KNOWLEDGE REGARDING BREAST CANCER AND BREAST SELF EXAMINATION AMONG FEMALES

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ABSTRACT

Background: Breast cancer is one of the most frequent cancers among the women. It can be detected earlier and survival rate can be improved by screening every year. Breast Self-Examination (BSE) is the one of the best methods for identifying breast cancer. Rural population has less access to medical facilities and their knowledge is low. Therefore, it is essential to educate them about breast cancer, its prevention and early detection. This study was aimed to assess the knowledge level of females regarding breast cancer and breast self-examination. **Materials & Methods:** Non experimental descriptive design was adopted for this study. 80 samples were selected through non probability sampling technique and the setting of the study was a rural community of Idukki district, Kerala. A structured knowledge questionnaire was used for data collection. Descriptive and inferential statistics were used to analyse the data. **Results:** Majority, 57.5% of samples were having an average level of knowledge, 27.5% of samples had good level of knowledge and 8.7% of samples had poor knowledge and 7.5% was found having excellent level of knowledge. A significant association was observed between the knowledge and education ($X^2=14.061$, $P 0.05=12.54$), knowledge and income ($X^2=14.42$, $P 0.05=12.59$) of women. But there was no association found between knowledge and other demographic variables.

Key Words: Breast Cancer, Breast Self-Examination, Knowledge, Booklet.

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INTRODUCTION

Women are the masterpiece creation of God and they pose high self-confidence as long as they are physically fit and healthy. They are dragged down by many illnesses; especially the ones that shatter their femininity. Breast cancer is one of such events. It is the most common cancer among women. Increased fat intake, reduced exercise, obesity and reduced duration of breast feeding are some of the major casual factors. It attacks the women during the most productive years of life, but breast cancer can be cured with limited resources, if detected earlier; but treating advanced stage disease is expensive and outcome is often poor. The most important strategy for achieving early detection of breast cancer is mammography and physical examination of breast by a physician or a qualified health worker or clinical breast examination (CBE) and breast self-examination (BSE).

BSE is a process whereby women examine their breast regularly to detect any abnormal swelling or lumps in order to seek prompt medical attention. It is the best way to note any changes in the breast, such as lumps or thickenings. Awareness on how to perform, when to perform and perceiving BSE are important and useful to detect breast cancer. Non-cancerous breast tumors are also abnormal growths, but it can increase the risk of getting breast cancer. Therefore, breast self-examination (BSE) itself helps to diagnose breast cancer very early.

Evidence suggests that if the examination is done properly and regularly, it may help to detect breast cancer early. It is an inexpensive risk-zero method of screening. It is used in an attempt to detect cancer and can be done at home. Even pregnant women can check their breast on monthly basis but women of all ages are encouraged to perform breast self-examination at least monthly and to report to health care providers about the changes, immediately.

NEED FOR THE STUDY

Breast problems are significant health problems concerning women. It is the second most frequently occurring cancer and the fifth most cause of cancer related mortality. According to WHO (2021), there were 2.3 million women diagnosed with breast cancer and 685 000 deaths globally in 2020. One in eight women develops cancer in her lifetime. Every 3 minutes, a woman is diagnosed with breast cancer and every 13 minute a woman dies.

According to NBCC 2021, it is estimated that 43,600 women and 530 men will die of breast cancer in the US only. In India as per GLOBOCAN 2018 data, there were approximately 162,468 new cases and 87,090 deaths occurring annually due to breast cancer. Out of all cancers, breast cancer only was responsible for 1.5 lakh cases (10%) of cancer in India by 2016. Breast cancer is the most common malignancy among the women in Kerala; it is about 30 to 35%. According to the data available with the Thiruvananthapuram Cancer Registry, the prevalence rate in rural areas is 19.8 per 100,000, while in the urban areas, it is 30.5 per 100,000. According to the GBD report published in 2016, the burden of cancer in Kerala is 135.3/100,000 of population in contrast to the national average of 100/100,000 of population. The prevalence of any warning sign among the study population was 400/100,000 of population.

Approximately, 7% of women with breast cancer are diagnosed before the age of 40 years, and it is accounted for more than 40% of all cancer in women in this age group. Survival rates at this age group are worse when compared to older women. So, breast cancer in 'less than 40 age group' is also significant. So, a study regarding the knowledge about breast cancer and breast self-examination among females is significant. It may prevent the chance of its incidence in the future as well as reduce the occurrence rate.

STATEMENT OF THE PROBLEM

'A study to assess the knowledge regarding breast cancer and breast self-examination among females within a selected community of Idukki district in Kerala with a view to prepare an information booklet'

OBJECTIVES

1. To assess the level of knowledge of females regarding breast cancer and breast self-examination.
2. To determine the relationship of knowledge level of females about breast cancer and breast self-examination with their demographic variables.

- Develop and provide an information booklet based on the level of knowledge regarding breast cancer and breast self-examination.

RESEARCH METHODOLOGY

- Research Design:** Non experimental descriptive design was used.
- Research Approach:** In this study, a quantitative research approach was considered.
- Setting:** The present study was conducted at Kozhimala, a rural community of Idukki district of Kerala.
- Sample size:** 80 females within the age group of 35-55 years were selected.
- Sampling technique:** In this study, non-probability purposive sampling technique was used.
- Data collection tool:**

Part I: Demographic data which consists of age, education, income, family history, parity and marital status.

