

**KNOWLEDGE, ATTITUDE, AND PRACTICE OF MARRIED FEMALE REGARDING BREAST CANCER PREVENTION AT A RURAL COMMUNITY, LAHORE**

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**Abstract:** *This study was conducted in a rural community to study the status of knowledge, attitude, and practice of breast self-examination among married females above 30. Breasts are crucial in defining the female body's special function. One should have a brief idea of what is normal for the breast and not. The reason for conducting this study was to enable women to know the facts and causes of breast cancer and amputation in later stages to stimulate the women of the area to seek proper medical attention when needed. To identify married females' knowledge, attitudes, and practices regarding breast cancer prevention in a rural community, Lahore. A cross-sectional study was conducted in a rural community. For this purpose, a simple random sampling technique was utilized for participant recruitment. A sample size of 80 was calculated for predicted event frequency. The researchers in the community administered the questionnaire. The data was evaluated using SPSS Statistical Software. And presented as frequency and percentage. Eighty females were selected from the community, and an adaptive, closed-ended, self-administered questionnaire was used to determine the knowledge, attitude, and practice of BSE in the community. The majority of the women were literate. The study revealed that among the 68.8% of females who have heard about breast self-examination, 95% of females think that breast self-examination is necessary. 88.8% of females think breast self-examination helps in the early detection of breast cancer. 65% of females know that breast self-examination should be performed once a month and 58.8% know how to perform breast self-examination correctly. 62.5% of females are fully aware of its benefits. 52.5% of females know that breast self-examination is performed on the arm and upper chest areas. 76.3% don't have a family history of breast cancer. 61.3% of females think that if there is no history of breast cancer, there is no need to practice breast self-examination. 92.5% of females know that breast self-examination is a good practice for all women must be taught. The study's result was that the community's knowledge was good. The efforts of the health department and the collaboration of media groups can further increase it.*

**Keywords:** Breast Self-Examination (BSE), Knowledge, Attitudes, Rural, Community

### Introduction

Each breast lies over a muscle of the chest called the pectoral muscle. The female breast covers a fairly large area. It extends from just below the collarbone (clavicle) to the armpit (axilla) and across the breastbone (sternum). The breast has many blood vessels; lymph vessels are thin tubes that collect and move lymph fluid away from the breast into small, bean-shaped masses of lymphatic tissue called lymph nodes. The breast's main function is producing, storing, and releasing milk to feed a baby. Milk is produced in lobules throughout the breast when they are stimulated by hormones in a woman's body after giving birth (Truchet and Honvo-Houéto, 2017). Their awareness may influence the medical help-seeking behavior of females. Knowledge deficiency may lead to disease progress. So, women should be capable of identifying early symptoms of breast cancer (Latif, 2014) Breast cancer is a major, life-threatening public health concern. Long-term disease incidence increases have been observed in developed and developing countries (Overgaard et al., 2022). It is the most common cause of cancer mortality among women, accounting for 16% of cancer deaths in adult women. (Andegiorgish et al., 2018) Three screening methods are present: breast self-examination (BSE), clinical breast examination (CBE), and mammography. Unlike CBE and mammography, BSE is a simple procedure that Women do independently at home. It is non-invasive and takes only 5 minutes. 1.9 CBE is a

physical examination done by doctors to find the abnormality. In mammography low, energy X-rays are used as a screening method for any abnormal change (Khalid et al., 2018).

Breast cancer is the most frequent malignancy found in women, as it is the most frequent cancer diagnosis in 154 countries out of 185. It is generally found at the age of 35 and over, but with time, it is becoming common in less age. It is neither preventable nor curative, but risk factors can be reduced and managed. In some cases, it can be treated if detected in the early treatable stage. Late detection can lead to severe complications and a worse prognosis. The monthly practice of BSE is a feasible, easy, and effective approach that does not require any specific tool and can be performed quickly. It is a reliable and healthy practice to stay updated with health status and help women become familiar with their breast structure. When women become familiar, it allows them to detect any change in their breasts at a very early stage (Koc et al., 2019).

