Knowledge, Attitude, Practice and Beliefs About Breast Cancer and Barriers to Breast Self-Examination Among Women in South Kerala

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Abstract- Background: Breast cancer is a significant health concern worldwide, with early detection playing a crucial role in improving outcomes. This study aimed to assess knowledge, attitudes, practices, and beliefs about breast cancer and identify barriers to breast self-examination (BSE) among women in South Kerala.

Methods: A cross-sectional survey was conducted over six months, involving 500 women aged 13 years and above. Participants were selected using purposive sampling. A structured questionnaire was used to collect data on demographics, knowledge of breast cancer symptoms and risk factors, attitudes towards breast health, BSE practices, and perceived barriers. Ethical approval was obtained prior to data collection.

Results: Breast self-examination (BSE) is important for detecting breast cancer early, but many obstacles hinder women from engaging in it consistently. These include insufficient knowledge, fear and worry, body image issues, cultural and societal obstacles, language difficulties, physical challenges, inadequate healthcare access, age and education, negative past experiences, and time constraints. Women lacking healthcare access may not get advice or talk to a healthcare professional about their concerns.

Conclusion: The study emphasizes the importance of education and motivation in encouraging BSE among women in India.

Keywords: Breast cancer, Breast self-examination, Awareness, Barriers, Women's health.

INTRODUCTION

Breast cancer claims the lives of thousands of women each year and affects countries at all levels of modernization. In 2018, there were 2.1 million newly diagnosed breast cancer cases among women. Breast cancer as a most common organ cancer in women is the first cause of death among women with 40-45 years old. The outbreak of breast cancer is more common in women in comparison to the men. Such outbreak is commonly around the age of 40 and after menopause period. Genetic factors, pregnancy in old ages, menopause after the age of 55[1,2,3,4]. The only way to control this disease is early detection, that it can be treated in about 90% of women with breast cancer. The best way for early detection of breast cancer is screening[5,6]. The best acceptable ways of screening for the breast cancer which is advised by the American Cancer Society are breast self-examination (BSE), clinical examination by the physicians or healthcare providers (Clinical Breast Examination), mammography and magnetic resonance imaging. BSE from economical and human viewpoints has many benefits in comparison to two other methods. Such as this is a simple, inexpensive, easy, and effective technique that allows women to examine their breast tissue for any physical or visual changes[7,8]. BSE increases women's chances for treatment, thereby increasing the survival rate in women.

To assess health program priorities and identify implementation challenges, researchers conducted a knowledge-attitude-practice (KAP) survey in Hanoi in 2019. The study included 508 women aged 30-74 years and used validated measures of breast cancer awareness and health beliefs. Results showed that while 63% of participants had previously undergone breast cancer screening, only 18% demonstrated comprehensive awareness of breast cancer signs, risk factors, and screening methods. Clinical breast examination emerged as the most prevalent screening modality, with 51% of women having received this type of screening[9].

To evaluate women's breast cancer awareness and their knowledge, attitudes, and barriers regarding breast self-examination (BSE), researchers conducted a cross-sectional study. The two-month study involved 302 women aged 18-65 attending the Outpatient Department of Central Referral Hospital in Gangtok. While 75% of participants were aware of breast cancer, 80% of those who had heard of it couldn't identify risk factors. Only 46% of participants knew about BSE, with health professionals being the primary source of information. Among the 138 women aware of BSE, just 41.3% had ever practiced it[10].

Researchers conducted a study to assess breast cancer awareness and knowledge of breast self-examination (BSE) among female students at the University of Sharjah, UAE. The one-month study included 241 undergraduate female students aged 18 and older from three university campuses. Findings revealed that while most participants were aware of breast cancer, their knowledge of risk factors and warning signs/symptoms was limited. Notably, understanding of BSE techniques was particularly low. These results emphasize the need to enhance breast cancer and BSE awareness among young women in the UAE[11].

AIM & OBJECTIVES

This research study aims to comprehensively assess the knowledge, attitudes, practices, and beliefs about breast cancer, as well as identify barriers to breast self-examination (BSE) among women in South Kerala. The primary objectives of this investigation are multifaceted. Firstly, it seeks to evaluate the participants' understanding of breast cancer symptoms, risk factors, and warning signs, which is crucial for early detection and improved health outcomes. Secondly, the study aims to determine the level of knowledge regarding breast self-examination techniques within the study population, as BSE is an important tool for early detection of breast abnormalities. Thirdly, the research will explore the various barriers that may prevent women from performing regular breast self-examinations, which could include cultural, social, or personal factors. Lastly, based on the findings, the study intends to propose evidence-based recommendations for future interventions and management strategies to improve breast cancer awareness and screening practices in the region.