Part II: It consists of 25 items of multiple-choice questions to assess the knowledge level of females regarding breast cancer and breast self-examination

- Data analysis:** For data analysis, descriptive and inferential statistics were used

RESULTS

Section A: It deals with distribution of samples according to demographic variables

Table – 1: Frequency distribution of samples according to demographic variables

N = 80

Variables		f	%
Age	35 – 40 yrs.	29	36.25
	41 – 45 yrs.	18	22.50
	46 – 50 yrs.	23	28.75
	51 – 55 yrs.	10	12.50
Education	Primary	0	0
	Secondary	36	45.00
	University	44	55.00
Income (in Rupees)	Low (<10,000)	73	91.26
	Middle (10,000-30,000)	6	7.50
	High (>30,000)	1	1.20
Family History	Yes	0	0
	No	80	100.00
Parity	Nulliparous	1	1.25
	Multiparous	79	98.75
Marital Status	Single	1	1.25
	Married	79	98.75

Section – B: Distribution of samples according to knowledge level.**Table – 2:** Frequency distribution of sample according to their level of knowledge

N = 80

Knowledge Level	Score	Score in percentage	Frequency	Percentage
Excellent	20-25	81 - 100	6	7.5
Good	15-19	61 - 80	22	27.5
Average	10-14	41 - 60	46	57.5
Poor	≤ 10	≤ 40	6	8.7

Maximum score = 25

Figure – 1: Pie diagram representing distribution of sample according to knowledge level

Table – 2 and pie diagram in Figure - 1 represent that 7.5% sample had excellent knowledge, 27.5% had good knowledge 57.5% had average knowledge and 8.7% had poor knowledge regarding breast cancer and breast self-examination.

Section – C: Association between knowledge level of females and their selected demographic variables.**Table – 3:** Association of level of knowledge and demographic variables

N = 80

Sl. No.	Variables	Chi-square	P value
1.	Age	7.0664	16.95
2.	Education	14.0610	12.54*
3.	Family income	14.4200	12.59*
4.	Family history	8.0340	9.49
5.	Parity	1.9800	7.85
6.	Marital status	2.1000	3.84

P < 0.05

* Significant

DISCUSSION

Part - I: Distribution of samples based on demographic data

Demographic variables selected for this study were age, education, family income, family history, parity and marital status. 36.25% of samples belonged to 35-40 age group. More than half of them (55%) had education at university level. 91.25% belonged to low-income group. None of the samples had family history of breast cancer. Majority of the samples (98.75%) were married and multiparous. Some of these findings were consistent with another study wherein results showed that 38% of study population belonged to 31-40 age group, 44% were from lower middle class, majority of samples (80%) were married and only few (7%) had breast cancer in family history whereas educational status was contradicting with the present study result which showed that 30% had primary education (**Rakesh Singh, Alka Turuk (2017)**). Another study was conducted in Himachal Pradesh and the result there revealed that maximum women 42.5% were in the age group of 41- 50 years, 37.5% women were graduates, and the maximum number (87.5%) of women was married, 82.5% of women had no history of breast cancer in family. **Neha Kaushal et al (2017)**. This is congruent with the present study.

Part II: level of knowledge on breast cancer and breast self-examination

A cross-sectional study was carried out by **Abdullah Nasser Alomair et al, (2020)** among 422 female students at KSU. The study showed that the majority of participants, (57.4%) had a moderate level of knowledge of breast cancer. Which is similar to present study result and it showed that 57.5% had average knowledge, 27.5% had good knowledge, 7.5% had excellent knowledge and 8.7% had poor knowledge regarding breast cancer and breast self-examination. Another study which was conducted in Punjab among adolescent girls revealed that 45% of adolescent girls had average knowledge and 45% of them had poor knowledge and only a few (10%) adolescent girls had good knowledge regarding breast Cancer (**Amandeep Kaur 2019**). In a cross-sectional study conducted to assess the knowledge and attitude towards breast cancer among 414 nurses in hospital in Asmara, the result showed that 48.88% had a good knowledge regarding breast cancer and 32% knew at least one sign and symptom of breast cancer. (**Amanuel Kidane Andegiorgish et al 2018**)

Part III: Association between level of knowledge and demographic variables

The present study showed that there was significant association of knowledge with the selected demographic variables like education and income. However, other variables had no association. The above Punjab study also showed that there were significant relationships between knowledge and age, type of family, family's monthly income and source of health information ($p < 0.05$).

CONCLUSION

The present study was conducted to assess the knowledge regarding breast cancer and breast self-examination among females. Results revealed that majority of the samples (57.5%) had average knowledge about breast cancer and BSE and only few (7.5%) of them had excellent knowledge. It shows still there is a gap in information related to early detection and management about breast cancer. This indicates the importance of conducting a training programme to increase the level of awareness among the common people. So, the researcher developed an informational booklet regarding breast cancer and BSE.

LIMITATIONS AND RECOMMENDATIONS

- Since the sample was limited to 80, generalisation of findings was also limited
- A structured teaching programme could have been devised to improve their knowledge about breast cancer and BSE
- Health awareness programme can be performed in community setting
- Periodic training regarding BSE can be arranged in clinical settings especially in Gynaecology departments
- Mass media can play an important role for spreading information about breast cancer and BSE to improve awareness in the community.

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