A Quazi experimental study design was conducted at Jahangirnagar University in Bangladesh. Educational information on breast cancer and breast self-examination demonstration of breast self-examination procedures and leaflets were distributed among 400 females after obtaining written informed consent. Pre-intervention and 15 days post-intervention assessments were conducted to assess the change in knowledge on breast cancer and the practice of

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breast self-examination. The significant differences were measured in the pre-test vs. post-test mean score. Study findings confirmed that the study population had inadequate awareness and knowledge, which was improved significantly after educational intervention (Sarker et al., 2022).

A cross-sectional study was conducted among reproductive-age women in the Akatsi South District of the Volta Region of Ghana. This study assesses awareness, knowledge, and practice of breast self-examination as a method of prevention and early diagnosis of breast cancer. This study was a cross-sectional study involving 385 women between the ages of 15 and 49. Data were collected with a structured questionnaire. Descriptive statistics were used to analyze the data. Only 3.1% of women had no formal education, and 58.9% were single. Although 88.3% of the respondents were aware of breast cancer, 64.9% had good or sufficient knowledge of breast cancer, and only 37.6% practiced breast self-examination. Over 50% of the respondents did not know how to perform breast self-examination. The findings in this study have shown a significantly lower level of awareness and practice of breast self-examination among women in the Akatsi South District of the Volta Region (Dadzi and Adam, 2019).

A cross-sectional study was conducted in Gaza to assess breast cancer awareness. This study assesses the level of female's knowledge and practice of breast self-examination. A self-administered questionnaire was used to assess the knowledge about breast cancer. Eighty-six students participated in the study. Roughly all the students have heard about breast self-examination, and 69.8% knew the time to do breast self-examination; however, only 31.4% practice it regularly. A statistically significant relationship existed between knowledge about applying breast self-examination and regular practice. A training program should be implemented to increase the level of awareness about breast cancer and practicing breast self-examination (Abo Al-Shiekh et al., 2021).

**Methodology**

This research aimed to investigate the level of knowledge and practice of breast cancer prevention among married females in the Malik Pur community. The study included a sample size of 80 participants, selected based on predicted event frequency. A questionnaire was designed with 14 close-ended questions, including 6 demographic questions and 8 regarding knowledge, attitude, and practice related to breast cancer prevention. The researchers administered the questionnaire in the community and analyzed the data using

SPSS Statistical Software, evaluating the results in frequency and percentage.

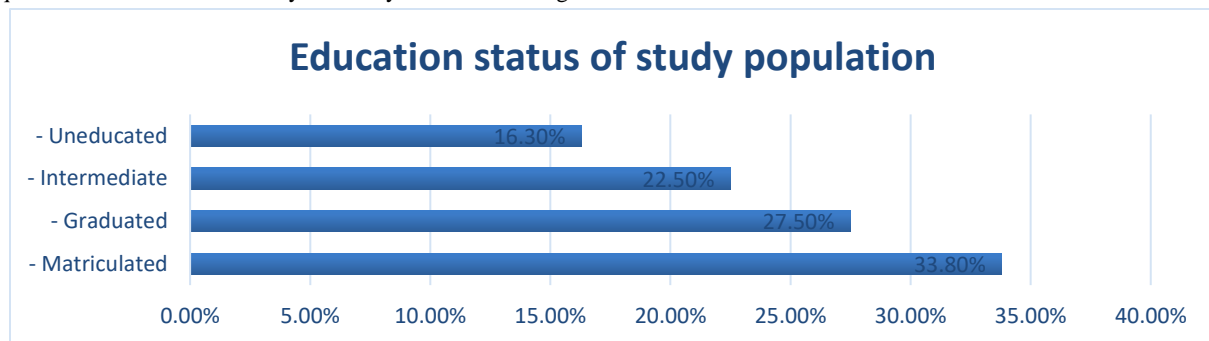
**Results**

"In the studied cohort, the age distribution of females reveals that 92.5% lie within the age bracket of 30-40 years, while a minority of 7.5% are categorized within the 41-50 years range. Regarding educational qualifications, a plurality (33.8%) has completed matriculation, 27.5% have attained a graduation degree, 22.5% have an intermediate level of education, and a minority of 16.3% have no formal education. Notably, all females (100%) in this cohort are married. Analyzing the age group of their offspring indicates that a significant majority (92.5%) are within the 0-5 year's age group, with the remaining 7.5% falling in the 6-10 years category. Observations on the occupational status of married females reveal that 36.3% are gainfully employed, whereas 63.8% are currently not part of the workforce. Delving into family structures, 37.5% of these married females reside in nuclear family settings, while 62.5% are integrated into joint family systems.

