

A STUDY ON AWARENESS ABOUT BREAST CANCER AND PRACTICE OF BREAST SELF-EXAMINATION AMONG ARTS AND SCIENCE STUDENTS, CHENNAI.

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KEYWORDS

Breast cancer, breast self-examination, awareness.

ABSTRACT:

Introduction: Breast cancer remains one of the most prevalent forms of cancer affecting women globally, with significant implications for public health. This study aims to assess the awareness about breast cancer and practice of breast self-examination among arts and science students, Chennai.

Methods: A study used cross-sectional study design. The sample size consisted of 100 students selected through simple random sampling. The Institutional Ethics Committee authorized this study. The inclusion criteria were students within the age group of 18–24 years, and the exclusion criteria included those with a history of breast cancer or prior formal training in BSE.

Results: The study findings revealed that awareness levels among participants varied, with 50% showing moderate awareness, 30% mild awareness, and 20% adequate awareness. While 80% had heard of breast cancer and 70% were aware of Breast Self-Examination (BSE), only 30% had ever practiced BSE. Additionally, 75% believed BSE aids in early detection, but only 40% had been taught how to perform it. Half of the participants were unaware of breast cancer's risk factors and symptoms.

Conclusions: The study concluded that while most participants are aware of breast cancer and Breast Self-Examination (BSE), many do not regularly practice BSE. Even though most know about breast cancer and its prevention, many lack understanding of key aspects such as risk factors, symptoms, and the importance of early detection.

1. Introduction

Breast cancer remains one of the most prevalent forms of cancer affecting women globally, with significant implications for public health. According to the World Health Organization (WHO), breast cancer accounts for approximately 25% of all cancer cases among women, making it the most commonly diagnosed cancer worldwide. [1]

The significance of breast cancer awareness and the practice of BSE cannot be overstated, especially among university students who are at a pivotal stage in their lives. Arts and science students, in particular, represent a diverse group with varying levels of health literacy and access to information regarding breast cancer. Research has shown that educational interventions can significantly improve knowledge and attitudes towards breast cancer screening among students. [2]

Cultural perceptions and societal norms surrounding breast cancer can also influence women's willingness to engage in self-examination practices. In many cultures, discussions about breast health are stigmatized, leading to misinformation and a lack of awareness about the importance of early detection. [3]

Furthermore, peer influence plays a significant role in shaping health behaviors among young adults. Studies have indicated that students who are part of supportive social networks are more likely to engage in health-promoting behaviors, including BSE. [4]

A study conducted among female students at Ain Shams University in Egypt revealed that while there was some awareness of breast cancer, knowledge about specific risk factors and the practice of BSE was limited. [5] Similarly, a study in Saudi Arabia found that a low percentage of women had received training on how to perform BSE, with many reporting that they had never performed it. [6] This lack of training and awareness is echoed in studies across different countries, including India and Ethiopia, where educational interventions have shown to significantly improve knowledge and practices regarding breast cancer screening. [7,8]

The findings from various studies underscore the necessity of continuous efforts to improve breast cancer awareness and the practice of BSE among young women, particularly those in educational settings. For instance, a systematic review highlighted that despite high levels of awareness about breast cancer, actual practices of BSE remain low, indicating a gap between knowledge and action. [9] This gap can be bridged through comprehensive educational strategies that not only inform but also motivate students to adopt healthy practices.

The awareness of breast cancer and the practice of Breast Self-Examination (BSE) among arts and science students is influenced by various factors such as education, social and cultural beliefs, and peer influence. To effectively address breast cancer, it's important to implement educational programs

that focus on these factors, encourage open discussions about breast health, and promote the practice of BSE. By creating an environment where students are more aware and proactive about their health, we can improve early detection rates and reduce the impact of breast cancer among young women. So, the study aims to assess the awareness about breast cancer and practice of breast self-examination among arts and science students, Chennai.

