

Breast cancer and breast self-examination knowledge, attitudes, and practises among women seeking outpatient care in a medical college in central India

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Abstract-

BACKGROUND: Breast cancer is a major cause of female morbidity and mortality. Early breast cancer discovery improves care and reduces complications. Breast self-examination helps discover breast abnormalities in settings with low access to clinical breast examination and mammography. All women in such situations are encouraged to undertake regular breast self-exams, and evidences are mandatory.

MATERIALS AND METHODS: 180 women and their female relatives were identified and enrolled using a random sampling. If a woman has already had a screening mammography or a Breast Cancer, she was disqualified from the trial. A self-administered questionnaire in local language was used to gather the data.

RESULTS: 180 women made up our study population, and their mean age was 37.81 ± 10.9 years. Only 1.67% (3) of the female population had family history of Breast Cancer. A staggering 81% of women had no knowledge about Breast Cancer. All of the women believed that a doctor's clinical breast exam was the sole available method of detecting breast cancer.

CONCLUSIONS: With the findings of this study, we came to the conclusion that health education campaigns must be launched to raise community awareness of breast cancer and its methods of detection. Major policy adjustments need be made in order to expand screening programmes and health education initiatives, which would ultimately reduce the burden of disease.

I. Introduction

Globally, breast cancer (BC) is the most prevalent cancer that affects women. With an expected 2.3 million new cases, or 11.7% of all cancer cases, it will now surpass lung cancer as the most common type of cancer worldwide in 2020[1]. According to epidemiological studies, the number of people with BC worldwide is predicted to reach about 2 million by the year 2030[2]. Between 1965 and 1985 in India, the incidence rose dramatically, by about 50%[3]. In India, there were an estimated 118000 incident cases in 2016 (95% confidence interval: 107000–130000), 98.1% of whom were female, and 526000 prevalent cases (474000 to 574000). From 1990 to 2016, the age-standardised incidence rate of breast cancer in females increased by 39.1% (95% confidence interval, 5.1 to 85.5), and this rise was seen in all 50 states[4]. According to Globocan data for 2020, BC caused 10.6% (90408) of all fatalities and 13.5% (178361) of all cancer cases in India, with a cumulative risk of 2.81[5].

According to recent trends, Indian women experience the disease more frequently and at a younger age than Western women. The National Cancer Registry Program looked for changes in the incidence of cancer between 1988 and 2013 by analysing data from cancer registries. The prevalence of BC has significantly increased over time, according to all population-based cancer registries[6]. In India, the cervix was the most common location of cancer in 1990, followed by BC, according to the registries of Bangalore (23.0% vs. 15.9%), Bhopal (23.2% vs. 21.4%), Chennai (28.9% vs. 17.7%), Delhi (21.6% vs. 20.3%), and Mumbai (24.1% vs. 16.0%). With the exception of the rural Barshi registry (16.9% vs. 36.8%), breast cancer had replaced lung cancer as the most common site of cancer by the years 2000 to 2003. In the case of BC, registrations in Bhopal, Chennai, and Delhi showed a considerable upward trend[7].

When it comes to the 5-year overall survival, a study estimated it to be 95% for stage I patients, 92% for stage II, 70% for stage III and only 21% for stage IV patients[8]. In India, patients with breast cancer have a worse chance of survival compared to Western nations because of the disease's earlier onset, later stage at presentation, delayed start of definitive therapy, and insufficient/fragmented treatment [9].

Early detection and prompt treatment are the most effective interventions for BC management, according to the World Cancer Report 2020[10]. The cost of BC therapy increased with a higher stage of cancer

at diagnosis, according to a 2018 systematic review of 20 researches. As a result, early BC diagnosis can result in less expensive treatment [11].

II. Materials and Methods

In the OPD of our hospital, we carried out a cross-sectional descriptive study with a group of women and their female relatives. At our hospital, all patients who need outpatient care are required to go to a OPD run by the OBGY department. A random selection was used to identify and enroll 180 women and the female relatives of those women. We obtained their informed consent and ensured that their rights to privacy and confidentiality were upheld in order to collect this information. A person was removed from the study if she had a BC or had previously undergone a screening mammogram. A self-administered questionnaire in local language was used to gather the data.

III. Results and observations

180 women made up our study population, and their average age was 45.81 (10.9) years. About 31% of women had never attended a formal educational institution, and another 21% had only completed elementary school. The first child was born when all of the women were married and in their second decade (19.29 3.84 years). 92% of the women had exclusively breastfed their children, and 95% of them were free of addictions. Only 5 (1.38%) of the females [Tables 1] had a family history of BC.