Table 2 sheds light on participants' awareness, beliefs, and practices regarding Breast Self-Examination (BSE). A majority of the respondents, 68.8%, are familiar with BSE, while 31.3% have not heard of it. This demonstrates that while a significant portion is informed about the procedure, a segment remains unaware. Furthermore, the perceived significance of BSE is high, with a substantial 95.0% believing in its necessity. This recognition is further underscored by the 88.8% who concur that BSE plays a pivotal role in the early detection of breast anomalies.

The data, however, reveals certain gaps in understanding and practice. Although 65.0% of participants know that BSE should ideally be a monthly routine, 35.0% are not. A concerning 41.3% candidly admit their lack of proficiency in performing a BSE, indicating a clear area where educational interventions can be beneficial. On a positive note, 62.5% are well-acquainted with the benefits of BSE. Regarding the specific regions where BSE should be carried out, only 47.5% correctly identify the underarm and upper chest areas, leaving a larger 52.5% misinformed or unsure. While the examination's perceived time consumption isn't a major deterrent for most (66.3% don't view it as time-consuming), 33.8% feel otherwise.

A family history of breast cancer is acknowledged by 23.8% of respondents, which could impact their BSE practices and beliefs. Interestingly, there's a prevalent misconception among 61.3% who deduce the absence of a family history.



**Figure 1: Education status of the study population**

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**Table 1: Demographic Data of Studied Females**

Parameter	Percentage	Number of Respondents
<b>Age Distribution:</b>		
- Females aged 30-40 years	92.5%	74
- Females aged 41-50 years	7.5%	6
<b>Educational Qualifications:</b>		
- Matriculated	33.8%	27
- Graduated	27.5%	22
- Intermediate	22.5%	18
- Uneducated	16.3%	13
<b>Marital Status:</b>		
- Married	100%	80
<b>Children Age Distribution:</b>		
- Age group 0-5 years	92.5%	74
- Age group 6-10 years	7.5%	6
<b>Occupational Status:</b>		
- Employed	36.3%	29
- Unemployed	63.8%	51
<b>Family Structure:</b>		
- Nuclear Family	37.5%	30
- Joint Family	62.5%	50

**Table 2: Knowledge, attitude, and practice of married female regarding breast cancer prevention at a rural community, Lahore.**

	Frequency	Percentage
<b>Have you heard of Breast self-examination?</b>		
Yes	45	56.25
No	35	43.75
<b>Do you think Breast self-examination is necessary?</b>		
Yes	76	95.0
No	4	5.0
<b>Do you think Breast self-examination can help in early detection of breast self- examination?</b>		
Yes	71	88.8
No	9	11.3
<b>I know that Breast self-examination should be performed once in a month?</b>		
Yes	52	65.0
No	28	35.0
<b>I don't know how to perform Breast self-examination correctly?</b>		
Yes	33	41.3
No	47	58.8
<b>I am fully aware of its benefits?</b>		
Yes	50	62.5
No	30	37.5
<b>I know that Breast self-examination is perform on under arm and upper chest areas?</b>		
Yes	38	47.5
No	42	52.5
<b>Breast self-examination is time consuming?</b>		
Yes	27	33.8
No	53	66.3
<b>Do you have any family history of breast cancer?</b>		
Yes	19	23.8
No	61	76.3
<b>I think if there is no family history of breast cancer than there is no need to practice Breast self-examination.</b>		
Yes	49	61.3
No	31	38.8
<b>It is important to report lump in your breast after examine.</b>		
Yes	68	85.0
No	12	15.0
<b>Breast self-examination is a good practice to all women must be taught about that</b>		

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Yes	74	92.5
No	6	7.5
<b>I practice Breast self-examination to prevent from breast cancer.</b>		
Yes	54	67.5
No	26	32.5
<b>I often forget to practice Breast self-examination</b>		
Yes	54	67.5
No	26	32.5

## Discussion

This study was conducted in the rural community of Lahore. A sample of 80 participants participated in this study. All the participants participated in this study voluntarily. This study aimed to examine married females' knowledge and attitudes regarding breast cancer prevention.

