of the Patients' Consent:** The informed consent from the patients were obtained during data collection and sampling. Permission of the Hospital Ethics Committee was ensured before starting the study.

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**Conflicts of Interest:** N/A

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