



Knowledge and Attitude Regarding Breast Self-Examination Among Women in a Selected Community Area, Chhattisgarh

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Abstract

Background:

Breast cancer is one of the most common cancers affecting women worldwide. Early detection of breast cancer can significantly improve treatment outcomes and survival rates. Breast Self-Examination (BSE) is a simple, low-cost, and effective method for early detection of breast abnormalities. However, lack of knowledge and awareness about BSE among women remains a major barrier to early detection.

Objectives:

1. To assess the knowledge regarding breast self-examination among women in a selected community area.
2. To assess the attitude toward breast self-examination among women.
3. To find the association between knowledge and attitude with selected demographic variables.
4. To develop an informational pamphlet regarding breast self-examination.

Methods:

A descriptive research design was used for the study. The study was conducted in a selected community area of Chhattisgarh. A total of **100 women** were selected using a non-probability convenient sampling technique. Data were collected using a structured knowledge questionnaire and a Likert attitude scale. Descriptive and inferential statistics were used to analyze the data.

Results:

The findings revealed that a majority of respondents had **moderate knowledge regarding breast self-examination**, while some had inadequate knowledge. The attitude toward breast self-examination was found to be **moderately favorable among many women**. Educational status and previous exposure to health information were significantly associated with the knowledge level of the respondents.

Conclusion:

The study highlights the importance of health education programs to improve knowledge and encourage positive attitudes toward breast self-examination. Educational pamphlets and awareness programs can help women detect breast abnormalities early and improve health outcomes.

Keywords: Breast Self-Examination, Knowledge, Attitude, Breast Cancer, Women's Health, Early Detection.

Introduction

Breast cancer is one of the most common cancers affecting women worldwide and is a leading cause of cancer-related mortality. According to global health statistics, the incidence of breast cancer has been increasing steadily over the past few decades, particularly in developing countries. Breast cancer not only affects the physical health of women but also has significant psychological, social, and economic consequences for individuals and families. Early detection and prompt treatment are essential in reducing mortality and improving survival rates among women diagnosed with breast cancer.

Early detection strategies play a crucial role in controlling the burden of breast cancer. Screening methods such as clinical breast examination (CBE), mammography, and breast self-examination (BSE) are widely recommended for the early identification of breast abnormalities. Among these methods, breast self-examination is considered one of the simplest, most accessible, and cost-effective techniques that women can perform on their own. It does not require specialized equipment and can be practiced regularly by women to detect early changes in breast tissue.

Breast self-examination involves the systematic inspection and palpation of the breast tissue to identify any unusual lumps, swelling, skin changes, or discharge from the nipple. When performed regularly, BSE helps women become familiar with the normal appearance and feel of their breasts. This familiarity enables them to notice any unusual changes at an early stage, which may indicate potential health problems, including breast cancer. Early identification of abnormalities increases the chances of timely diagnosis and effective treatment.

Despite the advantages of breast self-examination, many women still lack adequate knowledge regarding the correct method, frequency, and importance of performing BSE. In many communities, awareness about breast cancer and preventive health practices remains limited. Cultural beliefs, fear of discovering a disease, embarrassment, and lack of access to reliable health information are some of the major barriers that discourage women from practicing breast self-examination regularly. Additionally, misconceptions about breast cancer and limited health education programs contribute to poor awareness and negative attitudes toward preventive screening practices.

Health education plays a vital role in improving knowledge and encouraging positive health behaviors among women. Educational interventions such as community awareness programs, counseling sessions, and distribution of informational pamphlets can significantly enhance women's understanding of breast cancer and the importance of early detection. Nurses, community health workers, and other healthcare professionals play an important role in providing accurate information and guidance to women regarding breast self-examination and other preventive health practices.

Therefore, assessing the knowledge and attitude of women regarding breast self-examination is essential to identify existing gaps in awareness and misconceptions. Understanding women's perceptions and attitudes toward BSE can help healthcare providers design effective educational strategies aimed at promoting early detection practices. Informational pamphlets, health education sessions, and awareness campaigns can serve as valuable tools in empowering women with knowledge and encouraging them to adopt breast self-examination as a routine health practice for the early detection and prevention of breast cancer.

Need of the Study

Breast cancer is one of the most common cancers affecting women worldwide and has become a significant public health concern. The increasing incidence of breast cancer has created a growing need for effective preventive and early detection strategies. Early detection of breast cancer plays a crucial role in reducing mortality rates and improving the chances of successful treatment and survival. When breast cancer is detected at an early stage, treatment options are more effective and less complicated, which can greatly improve the quality of life of affected women.