First and foremost, the fact that nearly 56% of participants are familiar with BSE is commendable, signaling the successful dissemination of information to some extent. However, the remaining 43.6% represents a significant subset of women who remain uninformed, highlighting an area where health education campaigns might need to bolster their efforts. The lack of information discovered in this analysis is comparable with findings from other Indian states (Dolar et al., 2012; Yadav and Jaroli, 2010) as well as emerging nations (Odusanya and Fmcp, 2001; Uche, 1999).

The almost unanimous consensus (95%) on the necessity of BSE indicates a widespread recognition of its importance in breast health maintenance. This overwhelming affirmation is further strengthened by the 88.8% who believe in its crucial role in early detection, suggesting that its preventive value is well-understood.

However, the data also reveals areas of concern. While most understand the monthly recommendation for BSE, over a third of respondents are either uninformed or misinformed about this recommended frequency. More troubling is the significant proportion (41.3%) who are unsure about the correct technique for BSE, potentially reducing the efficacy of their self-examinations. These findings of our research contradict those of their Western counterparts. According to Grunfeld et al., 90%, 70%, and 60% of British women could calculate the relative risk of breast cancer related to family history, prior history of breast cancer, and smoking, respectively (Grunfeld et al., 2002).

Other developed-country surveys have found that older women do not understand significant risk factors for many malignancies (Breslow et al., 1997; Paul et al., 1999). It has been proposed that older women may ascribe non-lump breast symptoms to the process of aging and hence disregard these breast cancer warning signals (Grunfeld et al., 2002).

Further gaps in knowledge surface when discussing the specific regions for examination. The near-even split between those aware and those who aren't suggesting that while many have general knowledge about BSE, they might lack details crucial for effective detection.

The perception of BSE as time-consuming by 33.8% might be seen as a barrier to regular practice. This calls for further education on streamlining the process and perhaps emphasizing its relative brevity compared to the potential

prolonged treatments and interventions if issues go undetected.

One result that stands out pertains to family history. A sizable 61.3% operate under the assumption that the absence of a family history of breast cancer diminishes the need for BSE. This misconception is particularly alarming, as many breast cancer cases arise without a clear family history, suggesting a critical need for clarifying this point in educational campaigns.

Lastly, the results show a commendable proactive attitude, with 85% emphasizing the importance of seeking medical advice upon detecting anomalies. Moreover, the overwhelming support (92.5%) for the idea that every woman should be educated about BSE underscores a collective recognition of its importance. Yet, the parity between those who practice BSE for prevention and those who forget to do so regularly hints at the gap between intention and action, suggesting the potential benefits of reminders or reinforcement strategies. In the United States, Jacobs et al. discovered that 89% of respondents had practiced BSE in the previous year, with 74% having done so in the previous six months, which is contradictory to our result, which means people here are not aware of the BSE regular exam (Jacob et al., 1989).

The findings of this study are relatively limited due to the use of a cross-sectional design and convenient sampling technique. Additionally, as the data was collected from only one setting, it may not be generalizable to other populations. Further, there could be a potential for denial of poor practices from respondents as the data was self-reported. This may affect the accuracy and reliability of the study's results. Finally, one of the main challenges in conducting research is often the lack of prior experience and expertise in the research field.

## Conclusion

We conclude from the following study that Breast Self-Examination knowledge is good among married females and should be enhanced through proper seminars and programs that effectively promote and optimize well-being. Media plays an important role in exploring many complex health problems and diseases. Knowledge of people will be raised by providing health education and maintaining a healthy lifestyle to minimize the risk factors regarding breast cancer.

## Declarations

### Data Availability statement

All data generated or analyzed during the study are included in the manuscript.

**Ethics approval and consent to participate**

Approved by the department Concerned.

**Consent for publication**

Approved

**Funding**

Not applicable

**Conflict of interest**

The authors declared absence of conflict of interest.

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