

## **Reviewer Details:**

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**Breast cancer screening awareness, practice and  
knowledge among women attending **out patient** in tertiary  
care centre**

### **ABSTRACT**

#### **BACKGROUND:**

The second most common cancer in the world among women is breast cancer. The survival rate can be increased by early detection and treatment.

#### **OBJECTIVES:**

To assess the knowledge about breast cancer screening methods among women attending **outpatient setup**.

#### **MATERIALS AND METHODS:**

A semi structured pretested questionnaire was distributed to 200 women attending **outpatient setup**. The questionnaire contained information of their demographic details, questions about knowledge on symptoms, risk factors, screening methods and management outcomes of breast cancer.

#### **RESULTS:**

The most marked result is that 71.5% women were aware of the fact that mammography detects breast cancer in early stages. A fair percentage of 68.3% women agreed that breast cancer is the second most common cancer among women.

#### **CONCLUSION:**

Awareness about breast cancer screening methods and treatment would enhance early detection and reduces the mortality rate.

**KEYWORDS:** breast cancer, breast self-examination, mammography, cancer screening

## **INTRODUCTION:**

The most frequent and second most common cancer in the world among women is breast cancer with a newer diagnosed cases of 1.67 million which constitutes 25% of all cancers<sup>[1]</sup>. In both developed and undeveloped regions breast cancer stands as the most common disease<sup>[1]</sup>. Symptomatic breast cancer with delayed presentation, have lower survival rates whereas a population of 20-30% women would wait for a period of three months before visiting a clinic<sup>[2][3]</sup>. Earlier diagnosis, breast screening and improved treatment methods have caused a decline in deaths due to breast cancer<sup>[4]</sup>. The most effective screening tool for breast cancer is mammography. Mammography reduces the mortality due to breast cancer in women of age group 50 – 74 years nonetheless of number of mammography done per year and the screening interval stated by results from clinical trials and case control studies<sup>[5]</sup>. Other screening methods include breast self-examination and clinical examination<sup>[6]</sup>. Number of studies have been conducted worldwide to assess the knowledge of women about breast cancer screening methods<sup>[7]</sup>. The aim of the study is to evaluate the knowledge about breast cancer screening methods and conduct educational health programmes in order to improve their understanding and knowledge about breast cancer.

## **METHODOLOGY:**

**STUDY DESIGN:** cross sectional study

**SAMPLING METHOD:** random sampling

**SAMPLE SIZE:** A number of 200 women attending outpatient department.

**STUDY SETTING AND POPULATION:** the study was conducted among women attending outpatient setup in Saveetha Medical College, Kancheepuram, Tamil Nadu, India, during the period of 15<sup>th</sup> February to 15<sup>th</sup> march, 2021. A total of 200 women were selected and study was conducted by getting informed consent from them.

**INCLUSION CRITERIA:** all women attending outpatient setup in the age group of 30-80 years.

**EXCLUSION CRITERIA:** women who are not willing to participate in the study.

**STUDY TOOL:** semi structured pretested questionnaire.

Informed consent was obtained from the participants before initiating the study. The questionnaire was distributed to women attending outpatient setup and collected immediately. The questionnaire contained information of their demographic details, questions about knowledge on symptoms, risk factors, screening methods and management outcomes of breast cancer. The proposal for the study submitted to the institution ethics committee and approval was obtained.

## **RESULTS:**

The responses were obtained from 200 women who belong to age between 30-80 years. Majority of participants fall in 4<sup>th</sup> decade followed by 5<sup>th</sup>, 6<sup>th</sup>, 3<sup>rd</sup> and 7<sup>th</sup> decades. Of 200 women surveyed, 63.1% were unemployed and 36.9% were employed. About 40.7% women surveyed have completed primary school at least. A larger number of women (60.1%) under study were from rural area and 39.9% were from urban areas.

A percentage of 68.3% women have agreed that breast cancer is the second most common cancer among women and a majority of 61.3 % have said that there is increase in incidence of death in breast cancer. 84.1% of women were conscious about bloody nipple discharge as an abnormal symptom and 72% of women were aware of presence of lump has an association with breast cancer. Knowledge about risk factors of breast cancer were summarised and tabulated in table 1.

