



Women's Awareness and Knowledge of Breast Cancer Risk Factors, Symptoms, and Screening: A Descriptive Cross-Sectional Study

Dr. Puneet Kumar¹, Dr Heena Sharma^{2}*

1. Medical Officer (CHC Kasba Kotla block dadasiba, Kangra), Himachal Pradesh

2. Medical Officer (Patta brawari block dharampur, Solan), Himachal Pradesh

ABSTRACT:

The results of the current study show that female participants' awareness of the numerous risk factors and symptoms of breast cancer is lacking. In order to increase women's knowledge of breast cancer, suitable educational programmes and campaigns based on a national level are required. Knowledge concerning breast self-examination, clinical breast examination, and mammography was also not adequate.

Keywords: Breast cancer, women, awareness

Introduction

Breast cancer stands as the second most prevalent form of cancer globally and ranks as the most frequent cancer affecting women, both across developed and developing nations. Annually, there are approximately 1.38 million fresh cases of breast cancer detected, leading to 458,000 fatalities. This disease's prevalence is notably escalating in India, where an estimated 100,000 new cases are diagnosed yearly. Presently, India bears a striking 17 percent of the world's breast cancer burden. According to recent data from Globocan1, in 2012, India recorded 144,937 new instances of breast cancer, with 70,218 women succumbing to the ailment. This signifies that for every 2 women freshly diagnosed with breast cancer, one tragically loses her life. Comparatively, in the United States, only one in every 5-6 women diagnosed meets the same fate.

It's crucial to recognize that breast cancer transcends economic boundaries. Despite being often associated with affluence, this ailment profoundly impacts low and middle-income countries. In fact, more than half (58%) of breast cancer-related deaths befall women in financially disadvantaged nations, where survival odds can plummet to as low as 20%. The dire situation is exacerbated by fragile healthcare systems, limited access to early diagnosis and treatment, and in many instances, the absence of supportive and palliative care options.

The root causes of breast cancer still remain shrouded in uncertainty, underscoring the paramount importance of early detection. Early identification serves as the linchpin of breast cancer management. Timely detection, combined with appropriate diagnosis and treatment, can significantly enhance the prospects of successful recovery and cure.

Regrettably, breast cancer continues to be entrenched in social stigma within India. An array of misconceptions and misinformation pervades the societal fabric, fostering an unwarranted fear of the ailment. Consequently, a significant portion of patients only seek medical intervention when the disease has progressed considerably. A staggering 70% of cases reach diagnostic and treatment facilities at an advanced stage, contributing to subpar survival rates and elevated mortality figures.

In India, a mere 30% of breast cancer instances are categorized as early-stage, in stark contrast to the 60-70% observed in developed nations. This discrepancy is reflected in the incidence-to-mortality ratio, which stands at 0.48 in India and 0.25 in North America. This alarming gap in outcomes can be attributed to a lack of awareness and the absence of widespread breast cancer screening initiatives in India.

Material and Methodology

From January 2019 to March 2019, a descriptive cross-sectional study was conducted. The study comprised women attendants who participated voluntarily after being briefed about the study's purpose and goals. These women had visited various outpatient and inpatient departments at CHC Dadasiba, Kangra. A total of 50 women consented to join the study. The data collection employed a structured questionnaire developed by the authors, available in both English and Hindi. Written informed consent was obtained prior to participation, and participants were assisted by the authors in filling out the questionnaire, ensuring clarity.

The questionnaire delved into socio-demographic aspects such as age, marital status, residence, education level, occupation, family history of cancer (including breast cancer), and monthly income. It aimed to assess participants' awareness of breast cancer risk factors and symptoms, categorizing their knowledge into four groups: "Excellent," "Very Good," "Good," and "Poor." These groups were determined based on the percentage of correct answers provided. Additionally, the questionnaire aimed to evaluate participants' familiarity with Breast Self-Examination (BSE), Clinical Breast Examination (CBE), and Mammography.

Following the questionnaire completion, an interactive session was conducted, discussing breast cancer risk factors, symptoms, and screening techniques. Informative pamphlets on proper breast self-examination methods were also distributed. Participants with suggestive breast disease signs, symptoms, or an immediate family history of breast carcinoma were excluded from the study.

The collected data from all participants was analyzed with respect to:

1. Awareness and knowledge level regarding various breast cancer risk factors.
2. Awareness and understanding of breast cancer symptoms.
3. Familiarity with Breast Self-Examination, Clinical Breast Examination, and Mammography among participants.