Breast self-examination (BSE) is one of the simplest, most accessible, and cost-effective methods for the early detection of breast abnormalities. It is a technique that women can perform on their own to identify unusual lumps, swelling, or changes in the breast. Regular practice of breast self-examination helps women become familiar with the normal structure of their breasts and enables them to recognize any abnormal changes at an early stage. Because it requires no special equipment or clinical setting, BSE is particularly useful in resource-limited settings where access to advanced screening methods such as mammography may be limited.

Despite its importance, many women in developing countries still lack adequate knowledge about breast cancer and the correct technique of performing breast self-examination. In many communities, awareness about breast cancer prevention remains low. Cultural beliefs, fear of cancer diagnosis, embarrassment, lack of access to health education, and misconceptions about breast diseases often prevent women from practicing breast self-examination regularly. As a result, many cases of breast cancer are detected at advanced stages, when treatment becomes more difficult and less effective.

Another important issue is that many women are unaware of the recommended frequency and proper method of performing breast self-examination. Lack of awareness and limited exposure to health education programs contribute to negative attitudes toward preventive health practices. Without proper knowledge and motivation, women may not recognize the importance of early detection and may delay seeking medical help when abnormalities occur.

Health education and awareness programs are essential to address these challenges. Educational interventions such as community health programs, awareness campaigns, and informational pamphlets can significantly improve women's knowledge regarding breast cancer and the importance of breast self-examination. Healthcare professionals, particularly nurses and community health workers, have a key role in educating women about preventive health practices and encouraging them to adopt healthy behaviors.

Assessing women's knowledge and attitudes toward breast self-examination is therefore important in identifying gaps in awareness and misconceptions related to breast cancer prevention. Understanding these factors can help healthcare providers develop effective educational strategies to promote regular breast self-examination among women. The findings of such studies can also guide the development of educational materials, such as pamphlets, which can serve as practical tools to increase awareness and encourage women to practice breast self-examination regularly for early detection and prevention of breast cancer.

Materials and Methods

Research Design

The present study adopted a **descriptive research design** to assess the knowledge and attitude regarding breast self-examination among women.

Research Setting

The study was conducted in a **selected community area in Chhattisgarh**. The setting was selected because it provided access to a sufficient number of women within the specified age group, allowing the researcher to collect relevant data for the study.

Population

The target population for the study consisted of **women residing in the selected community area**.

Sample Size and Sampling Technique

The sample size for the present study consisted of **100 women**. The participants were selected using a **non-probability convenient sampling technique**, based on their availability and willingness to participate during the period of data collection.

Inclusion Criteria

The study included:

- Women aged **20–50 years**.
- Women who were **willing to participate** in the study.

Exclusion Criteria

The study excluded:

- Women who had been **previously diagnosed with breast cancer**.
- Women who were **not available during the period of data collection**.

Data Collection Tool

The data collection tool consisted of **three sections**:

Section I: Demographic Variables

This section included questions related to demographic information such as age, educational status, occupation, marital status, and previous knowledge about breast self-examination.

Section II: Structured Knowledge Questionnaire

This section consisted of a **structured questionnaire designed to assess the knowledge of respondents regarding breast self-examination**, including its meaning, purpose, correct method, frequency, and benefits for early detection of breast cancer.

Section III: Attitude Scale

A **Likert scale** was used to assess the **attitude of respondents toward breast self-examination**. The scale consisted of statements reflecting positive and negative attitudes toward the practice of breast self-examination.

Data Collection Procedure

Prior permission was obtained from the **concerned community authorities** before conducting the study. The purpose of the study was clearly explained to the participants, and **informed consent** was obtained from each respondent. Confidentiality and anonymity of the information were assured. Data were collected using a **structured questionnaire**, and participants were encouraged to provide honest responses.

Data Analysis

The collected data were organized, coded, and analyzed using **descriptive and inferential statistics**. Descriptive statistics such as **frequency, percentage, mean, and standard deviation** were used to summarize the demographic characteristics and levels of knowledge and attitude among the participants. Inferential statistics were applied to determine the **association between knowledge levels and selected demographic variables**.

Results

The data collected from **100 women residing in the selected community area** were analyzed using descriptive and inferential statistics to assess their **knowledge and attitude regarding breast self-examination (BSE)**.