The significance of this research lies in its potential to provide real-time data on the current state of breast cancer awareness and attitudes among women in South Kerala. This information is vital for healthcare providers, policymakers, and public health officials to develop targeted educational programs and interventions. Moreover, by shedding light on the level of knowledge about breast self-examination and the barriers to its practice, the study can inform the design of more effective awareness campaigns and support systems. The findings may also reveal gaps in healthcare access or education that need to be addressed to improve overall breast health in the community. Ultimately, this research has the potential to contribute to the broader goal of reducing breast cancer morbidity and mortality by promoting early detection and timely medical intervention through improved awareness and regular self-examination practices.

METHODOLOGY

This research study employs a cross-sectional survey designed to investigate knowledge, attitudes, practices, and beliefs about breast cancer, as well as barriers to breast self-examination (BSE) among women in South Kerala. The methodology was carefully structured to ensure comprehensive data collection and analysis. The study was conducted over a period of 6 months, focusing on women above 13 years of age who were willing to participate. To maintain the integrity of the research, women who have been diagnosed with breast cancer or those with dementia or other cognitive impairments was excluded from the study.

The sample size for this investigation was set at 500 participants, which was selected by using a purposive sampling technique. This non-probability sampling method is chosen to ensure that the study captures data from individuals who meet specific criteria and can provide valuable insights into the research questions. The purposive sampling will allow researchers to select participants from diverse backgrounds, socioeconomic statuses, and geographic locations within South Kerala, enhancing the representativeness of the sample.

Data collection was primarily conducted through a structured questionnaire designed to capture various study variables. These variables include patient characteristics such as age, education, and occupation,

as well as specific questions to assess knowledge, attitudes, practices, and beliefs about breast cancer. The questionnaire also includes items to identify barriers to performing BSE.

Data analysis involves both descriptive and inferential statistics. Descriptive statistics is used to summarize the demographic characteristics of the sample and the prevalence of various knowledge levels, attitudes, and practices. Inferential statistics, such as chi-square tests and logistic regression, will be employed to explore relationships between variables and identify factors associated with breast cancer awareness and BSE practices.

An ethical consideration was paramount throughout the study. Informed consent was obtained from all participants, with special attention given to participants between 13 and 18 years of age, ensuring parental consent where necessary. The study protocol was reviewed and approved by the appropriate institutional ethics committee before commencement. Confidentiality of participant information was strictly maintained throughout the data collection, analysis, and reporting processes.

The findings from this methodologically robust study will provide valuable insights into breast cancer awareness and screening practices among women in South Kerala. These results can inform the development of targeted interventions and public health strategies to improve breast cancer early detection and prevention in the region.

STUDY PROCEDURE

This study followed a systematic procedure to ensure rigorous and ethical research. The process began with the careful selection of the research topic, focusing on breast cancer awareness and breast self-examination practices among women in South Kerala. Following topic selection, an extensive review of literature was conducted to establish the current state of knowledge in the field and identify gaps that this study aimed to address. The research team then developed a comprehensive protocol detailing the study methodology, which was presented to relevant academic and medical committees for feedback and refinement.

Once the protocol was finalized, it was submitted to the institutional ethical committee for review and approval. This crucial step ensured that the study adhered to ethical standards and protected the rights and well-being of participants. Upon receiving ethical approval, the data collection phase commenced. This involved administering the structured questionnaire to the 500 selected participants using the purposive sampling technique. The data collection process was carried out over the course of the 6-month study duration, with trained researchers ensuring consistent and accurate data gathering.

Following the completion of data collection, a thorough statistical analysis was performed. This included both descriptive and inferential statistical methods to analyze the quantitative data, as well as thematic analysis for any qualitative data collected. The analysis aimed to uncover patterns, relationships, and significant findings related to breast cancer awareness and BSE practices among the study population.

Finally, the results of the study were compiled, interpreted, and prepared for submission. This involved writing a comprehensive research report detailing the study's findings, limitations, and implications for public health practice and future research. The results were submitted to relevant academic journals and were also presented at conferences to disseminate the findings to the wider scientific community and stakeholders in breast cancer prevention and awareness.

RESULTS

Most women lacked sufficient knowledge: 58.5% of the participants had insufficient knowledge about BSE.

- Negative perceptions of BSE: 78.3% of the respondents held negative perceptions of BSE.
- Inadequate execution of BSE: 90.6% of the respondents showed inadequate execution of BSE.
- The research discovered that self-care and cultural aspects, like shyness and lack of encouragement to talk about breast health, were important indicators of BSE knowledge, attitude, and practice.

Factors that impact knowledge and practice of BSE.

- Taking care of oneself was discovered to positively predict knowledge and attitude towards BSE.
- Cultural influences like shyness and lack of encouragement to talk about breast health were identified as major factors negatively impacting the understanding, mindset, and implementation of BSE.

- Age and years of education were significantly associated with knowledge, attitude, and practice of BSE based on demographic variables.

Breast self-examination (BSE) plays a crucial role in detecting breast cancer early, yet numerous obstacles hinder women from engaging in it consistently.

