

Breast Cancer Awareness among Women

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Submitted: 09-Aug-2024
Revised: 17-Sep-2024
Accepted: 21-Sep-2024
Published: 02-Jan-2025

ABSTRACT

Breast cancer (BC) is the most common malignancy among women globally, with high mortality rates in India. Early detection of BC significantly increases survival rates and reduces mortality. Raising awareness about BC is crucial for educating the public about screening, symptoms, and treatment to help recognize early signs and seek prompt treatment. This article aims to describe a case of breast primary lymphedema and emphasizes the importance of public awareness regarding risk factors, clinical manifestations, and self-examination for early detection and mortality reduction.

KEYWORDS: Abnormalities, awareness, breast cancer

INTRODUCTION

Breast cancer (BC) is the most common cancer among women, with the majority of cases diagnosed in women over 50, although younger women can also be affected. It has the second-highest mortality rate after lung cancer and is a major public health concern. Low- and middle-income countries have higher incidence and mortality rates than high-income countries.^[1] Early detection is vital for reducing mortality and increasing survival rates. In Western nations, most cases are diagnosed early; in India, about 46% are reported at advanced stages. Low awareness of signs, symptoms, risk factors, and self-examination contributes to late detection in India.^[2] Misconceptions, limited understanding of symptoms, prevention, treatment, social stigma, and structural inequalities further hinder early detection. Addressing these barriers is essential for improving early detection and reducing the mortality rate in India.^[3]

COMMON SYMPTOMS OF BREAST CANCER

Common symptoms include painful or painless hard lumps, immobile or fixed breasts, nipple retraction or abnormalities, nipple discharge, and peau d'orange skin appearance. Symptoms may be detected during routine activities such as showering, dressing, or breastfeeding.

Breast self-examination (BSE) can also help detect symptoms.^[4] Breast edema can vary in severity, with peau d'orange being a notable characteristic. Women with a high genetic risk should undergo a thorough evaluation, including history, risk assessment, and physical examination.^[5] Breast edema involves more than swelling, with other criteria including heaviness, thickening, pain, redness, hyperpigmented pores, and a positive pitting sign. Lymphedema commonly affects extremities after radiation therapy, and primary lymphedema of the breast, a rare condition, has no known risk factors.^[6]

IMPORTANCE OF BREAST SELF-EXAMINATION

BSE is a screening method performed by women at home, crucial for early detection. It is easy, safe, inexpensive, private, and requires no special equipment. Women detect about 80% of BCs not found by mammography. Routine BSE is vital in low- and middle-income countries with limited access to mammography and ultrasonography. Early diagnosis and treatment from early detection lower

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How to cite this article: Rathore SS, Timalisina D, Akulwar A, Mishra VH. Breast cancer awareness among women. J Mid-life Health 2024;15:293-5.

Access this article online	
Quick Response Code: 	Website: https://journals.lww.com/jomh
	DOI: 10.4103/jmh.jmh_144_24

mortality rates.^[7] The study used the Theory of Reasoned Action to encourage BSE among younger women. BSE, along with mammography and physical inspection, is a cost-effective strategy in low- and middle-income settings. Monthly BSE increases the likelihood of early lump detection, linked to better survival and treatment outcomes. Health professionals should promote breast health education, emphasizing cancer threats and BSE benefits.^[8]

LACK OF AWARENESS ABOUT BREAST CANCER

Cancer prevention plays a crucial role in combating the disease. Increased awareness and behavioral changes among women can significantly reduce BC incidence. Many women have low awareness levels, particularly unemployed ones. Negative attitudes and ignorance hinder participation in screening. Mobile phones offer a platform for awareness interventions, though few BC prevention apps have been scientifically tested for effectiveness. High awareness is vital for timely treatment and preventing progression.^[9] Poor education and limited medical access put rural women at risk of late-stage BC. The study focuses on public awareness of risk factors, clinical manifestations, and self-examination for early detection. Education level influences perspectives on BC, emphasizing the need to raise public awareness, especially among women. In India, 19%–34% of female cancer cases are BC, with high mortality due to a lack of awareness and screening programs.^[10]

TREATMENT OF BREAST CANCER

BC treatment involves a multimodal approach, including radiotherapy, chemotherapy, surgery, and endocrine therapy. BC has the highest incidence of female cancers worldwide. Treatment options include surgery, hormonal therapy, chemotherapy, radiation therapy, and immunology-based treatments such as checkpoint blockades and vaccines. Significant progress has been made in chemotherapy over the past decade, with clear survival benefits.^[11] High-dose chemotherapy shows promise but remains exploratory. Older patients can benefit from treatment based on therapeutic standards. Endocrine therapy or single-agent chemotherapy are primary options for low-risk patients, while high-risk patients may need poly-chemotherapies. Surgery remains crucial for removing tumor lesions, with postoperative radiotherapy recommended in most cases. Immediate reconstruction after mastectomy, preserving the nipple, shows no recurrence in certain cases.^[12]

IMPACT OF LIFESTYLE ON BREAST CANCER

Increased body mass index (BMI) is associated with a higher BC risk and mortality. Obesity and cholesterol

impact risk factors, influenced by menopause, disease subtype, and inflammation. Reducing endogenous estrogen is a primary strategy for lowering risk in postmenopausal women. Lifestyle changes can improve health outcomes beyond cancer risk reduction.^[13] Alcohol consumption and high BMI are recognized risk factors linked to diet. Weight gain during adulthood increases BC risk in postmenopausal women. Caloric consumption and restriction can reduce recurrence risk. Lifestyle changes, including diet and physical activity, are common after diagnosis to improve health and prevent recurrence. Birth control pills and estrogen replacement therapy may overstimulate breast tissue, contributing to cancer risk.^[14]

CONCLUSIONS

This study concludes that while general BC awareness is good, knowledge of specific signs and BSE, crucial for early detection and mortality reduction, is low. Effective health education programs are needed to inform women about BC, disseminate reliable information, and encourage early detection through the media. Education is the primary barrier to regular screening and early detection, necessitating efforts to raise awareness and reduce stigma.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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