The findings of the study revealed that the **level of knowledge regarding breast self-examination varied among the respondents**. A majority of participants demonstrated **moderate knowledge** about breast self-examination, including its importance for early detection of breast abnormalities. However, a smaller proportion of women had **inadequate knowledge** about the correct method, frequency, and benefits of performing breast self-examination. Only a limited number of respondents possessed **adequate knowledge** regarding the proper technique and regular practice of BSE.

The assessment of attitude toward breast self-examination showed that many respondents had a **moderately favorable attitude** toward practicing BSE as a preventive health measure. Most participants expressed willingness to learn more about breast self-examination and recognized its role in the early detection of breast cancer. However, certain **misconceptions and negative beliefs** were still observed among some respondents, such as fear of detecting breast cancer, embarrassment, or lack of confidence in performing the examination correctly.

Further analysis indicated that **educational status and previous exposure to health education programs** were significantly associated with the knowledge level of the respondents. Women who had **higher levels of education or prior exposure to health awareness programs** demonstrated better knowledge and more positive attitudes toward breast self-examination compared with those who had lower educational levels or limited exposure to health information.

Overall, the results highlight the **need for health education programs and awareness campaigns** to improve knowledge and promote positive attitudes toward breast self-examination among women. Educational interventions such as **pamphlets, demonstrations, and community health education sessions** can help increase awareness and encourage women to practice breast self-examination regularly for early detection of breast abnormalities.

Table 1

Distribution of Participants According to Level of Knowledge Regarding Breast Self-Examination (N = 100)

Level of Knowledge	Frequency (f)	Percentage (%)
Inadequate Knowledge	30	30%
Moderate Knowledge	50	50%
Adequate Knowledge	20	20%
Total	100	100%

Interpretation:

The table shows that **50% of respondents had moderate knowledge**, **30% had inadequate knowledge**, and **20% had adequate knowledge** regarding breast self-examination.

Distribution of Participants According to Knowledge on Breast Self-Examination

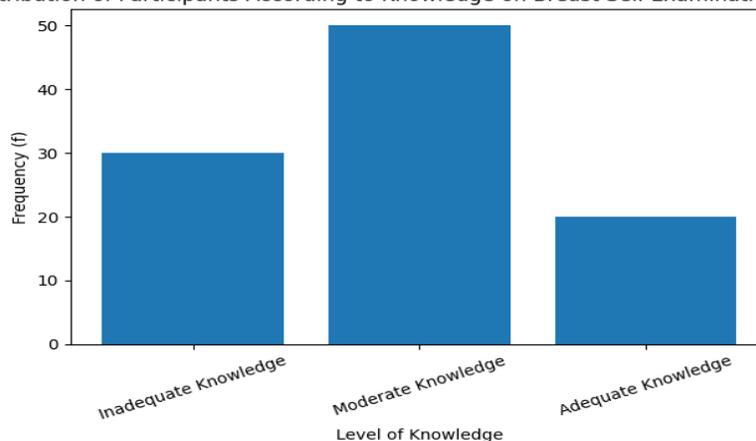


Table 2

Distribution of Participants According to Attitude Toward Breast Self-Examination (N = 100)

Attitude Level	Frequency (f)	Percentage (%)
Unfavorable Attitude	25	25%
Moderately Favorable Attitude	55	55%
Favorable Attitude	20	20%
Total	100	100%

Interpretation:

The table indicates that **55% of participants had a moderately favorable attitude**, **25% had an unfavorable attitude**, and **20% had a favorable attitude** toward breast self-examination.

Distribution of Participants According to Attitude Toward Breast Self-Examination