2. Materials and Methods

This cross-sectional study was conducted to assess the awareness about breast cancer and the practice of Breast Self-Examination (BSE) among arts and science students in a well-known college in Chennai. The sample size consisted of 100 students selected through simple random sampling. The Institutional Ethics Committee authorized this study. The inclusion criteria were students within the age group of 18–24 years, and the exclusion criteria included those with a history of breast cancer or prior formal training in BSE.

A self-administered structured questionnaire was the primary tool used to collect data on students' awareness about breast cancer and the practice of Breast Self-Examination (BSE). The questionnaire was designed to capture socio-demographic details (such as age, gender, educational background, and family history of breast cancer), level of awareness regarding breast cancer, and whether the students practiced BSE.

Data were collected through a structured questionnaire, which covered sociodemographic information, awareness of breast cancer, and the practice of BSE. The study was conducted during February and March 2024.

Statistical analysis: Data analysis was performed using SPSS (Statistical Package for the Social Sciences) version 26. Descriptive statistics were used to assess the level of awareness and practice of BSE, and the chi-square test was applied to identify any significant associations between socio-demographic factors and BSE practices. A p-value of less than 0.05 was considered statistically significant.

3. Results

The majority of participants are 18–20 years old (45%), with females making up 100% of the sample. Most are pursuing undergraduate studies (60%), and 80% do not have a family history of

breast cancer. 60% are aware of Breast Self-Examination (BSE), primarily learning about breast cancer from social media (40%). In terms of BSE practice, 45% never practice it, while 30% do so regularly and 25% occasionally. These findings show a strong awareness of BSE but low adherence to regular practice. (Table 1)

The level of awareness among participants varied, with 50% (n=50) showing moderate awareness, 30% (n=30) exhibiting mild awareness, and 20% (n=20) demonstrating adequate awareness. These findings suggest that while many have a basic understanding of breast cancer and BSE, there is a need for targeted educational efforts to improve knowledge, especially among those with mild or moderate awareness. (Table 2)

Table 3 showed that the majority of participants (80%) have heard of breast cancer, and 70% are aware of what Breast Self-Examination (BSE) is. However, only 30% of participants have ever practiced BSE, and 60% have received information about it. A significant number (75%) believe that BSE can aid in the early detection of breast cancer, yet only 40% have been taught how to perform BSE. While 50% are aware of the risk factors and symptoms of breast cancer, the remaining 50% lack this knowledge, highlighting the need for further education. Regarding perceptions, 55% believe breast cancer is preventable, and 70% acknowledge that it is a common disease among women, though only 45% understand that men can also get breast cancer. A large majority (80%) feel more education is needed about breast cancer and BSE, indicating a clear need for continued awareness and information dissemination.

Table 1: Demographic Variables of the students (N = 100)

Demographic Variable	Category	Frequency	Percentage
1. Age	18–20 years	45	45%
	21–22 years	35	35%
	23–24 years	20	20%
2. Gender	Female	100	100%
3. Educational Level	Undergraduate	60	60%
	Postgraduate	30	30%
	Diploma/Certificate Course	5	5%
	Other	5	5%
4. Family History of Breast Cancer	Yes	20	20%
	No	80	80%

5. Awareness of BSE (Breast Self-Examination)	Aware	60	60%
	Not aware	40	40%
6. Source of Information on Breast Cancer	Social media	40	40%
	Health Professionals	30	30%
	Family/Friends	20	20%
	Educational Institutions	10	10%
7. Practice of BSE (Breast Self-Examination)	Regular practice	30	30%
	Occasionally	25	25%
	Never	45	45%

Table 2: Level of awareness among the students

Level of Awareness	Frequency	Percentage
Mild Awareness	30	30%
Moderate Awareness	50	50%
Adequate Awareness	20	20%