Results

In total, 50 women participated, ranging from 20 to 60 years old, with a mean age of 39.34 years. The largest group (42.5%) fell within the 31-40 years age range, followed by 27.5% aged 41-50 years. Participants aged 20-30 years constituted 22%, while those aged 51-60 years accounted for 7%. A significant majority (90%) were married, with only 10% being unmarried. Among the participants, 52.5% were from urban areas, and 47.5% were from rural regions. In terms of education, 52.5% were illiterate, 5% had primary education, 12.5% had secondary education, 2.5% had attended college, 20% were graduates, and 7.5% held post-graduate degrees. Regarding occupation, 70% were housewives, 17.5% were government employees, 7.5% held private jobs, and 5% were unemployed. About 53% reported a monthly income between 5,000 and 10,000 rupees, while 25% earned 10,000-30,000 rupees, 17% earned 30,000-50,000 rupees, and 5% earned less than 5,000 rupees monthly.

Discussion

Breast cancer stands as the predominant cancer affecting women, with increasing recognition of its severity. It's noteworthy that lung cancer now claims more lives among women in well-developed regions (210,000 deaths), surpassing breast cancer (198,000 deaths). Conversely, in less developed regions, breast cancer retains its tragic prominence (324,000 deaths), trailed by lung (281,000 deaths) and cervix (230,000 deaths) cancers. In light of the substantial mortality attributed to breast cancer, enhancing awareness of its risk factors and symptoms among females is imperative.

This study delved into the awareness of various risk factors and symptoms of breast cancer among women. The results unveiled that a considerable 60% of participants possessed poor knowledge of breast cancer risk factors. This aligns with other research, such as a study by TT Amin et al. which also found limited knowledge of breast cancer risk factors among adult Saudi women. Another investigation conducted by Patel NA et al. in the urban slums of Turbhe, Navi Mumbai, revealed that a staggering 93.1% of participants were unaware of breast cancer risk factors.

Similar patterns emerged in other studies: Parsa et al.'s research on female secondary school teachers in Selangor Malaysia, and Akhibge AO et al.'s study among female health workers in a Nigerian Urban City. These studies highlighted inadequate awareness of breast cancer risk factors among participants. Some risk factors were commonly overlooked, including alcohol consumption, oral contraceptive use, null parity, short breastfeeding duration, personal history of breast cancer, genetic factors, early menarche (<12 years), radiation exposure, age at first birth (>30 years), and late menopause (>54 years).

A similar lack of awareness was evident in Al Dubai SAR et al.'s study on Malaysian women, and Ahmed AS et al.'s investigation among Saudi women. These studies found participants had limited knowledge of risk factors, such as null parity, delivering after 30 years of age, shorter breastfeeding duration, oral contraceptive use, menopause after age 50, and menarche before age 11. Moreover, recognizing breast cancer symptoms is pivotal for early detection and treatment. In this study, 80% of participants were aware that breast lump/thickening could signal breast cancer. Comparable results were observed in Ahmed AS et al.'s and Al Dubai SAR et al.'s studies. However, some studies, such as Patel NA et al. and Sharma PK et al., showed that breast lump recognition was much lower among participants. Breast Self-Examination (BSE) plays a role in increasing breast awareness. In this study, 60% of participants were unfamiliar with BSE, and only 5% practised it regularly. Similar findings were seen in other research by Sharma PK et al. and Patel NA et al. Limited awareness of BSE methods and busy schedules were common reasons for non-performance.

Regarding clinical breast examination (CBE) and mammography, our study found minimal participation, mirroring Sharma PK et al.'s results. Lack of knowledge and awareness were cited as key reasons for non-performance, consistent with another research. Sources of information about breast cancer risk factors varied, including family interactions, television, and healthcare professionals.

Overall, these findings underscore the need for widespread education and awareness campaigns to improve understanding of breast cancer risk factors, symptoms, and screening methods.

References:

-
- [1]. Al-Sharbatti SS, Shaikh RB, Mathew E, Al-Biate MA. Assessment of breast cancer awareness among female university students in Ajman, United Arab Emirates. *Sultan Qaboos Univ Med J*. 2014;14:e522–9.
- [2]. Almutairi KM, Ahmad M, Vinluan JM, Almutairi A. Random cross-sectional determination of the level of awareness among female Saudi patients about breast cancer. *J Cancer Educ*. 2016;31:131–5.
- [3]. Aydogan U, Doganer YC, Kilbas Z, et al. Predictors of knowledge level and awareness towards breast cancer among Turkish females. *Asian Pac J Cancer Prev*. 2015;16:275–82.
- [4]. Bao PP, Wang CF, Xu JY, et al. Survey on knowledge and behavior of early detection for breast cancer among female residents in Shanghai. *Zhong liu fang zhi za zhi*. 2014;21:570–4.
- [5]. Berry DA, Cronin KA, Plevritis SK, et al. Effect of screening and adjuvant therapy on mortality from breast cancer. *N Engl J Med*. 2005;353:1784–92.
- [6]. Boyle P. Breast cancer control: Signs of progress, but more work required. *Breast J*. 2005;14:429–38.