**Table 1: knowledge about risk factors of breast cancer**

S. no	Risk factors	No. of participants with positive response N = 200	percentage
1	Has a correlation with age	83	41.5
2	Has a correlation with obesity	22	11
3	With a family history of breast cancer	64	32
4	With a previous history of contralateral breast cancer	31	15.5

In regard to awareness about the screening methods, 53.2%, 54.6%, 78.7% have chosen self-breast examination, clinical breast examination and mammography as screening procedures for breast cancer respectively. Knowledge about breast cancer screening methods were tabulated below in table 2.

**Table 2: knowledge about breast cancer screening methods**

S.No	Items	No. of participants with positive response N = 200	percentage
1	Mammography as screening method		
	Sufficient	76	38
	Partially sufficient	49	24.5
	In sufficient	23	11.5
	No idea	51	25.5
2	Mammography detects breast cancer in early stages	143	71.5

3	Mammography should be conducted with regular intervals in healthy women	104	52
4	Energy used in mammography has likely an increased future risk of developing breast cancer	97	48.5
5	Mammography should be done with a specific age limit	146	73
6	Most suitable age group for mammography is 35-45	89	44.5
7	USG is used as a screening tool in younger age group	127	63.5
8	The energy used in USG increases the future risk of breast cancer	81	40.5

A small number of 32.4% of women have done breast self-examination and a good number of 67.3% have done mammography already. 36.4% have done mammography without doctor's advice and without any complaints. Table 3 shows their source of knowledge about breast cancer screening methods.

**Table 3: source of knowledge about breast cancer screening methods**

S.No	Source of knowledge	No. of responses N = 200	percentage
1	Doctors and practitioners	127	63.5
2	Media	109	54.5
3	Newspaper	42	21
4	Friends and neighbours	68	34
5	Others	17	8.5

### **DISCUSSION:**

Breast cancer awareness would create early detection, diagnosis and reducing the stage potentially improves the chances for survival and also makes the treatment more sensible. Among the three breast cancer screening methods such as BSE, CBE and mammography, the last one is found to be the most effectual one<sup>[8-11]</sup>.

On considering the knowledge about risk factors of breast cancer, 41.5%, 11%, 32% and 15.5% of study population have given correct response on positive correlation with age, obesity, family history of breast cancer and previous history of contralateral breast cancer respectively. These values are comparatively lower than the results from a study conducted by Aylin YUCEL et al.,<sup>[12]</sup>

About 38% of women have said that mammography is a sufficient screening which is relatively lower than the study conducted by Aylin YUCEL et al., in which it is of 21.5%. A reasonable number of participants have proposed that mammography detects breast cancer in early stages which is more or less correlates with the study done by Aylin YUCEL et al.,

Awareness about interval period and age limit for mammography is grossly in lower number than comparing the results by Aylin YUCEL et al., On the other hand majority of people have a belief that energy used in mammography increases the future risk of breast cancer. In the current study on focusing USG 63.5% of women have agreed that it is a helpful screening method in younger age group which is relatively higher than results given by Aylin YUCEL et al., also 40.5% women have mentioned that energy used in USG increases the future risk of breast cancer <sup>[12]</sup>.

Mammography practice was 10.5% in Parsa et al., and 19% in KC Kanaga et al., which is comparably much lower than the current study which is 67.3% <sup>[13]</sup><sup>[7]</sup>. Concerning about symptoms of breast cancer 84.1% and 72% have identified that bloody nipple discharge and presence of lump have an association with breast cancer respectively which almost corresponds to the outcomes of KC Kanaga et al., <sup>[7]</sup>

In our study most of the participants came to know about screening methods for breast cancer through doctors, practitioners and media which more or less coincides with Aylin YUCEL et al., <sup>[12]</sup>

### **CONCLUSION:**

The desire to learn, discuss and spread knowledge about breast cancer among family and friends can be encouraged by educational programmes which in order increases the screening practice and also results in early detection and reduction in mortality rate from breast cancer. Awareness can be created not only through educational programmes but also through media such as radio, television, newspaper, pamphlets and plays. With increased prevalence of screening methods, most of the breast cancer cases can be diagnosed in early stages and can be treated effectively.

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