



# A STUDY ON BREAST CANCER AWARENESS, KNOWLEDGE ABOUT TREATMENT MODALITIES AMONG FEMALE PATIENTS IN MEDICAL COLLEGE AND HOSPITALS

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## ABSTRACT

Breast cancer is the most common female cancer worldwide including India, where advanced stages at diagnosis, and rising incidence and mortality rates, make it essential to understand cancer literacy in women. We conducted a literature review to evaluate the awareness levels of risk factors for breast cancer among Indian women and health professionals. To assess the knowledge about the symptoms for early detection of breast cancer and its outcome, about the investigations for diagnosing and knowledge about the treatment modalities for breast cancer among female patients. The knowledge of symptoms and risk factors might be the reason for the delayed presentation in breast cancer in developing countries. However, in developed nations where there is a diminution in mortality secondary to early detection and improved treatment modalities. Thus, more educational programs could be designed to provide comprehensive information of breast cancer and BSE to improve women's knowledge and awareness which can help in the early detection and reporting of breast cancer for the better treatment.

**Keywords:-** Awareness, Knowledge, Breast Cancer, Investigations, Treatment

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## INTRODUCTION

Breast cancer is the most common female cancer worldwide representing nearly a quarter (23%) of all cancers in women. The global burden of breast cancer is expected to cross 2 million by the year 2030, with growing proportions from developing countries [1-2].

Breast cancer accounts for 19-34 % of all cancer cases among women in India. There is a high mortality due to late stage diagnosis as patients usually present at an advanced stage because of late lack of awareness and non-existent breast cancer screening programs. There is a need for awareness for women about breast cancer, propagation of correct messages and promote early detection of breast cancer [3-4]

Our aim is to assess the awareness among female patients about breast cancer who are attending Srinivas Institute of Medical Sciences and Research Centre, Mangaluru, OPD.

To assess the knowledge about the symptoms for early detection of breast cancer and its outcome, To assess the knowledge about the investigations for diagnosing breast cancer among female patients in Srinivas Institute of Medical Sciences and Research Centre, Mangaluru, To assess the knowledge about the treatment modalities for breast cancer among female patients in Srinivas Institute of Medical Sciences and Research Centre, Mangaluru.

## Material and Methods

The present study is Descriptive cross-sectional study, Hospital based setting.

**Sample Size:** 1000 cases

## Study Population:

The study population was women attending Srinivas Institute of Medical Sciences and Research Centre, Mangaluru, OPD above the age of 18 yrs.

Researchers developed questionnaire consisting of nineteen (19) items were used. The questionnaire was divided into four (4) sections. Section one contains demographic information of the respondents while

section two contains information on the knowledge about the symptoms for early detection of breast cancer and its outcome, section three contains information on the respondents knowledge about investigations for breast cancer, section four contains knowledge about treatment modalities.

Data for the study were collected using self-designed structured questionnaire. The instrument was tested for validity and reliability by an expert in the field and all corrections were corrected before final usage. It consisted of closed and open ended questions that were used to collect data that would meet objectives of the study. The questionnaire was distributed to all respondents, same was interpreted to those who were non literate, and all questionnaires were retrieved from the respondents. The questionnaire has four sections.

Approval for the study was obtained from the ethical committee of, Also, informed consent was obtained from each respondent and they were assured of their confidentiality and anonymity of the information provided.

Table 2 shows the mean and standard deviations of females according to their age. The highest mean and standard deviation comes from above 45 years of females ( $55.158 \pm 7.549$ ).

Table 3 shows the mean and standard deviations of females according to their literacy. The highest mean and standard deviation comes from literate females ( $29.6878 \pm 12.3409$ ).

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Table 4 shows the mean percentage of awareness among females about breast cancer according to their age. It shows that females aged between 26 to 35 has highest knowledge about awareness (53.763).

Table 5 shows mean percentage of awareness among females about breast cancer according to their literacy. It shows that literate females have highest knowledge (53.144) when comparing to illiterate females (49.401).

Table 6 shows the mean percentage of knowledge about symptoms among females about breast cancer according to their age. It shows that females aged between 35 to 45 have highest knowledge about awareness (55.068).

**Table I: Demographic data of respondents**

AGE [years]	FREQUENCY	PERCENTAGE (%)
18-25	538	51.53
26-35	215	20.59
35-45	171	16.38
Above 45	120	11.49
Overall	1044	100.00
<b>Literacy</b>	<b>Frequency</b>	<b>Percentage</b>
Literate	1006	96.36
Illiterate	38	3.64
<b>RELIGION</b>	<b>Frequency</b>	<b>Percentage</b>
Hindu	758	72.60
Muslim	175	16.76
Christian	201	19.25
Others	15	1.43
<b>OCCUPATION</b>	<b>Frequency</b>	<b>Percentage</b>
Farming	258	24.71
Housewife	647	61.97
Students	39	3.73
Hospital workers	45	4.31
Others	55	3.35

Table 7 shows mean percentage of knowledge about symptoms among females about breast cancer according to their literacy. It shows that literate females have highest knowledge (53.777) when comparing to illiterate females (50.438).

Table 8 shows the mean percentage of knowledge about the investigations for diagnosing among females about breast cancer according to their age. It shows that females aged between 26 to 35 have highest knowledge about awareness (51.4883).

Table 9 shows mean percentage of knowledge about the investigations for diagnosing among females about breast cancer according to their literacy. It shows

that illiterate females have highest knowledge (51.842) when comparing to literate females (49.95).

Table 10 shows the mean percentage of knowledge about treatment modalities among females about breast cancer according to their age. It shows that females aged between 35 to 45 have highest knowledge about awareness (51.0233).