Table 3: Response of the students to awareness questions

Question	Yes	No
1. Have you heard of breast cancer?	80 (80%)	20 (20%)
2. Do you know what BSE (Breast Self-Examination) is?	70 (70%)	30 (30%)
3. Do you know the importance of early detection of breast cancer?	65 (65%)	35 (35%)
4. Have you ever practiced BSE?	30 (30%)	70 (70%)
5. Have you ever received information about BSE?	60 (60%)	40 (40%)
6. Do you think BSE can help in the early detection of breast cancer?	75 (75%)	25 (25%)

7. Are you aware of the risk factors for breast cancer?	50 (50%)	50 (50%)
8. Have you ever been taught how to perform BSE?	40 (40%)	60 (60%)
9. Do you believe that breast cancer is preventable?	55 (55%)	45 (45%)
10. Do you think men can also get breast cancer?	45 (45%)	55 (55%)
11. Are you aware of the symptoms of breast cancer?	50 (50%)	50 (50%)
12. Have you seen any awareness campaigns on breast cancer?	65 (65%)	35 (35%)
13. Do you feel comfortable discussing breast cancer?	60 (60%)	40 (40%)
14. Do you think breast cancer is a common disease among women?	70 (70%)	30 (30%)
15. Do you think more education is needed about breast cancer and BSE?	80 (80%)	20 (20%)

4. Discussion

The results of the study indicate that a significant portion of participants, primarily aged 18–20 years (45%) and predominantly female (100%), demonstrates a concerning level of awareness and practice regarding breast cancer and Breast Self-Examination (BSE). While 80% of participants have heard of breast cancer, only 30% actively practice BSE, despite 75% believing that BSE aids in early detection. Additionally, 60% of participants are aware of BSE, with social media being the primary source of this information for 40% of them. The awareness levels are varied, with 50% showing moderate awareness, 30% mild awareness, and only 20% adequate awareness. This suggests a critical need for targeted educational initiatives to enhance knowledge and encourage the practice of BSE among young women.

The findings align with previous research that highlights similar trends in breast cancer awareness and BSE practices among young women. A study conducted by Ibrahim et al. in Nigeria found that while awareness of breast cancer was relatively high, the actual practice of BSE was alarmingly low, with many women reporting that they had never performed it. [10] This study echoes the current findings, where a significant percentage of participants (45%) reported never performing BSE, indicating a gap between awareness and practice.

Moreover, the study by Khushalani et al. in the United States revealed that women with a positive family history of breast cancer had higher awareness levels regarding risk factors associated with the disease.[11] This is relevant to the current study, where 80% of participants reported no family history of breast cancer, potentially contributing to their lower awareness and practice levels. The lack of a familial connection may diminish the perceived urgency to engage in preventive measures such as BSE.

Additionally, research by Liu et al. in Eastern China demonstrated that women who had previously undergone early screening exhibited better knowledge scores regarding breast cancer and BSE. [12] This finding supports the current study's assertion that awareness and education are crucial for promoting proactive health behaviors. The low percentage of participants who practice BSE regularly (30%) suggests that educational interventions could significantly impact their engagement in early detection practices.

In another study, Qedair et al. found that higher levels of education were associated with better knowledge and practices regarding breast cancer screening methods among women in Saudi Arabia. [13] This aligns with the current study's demographic, where most participants are undergraduate students. The implication is that educational institutions have a vital role in enhancing breast cancer awareness through structured health education programs.

highlighted that many students had limited knowledge of breast cancer risk factors and BSE practices, similar to the findings of the current study. [14] This reinforces the need for comprehensive educational initiatives that not only inform but also empower young women to take charge of their breast health.

5. Conclusion

The study concluded that while most participants are aware of breast cancer and Breast Self-Examination (BSE), many do not regularly practice BSE. Even though most know about breast cancer and its prevention, many lack understanding of key aspects such as risk factors, symptoms, and the importance of early detection. The findings suggest that more educational efforts are needed to encourage regular BSE practice and improve knowledge about breast cancer. Overall, the study

highlights the importance of providing clear, practical information to help young people take proactive steps in managing their health.

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Conflicts of Interest

No

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