



A Descriptive Study to Assess the Knowledge Regarding Breast Cancer Awareness Among Women at Ganga Breast Care Centre, Coimbatore

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Abstract:

Aim and objectives: The study aims to assess the knowledge regarding risk factors, symptoms, screening techniques, and preventive measures regarding breast cancer among women at Ganga Hospital breast care centre, Coimbatore. **Materials & methods:** A descriptive study design was used in this study. Purposive sampling technique was used. The sample size was 50. Self administered questionnaire used to assess the knowledge aspects such as general awareness of breast cancer, knowledge of early warning signs, screening methods (self-breast examination, clinical breast examination, and mammography), and perceptions about prevention. **Results:** This study revealed that Majority of the women had 51.3% had low knowledge for breast cancer. There was an association between knowledge and age, marital status, education and source of information about breast cancer and it was found to be significant ($p < 0.05$). The study highlights the need for targeted educational interventions to improve breast cancer awareness among women. **Conclusion:** Community-based programs, healthcare provider initiatives, and media campaigns can help bridge knowledge gaps and encourage early detection practices. Strengthening awareness efforts is essential in reducing breast cancer-related mortality and enhancing women's health outcomes.

Keywords: Breast cancer, awareness, knowledge, women, screening, early detection, prevention.

1. INTRODUCTION:

Breast cancer is one of the most common cancers affecting women globally, contributing significantly to morbidity and mortality. According to the World Health Organization (WHO), early detection through awareness and screening plays a critical role in reducing fatalities. Despite advancements in medical science, a lack of knowledge regarding risk factors, symptoms, and screening practices continues to hinder early diagnosis, particularly in developing regions. Breast cancer awareness encompasses knowledge about the disease, early warning signs, risk factors, screening methods such as mammography and self-breast examination (SBE), and preventive measures that can aid in early detection and treatment.

Breast cancer remains the most common cancer among women worldwide. In 2025, it is estimated that approximately 316,950 women in the United States will be diagnosed with invasive breast cancer, with an additional 59,080 new cases of ductal carcinoma in situ (DCIS). Notably, incidence rates have been increasing by about 1% per year, with a slightly higher rise of 1.4% annually among women under 50.



Recent studies indicate varying levels of awareness among women regarding breast cancer risk factors and screening methods. A study conducted in the United Arab Emirates assessed the impact of breast cancer awareness programs on screening utilization. Among 959 women aged 20 and above, 31.7% had attended awareness programs. Attendance was associated with younger age, higher education, and being single. Importantly, 38.5% of attendees utilized screening services compared to 13.3% of non-attendees, suggesting that participation in awareness programs significantly enhances screening uptake.

Studies indicate that a large proportion of women are unaware of the importance of routine breast examinations and early warning signs, leading to late-stage diagnosis and poor prognosis. Factors such as cultural beliefs, lack of education, limited access to healthcare, and misinformation contribute to this gap. Assessing the level of awareness regarding breast cancer is essential in designing effective educational interventions to promote early detection and improve survival rates.

1.1 Statement of the problem:

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1.2. Objectives:

- Assess the knowledge of women regarding breast cancer risk factors, symptoms, and screening methods.
- Identify gaps in awareness that may contribute to delayed diagnosis and treatment.
- Recommend strategies to enhance breast cancer awareness and screening participation.

1.3 Hypothesis:

H₀:-There is no significant association between women's knowledge of breast cancer and their awareness of risk factors, symptoms, and screening methods among women

H₁:- There is a significant association between women's knowledge of breast cancer and their awareness of risk factors, symptoms, and screening methods.

2. Materials & Methods:

It was a descriptive study. Random sampling technique was used. The sample size was 50. Self administered questionnaire regarding breast cancer among women. The samples were selected by using random sampling technique on the basis of selection criteria. Informed consent was taken from the respondent. On the same day by using self administered knowledge questionnaire, the knowledge was assessed.

Section I: Data on distribution of demographic variables of women

Section II: Data on level of knowledge regarding breast cancer awareness among women

This study revealed that Majority of the women had 51.3% had low knowledge for breast cancer. There was an association between knowledge and age, marital status, education and source of information about breast cancer and it was found to be significant ($p < 0.05$). The study highlights the need for targeted educational interventions to improve breast cancer awareness among women.