Table 11 shows mean percentage of knowledge about treatment modalities among females about breast cancer according to their literacy. It shows that literate females have highest knowledge (53.289) when comparing to illiterate females (49.676).

**Table 2: Awareness among females about breast cancer according to their age**

Sl.No	Age	Mean age $\pm$ SD	Mean score $\pm$ SD
1	18-25	20.226 $\pm$ 2.8929	11.594 $\pm$ 2.31731
2	26-35	31.065 $\pm$ 3.21	11.827 $\pm$ 2.3607
3	35-45	39.672 $\pm$ 2.4297	11.7193 $\pm$ 2.418
2	Above 45	55.158 $\pm$ 7.549	11.5833 $\pm$ 2.4065
5	Overall	29.659 $\pm$ 12.30589	10.691 $\pm$ 2.3356

**Table 3: Awareness among females about breast cancer according to their literacy**

Sl.No	Literacy	Mean age $\pm$ SD	Mean score $\pm$ SD
1	Literate	29.6878 $\pm$ 12.3409	11.961 $\pm$ 2.3356
2	Illiterate	28.894 $\pm$ 11.465	10.868 $\pm$ 2.6627

**Table 4: Mean percentage of awareness among females about breast cancer according to their age**

Sl.No	Age	Mean score	Standard Deviation	Mean percentage
1	18-25	11.594	2.31731	52.703
2	26-35	11.827	2.3607	53.763
3	35-45	11.7193	2.418	53.269
4	Above 45	11.5833	2.4065	52.65
5	Overall	10.691	2.3356	48.59

**Table 5: Mean percentage of awareness among females about breast cancer according to their literacy**

Sl.No	Age	Mean score	Standard Deviation	Mean percentage
1	Literate	11.961	2.3356	53.144
2	Illiterate	10.868	2.6627	49.401

**Table 6: Knowledge about symptoms among females about breast cancer according to their age**

Sl.No	Age	Mean score	Standard Deviation	Mean percentage
1	18-25	3.172	1.2043	52.88
2	26-35	3.265	1.2033	54.41
3	35-45	3.3040	1.2929	55.068
2	Above 45	3.225	1.141	53.75
5	Overall	3.0576	1.2405	50.9609

**Table 7: Knowledge about symptoms among females about breast cancer according to their literacy**

Sl.No	Age	Mean score	Standard Deviation	Mean percentage
1	Literate	3.22664	1.2046	53.777
2	Illiterate	3.0263	1.3849	50.438

**Table 8: Knowledge about the investigations for diagnosing among females about breast cancer according to their age**

Sl.No	Age	Mean score	Standard Deviation	Mean percentage
1	18-25	4.9572	1.6	49.572
2	26-35	5.1488	1.55166	51.4883
3	35-45	4.871	1.547	48.713
2	Above 45	5.125	1.678	51.25
5	Overall	4.964	1.5993	49.642

**Table 9: Knowledge about the investigations for diagnosing among females about breast cancer according to their literacy**

Sl. No	Age	Mean score	Standard Deviation	Mean percentage
1	Literate	4.995	1.585	49.95
2	Illiterate	5.184	1.783	51.842

**Table 10: Knowledge about treatment modalities among females about breast cancer according to their age**

Sl. No	Age	Mean score	Standard Deviation	Mean percentage
1	18-25	2.007	0.9953	50.185
2	26-35	1.981	0.985	49.534
3	35-45	2.0409	0.941	51.0233
2	Above 45	1.875	1.0576	46.875
5	Overall	1.987	0.9919	49.676

**Table 11: Knowledge about treatment modalities among females about breast cancer according to their literacy**

Sl. No	Age	Mean score	Standard Deviation	Mean percentage
1	Literate	2.1315	0.9919	53.289
2	Illiterate	1.987	0.99107	49.676

## DISCUSSION

Breast cancer is the most common malignancy affecting women, with more than one million cases occurring worldwide annually. In India, it is the second commonest cancer among females. Though it can be detected early by self and clinical breast examination or mammography, in our country only 15% patients present in the localized stage; in 75% regional lymph nodes are already involved while 10% have distant spread at the time of reporting<sup>(1)</sup>. This is due to lack of awareness and nonexistent breast cancer screening programmes. Early detection and prompt treatment offer the greatest chance of long term survival and breast self-examination (BSE) seems to be an important viable optional substitute for early detection of cancer [2-10]. The study was carried out to find out the awareness among female patients about breast cancer who are attending Srinivas Institute of Medical Sciences and Research Centre, Mangaluru, OPD, findings from this study however revealed that majority of women had insufficient knowledge about breast cancer. These findings were similar to those of these studies of other Asian countries showing below average awareness about the existence of breast cancer and their symptoms.

Our findings confirmed the previous reports [8, 13-15] that the deficit in the knowledge of symptoms and risk factors might be the reason for the delayed presentation in breast cancer in developing countries. However, in developed nations where there is a diminution in mortality secondary to early detection and improved treatment modalities [16-22], delayed presentation remains a problem for older women as seen in British, American and Australian women

It is also noteworthy that illiterate women lack sufficient knowledge on risk factors and management of breast cancer.

## CONCLUSION

In our sample all 1044 females are above 18 years old. Their overall mean percentage score is 48.59. This level of knowledge about breast cancer is not enough to declare that the females have adequate knowledge about breast cancer. So by interpreting the result we found that the females in our sample didn't have adequate knowledge about breast cancer awareness. Thus, more educational programs could be designed to provide comprehensive information of breast cancer and BSE to improve women's knowledge and awareness

which can help in the early detection and reporting of breast cancer for the better treatment.

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