Here are some typical obstacles:

1. Insufficient knowledge: A lot of women are not familiar with the correct way to do BSE or its advantages.
2. Fear and worry: The dread of discovering a lump or worry about breast cancer can stop women from doing BSE.
3. Issues with body image: Some women feel uneasy or self-conscious about touching their breasts.
4. Cultural and societal obstacles: In certain cultures, breast self-examination might be considered inappropriate or off-limits.
5. Language difficulties: Women who don't speak the primary language of their country might struggle to find information and resources on BSE.
6. Physical challenges: Women with physical disabilities or limited hand mobility might find it hard to carry out BSE.
7. Inadequate healthcare access: Women lacking healthcare access might not get advice on BSE or have the chance to talk to a healthcare professional about their concerns.
8. Age and education: Younger women and those with less education might not do BSE because they are unaware or don't understand its significance.
9. Negative past experiences: Disturbing experiences, like a previous false alarm or an unpleasant medical examination, can discourage women from doing BSE.
10. Time constraints and prioritization: Women with hectic schedules or numerous duties might not make BSE a priority.

By recognizing these barriers, healthcare providers and educators can create specific strategies to encourage breast self-examination and enhance the rate of breast cancer detection among women.

CONCLUSION

Breast self-examination (BSE) is important for detecting breast cancer early, but many obstacles hinder women from engaging in it consistently. These include insufficient knowledge, fear and worry, body image issues, cultural and societal obstacles, language difficulties, physical challenges, inadequate healthcare access, age and education, negative past experiences, and time constraints. Women lacking healthcare access may not get advice or talk to a healthcare professional about their concerns.

The study emphasizes the importance of education and motivation in encouraging BSE among women in India.

REFRENCE

[1] Obikunle AF, Ade-Oshifogun B. Perspectives of African American women about barriers to breast cancer prevention and screening practices: A qualitative study. Afr J Reprod Health. 2022 Jul;26(7):22-28.

[2] Racine L, Andsoy I, Maposa S, Vatanparast H, Fowler-Kerry S. Examination of Breast Cancer Screening Knowledge, Attitudes, and Beliefs among Syrian Refugee Women in a Western Canadian Province. Can J Nurs Res. 2022 Jun;54(2):177-189.

[3] Tan EH, Wong ALA, Tan CC, Wong P, Tan SH, Ang LEY, Lim SE, Chong WQ, Ho J, Lee SC, Tai BC. Beliefs about medicines and adherence in women with breast cancer on adjuvant endocrine therapy. J Health Psychol. 2022 Apr;27(5):1111-1124.

[4] Htay MNN, Dahlui M, Schliemann D, Cardwell CR, Loh SY, Ibrahim Tamin NSB, Somasundaram S, Donnelly M, Su TT. Changing Health Beliefs about Breast Cancer Screening among Women in Multi-Ethnic Malaysia. Int J Environ Res Public Health. 2022 Jan 30;19(3):1618.

[5] Shawahna R, Awawdeh H. Pharmacists' knowledge, attitudes, beliefs, and barriers toward breast cancer health promotion: a cross-sectional study in the Palestinian territories. BMC Health Serv Res. 2021 May 6;21(1):429.

[6] Emami L, Ghahramanian A, Rahmani A, Mirza Aghazadeh A, Onyeka TC, Nabighadim A. Beliefs, fear and awareness of women about breast cancer: Effects on mammography screening practices. Nurs Open. 2021 Mar;8(2):890-899.

[7] Rajendram P, Singh P, Han KT, Utravathy V, Wee HL, Jha A, Thilagaratnam S, Pathadka S. Barriers to breast cancer screening in Singapore: A literature review. Ann Acad Med Singap. 2022 Aug;51(8):493-501.

[8] Momenimovahed Z, Tiznobaik A, Taheri S, Hassanipour S, Salehiniya H. A review of barriers and facilitators to mammography in Asian women. Ecancermedicalscience. 2020 Nov 23;14:1146.
[9] Ngan TT, Jenkins C, Minh HV, Donnelly M, O'Neill C. Breast cancer screening practices among Vietnamese women and factors associated with clinical breast examination uptake. PLoS One. 2022 May 27;17(5):e0269228.
[10] Yambem LC, Rahman H. Knowledge, attitudes, and beliefs about breast cancer and barriers to breast self-examination among Sikkimese women. Indian J Med Paediatr Oncol. 2019; 40:175-81.
[11] Rahman SA, Al-Marzouki A, Otim M, Khalil Khayat NEH, Yousuf R, Rahman P. Awareness about Breast Cancer and Breast Self-Examination among Female Students at the University of Sharjah: A Cross-Sectional Study. Asian Pac J Cancer Prev. 2019 Jun 1;20(6):1901-1908.
[12] Che Mohamed N, Moey SF, Lim BC. Validity and Reliability of Health Belief Model Questionnaire for Promoting Breast Self-examination and Screening Mammogram for Early Cancer Detection. Asian Pac J Cancer Prev. 2019 Sep 1;20(9):2865-2873.