Table 1: Demographic characteristics of study population and awareness regarding breast cancer	
Variables	
Age (years)	
Mean (SD)	45.81 (\pm 10.9)
Education (%)	
None	56(31.11)
Primary school	38(21.11)
Secondary school	68(37.78)
Junior college and above	18(10)
Marital status (%)	180(100)
Married	
No. of children	
Median(range)	3(0-6)
Age at birth of first child (years)	
Mean (SD)	19.70 (\pm 6.02)
Whether breast feeding of children done (%)	
Present	166(92.22)
History of addictions (%)	
Present	8(4.44)
Regarding awareness of breast cancer	
Variables	Percent
Awareness about breast cancer (%)	18.89
Family history of breast cancer	1.38
Source from which participants had information about breast cancer	
Unaware	81.11
Friends and relatives	16.94
Television/radio	0.56
Doctors	0.56
Others	0.83
Examining participants' awareness of breast cancer symptoms (n does not equal 34 because some participants answered more than one item, while others responded none) (%)	
Nipple discharge	1%

Enlargement of one breast	4%
Lump in breast	18.33%
Axillary lump	2.2%
Retraction of breast	2.2%
Arm swelling	1%
Nipple retraction	.45%
Pain in breast	20.56%
Awareness about methods of screening for breast cancer (%)	
BSE	0
Clinical breast examination	98%
Ultrasound	2.2%
Mammography	2.2%

A staggering 81% of women had no knowledge about BC. The remaining 68 people had learned about BC from friends and family (16.94%), radio and television (0.56%), or doctors (0.56%). All of the women believed that a doctor's CBE was the only available method of detecting BC. It was observed that when literacy levels rose, the proportion of women who were aware rose as well, and this was statistically significant ($P > 0.005$). Similar to the previous example, people with higher socioeconomic status (SES) were more knowledgeable of BC than those with lower SES, and this difference was also statistically significant [Table 2]. It was but a surprising revelation that none of the study participants had knowledge about BSE or had previously done BSE.

Variables	Percent	
	Yes	NO
Knowledge about BSE (%)	0	100
Have the study participant done BSE any time in the past? (%)	0	100
Participants thought about chances of getting breast cancer (%)	1	99

IV. Discussion

Eighty-one and a half percent (81.11%) of the study population was unaware of BC, as per our study. People who were knowledgeable were better educated and from higher social classes. None of the study participants were doing BSE or knew anything about it. All of the study's female participants believed that doctors could only diagnose BC through CBE. Only half of the sample population knew about BC, according to Somdatta and Baridalayne[12], and knowledge rose with literacy and SES. This was similar to our research. Women of low SES have been found to have a lower incidence of BC than women of higher SES, but they also have a higher mortality rate because of more late-stage diagnoses.

The same study also revealed that 50% of their sample group believed that doctors could only diagnose BC through a clinical examination. Only two women had ever done BSE, and only 11% of women knew what it was. However, none of them consistently do it. [12] The obstacles that have been shown to lower BC screening rates in underserved women imply that personal and healthcare issues affect screening participation. Lack of information or awareness of cancer screening, embarrassment at engaging in actual screening procedures, a lack of faith in prevention, and fear of disease are examples of personal barriers. Procrastination, social and cultural views, and perceptions of prejudice in the healthcare system are additional personal hurdles that discourage underprivileged women from engaging in screening. [13]

There is no knowledge or awareness of BC early detection methods like BSE. [14,15] It has been proven and advised that mammography screening significantly lowers BC mortality, especially in women over 50. However, this method is expensive and hard to come by, making it challenging to use in resource-constrained India. A case-control study in Canada and a cohort research in Finland[16] both found that BSE was advantageous (reducing BC mortality) at all ages. [17] The effectiveness of routine breast self-examination in reducing BC mortality has recently become the subject of discussion. However, BSE education can encourage women to be aware of any unusual changes in their breasts and to seek medical treatment right once. The population's awareness of health issues and willingness to seek treatment can both benefit from positive health-care behaviour. [18-20]

V. Conclusion

This study found that women know little about BC, its symptoms, or detection methods. BC is one of the leading causes of death globally. BSE reduces morbidity and mortality by detecting BC early. India's BSE knowledge and practise are limited. Community health education programmes must enhance BC awareness and detection methods. Health-care workers and nurses need BSE training. We should reform policy to improve screening and health education programmes, which would reduce illness burden.

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