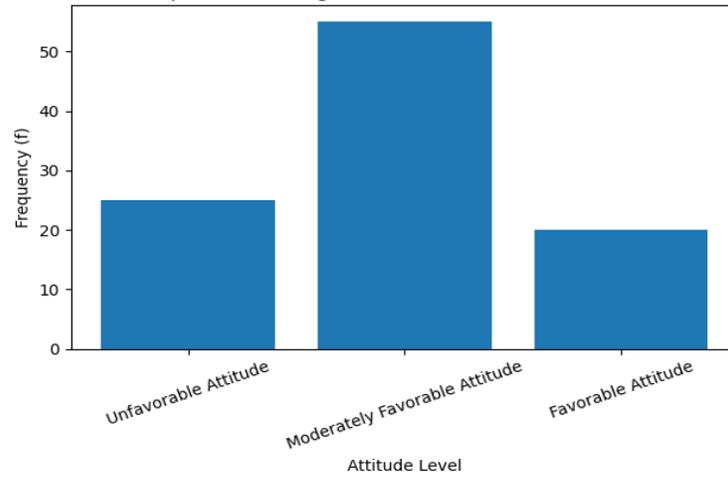


Table 3

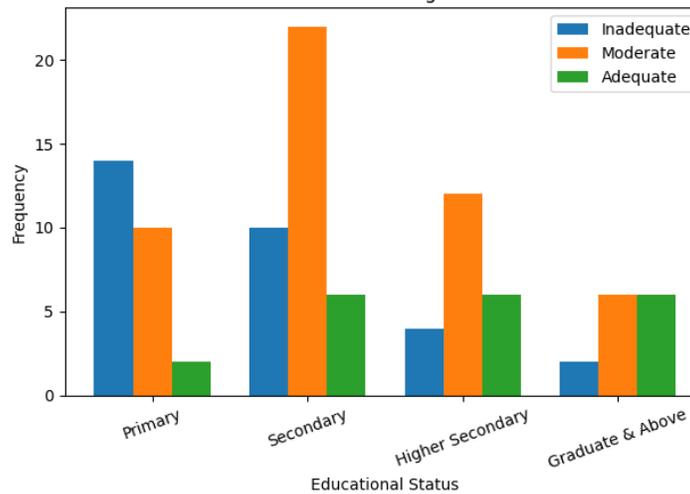
Association Between Educational Status and Knowledge Level Regarding Breast Self-Examination (N = 100)

Educational Status	Inadequate	Moderate	Adequate	Total
Primary	14	10	2	26
Secondary	10	22	6	38
Higher Secondary	4	12	6	22
Graduate & Above	2	6	6	14
Total	30	50	20	100

Interpretation:

The table shows that **knowledge regarding breast self-examination increases with higher educational status**, indicating that education plays an important role in improving awareness about breast cancer detection practices.

Association Between Educational Status and Knowledge Level on Breast Self-Examination



Conclusion

The study concluded that although many women had moderate knowledge regarding breast self-examination, a significant proportion lacked adequate awareness about its importance and correct method.

Health education programs, pamphlets, and awareness campaigns can play an important role in improving knowledge and promoting positive attitudes toward breast self-examination, ultimately contributing to early detection of breast cancer.

Recommendations

1. Health education programs should be conducted to increase awareness about breast self-examination.
2. Informational pamphlets should be distributed in community health centers.
3. Nurses and community health workers should provide regular counseling on breast cancer prevention.
4. Similar studies can be conducted with larger samples in different regions.

References

1. **World Health Organization.** (2023). *Breast cancer: Global health statistics and prevention strategies.* <https://www.who.int/news-room/fact-sheets/detail/breast-cancer>
2. **Bray, F., Ferlay, J., Soerjomataram, I., Siegel, R. L., Torre, L. A., & Jemal, A.** (2018). Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA: A Cancer Journal for Clinicians*, 68(6), 394–424. <https://doi.org/10.3322/caac.21492>
3. **American Cancer Society.** (2022). *Breast cancer facts & figures 2022–2023.* American Cancer Society. <https://www.cancer.org>
4. **Gupta, S. K., Pal, D. K., & Tiwari, R.** (2019). Knowledge and practice of breast self-examination among women in India. *International Journal of Community Medicine and Public Health*, 6(3), 1234–1238. <https://doi.org/10.18203/2394-6040.ijcmph20190721>
5. **Karayurt, O., Ozmen, D., & Cetinkaya, A. C.** (2008). Awareness of breast cancer risk factors and practice of breast self-examination among high school students in Turkey. *BMC Public Health*, 8, 359. <https://doi.org/10.1186/1471-2458-8-359>
6. **National Cancer Institute.** (2022). *Breast cancer screening and early detection.* <https://www.cancer.gov>
7. **Somdatta, P., & Baridalyne, N.** (2008). Awareness of breast cancer in women of an urban resettlement colony. *Indian Journal of Cancer*, 45(4), 149–153. <https://doi.org/10.4103/0019-509X.44662>
8. **United Nations Population Fund (UNFPA).** (2021). *Women's health and cancer prevention programs.* <https://www.unfpa.org>

9. **Sharma, K., Costas, A., Shulman, L. N., & Meara, J. G.** (2012). A systematic review of barriers to breast cancer care in developing countries resulting in delayed patient presentation. *Journal of Oncology*, 2012, 121873. <https://doi.org/10.1155/2012/121873>
10. **Park, K.** (2021). *Park's textbook of preventive and social medicine* (26th ed.). Banarsidas Bhanot Publishers.