Table 1 Scoring and Interpretation of Knowledge

S.No	Level of knowledge		
		Frequency (F)	Percentage (%)



1	Adequate knowledge	1	2
2	Moderate knowledge	5	10
3	Inadequate knowledge	44	88%

Tables 1 shows that, majority of the samples 44(88%) had inadequate knowledge, 5(10%) had moderate knowledge, and 1(2) had adequate knowledge during assessment of knowledge.

Ethical consideration:

Research was conducted after the approval of research committee and hospital. The nature and purpose of the study was explained to the authorities of Ganga Breast Care centre, Coimbatore. Oral consent was obtained from the participants. Assurance was given to the study samples that the anonymity of each individual would be maintained strictly.

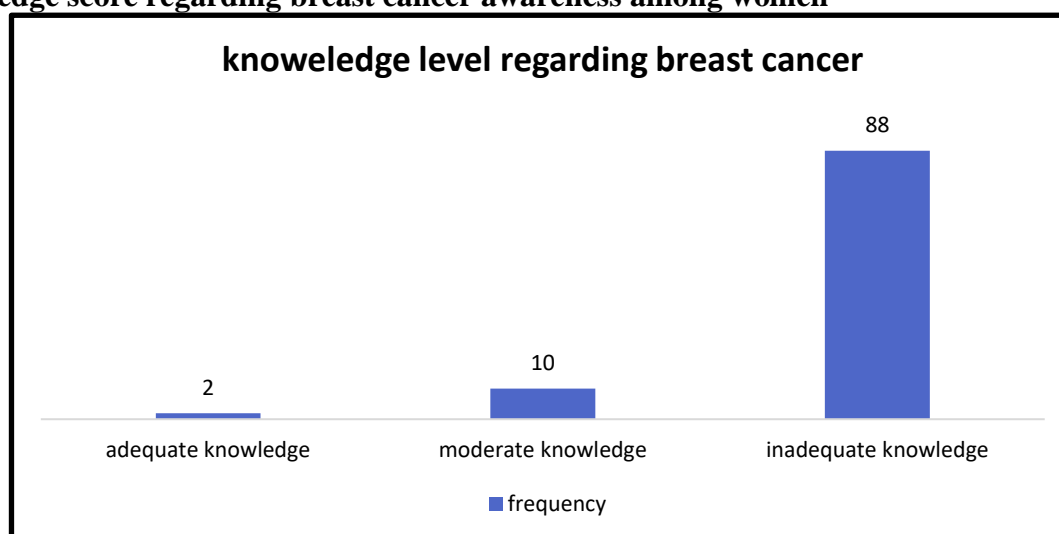
Statistical analysis:

Frequency and percentage will be used for the distribution of samples based on their knowledge on breast cancer awareness among nurses.

3. Results:

Majority of the women 30(60%) comes under the age of 20- 25 years. More than half of the samples 23(46%) were graduate women .Among the samples 47(94%) were not following breast self examination.

Fig 1 A bar diagram showing the percentage distribution of samples in terms of level of knowledge score regarding breast cancer awareness among women



4. Discussion:

This study revealed that Majority of the women had 51.3% had low knowledge for breast cancer. There was an association between knowledge and age, marital status, education and source of information about breast cancer and it was found to be significant ($p < 0.05$). The study highlights the need for targeted educational interventions to improve breast cancer awareness among women.



5. Limitations:

This study was conducted only in a selected hospital which imposed limitations in generalization of findings.

No follow-up was done after the test due to time constraint of the participants.

6. Conclusion:

The study highlights the need for targeted educational interventions to improve breast cancer awareness among women. Community-based programs, healthcare provider initiatives, and media campaigns can help bridge knowledge gaps and encourage early detection practices. Strengthening awareness efforts is essential in reducing breast cancer-related mortality and enhancing women's health outcomes.

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Contributors

RA: Conceptualization of the study, collection, analysis of the data, writing the manuscript, finalized the manuscript and will act as the guarantor of the paper, **KD:** Conceptualization of the study, collection, analysis of the data, writing the manuscript, finalized the manuscript, edited and critically evaluated the manuscript; Edited and critically evaluated the manuscript.

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