

# Study to Assess the Knowledge and Attitude about Breast Cancer and Breast Self Examination among Women of 20-50 Years of Age in a Selected Hospital of Haryana

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**Abstract:** ***Aim:** A study was conducted in a selected hospital of Haryana to assess the knowledge and attitude about Breast Cancer and Breast Self Examination among women of 20-50 years of age and to determine the correlation between knowledge and attitude of women. **Methodology:** Survey approach and descriptive research design was used to conduct the present study. Purposive sampling technique was used to select the sample size of 100 women (20-50 years of age). Knowledge of study sample were assessed through self-administered questionnaire while Likert's scale was used to assess the attitude of sample. **Results:** The research findings depict that the maximum women (48%) had poor, 46% had average and 6% had minimum knowledge regarding Breast cancer and breast self examination. It also indicates that more than half (55%) had favorable attitude and 38% had less favorable attitude and only 1% has more favorable attitude. Data shows that the coefficient of correlation between knowledge score and attitude score is 0.5 (+ correlation). **Conclusion:** The study showed that maximum women had inadequate knowledge regarding Breast cancer and Breast self examination so the nurses are in key position to educate the women to bring down the rate of breast cancer among women.*

**Keywords:** Attitude, breast cancer, breast self examination, knowledge, women

## 1. Introduction

Breast cancer is an uncontrolled growth of cells in breast. Breast cancer occurs as a result of mutations or abnormal changes in the genes responsible for the growth of cells and keeping them healthy<sup>1</sup>. Usually breast cancer either begins in the cells of the lobules which are the milk producing glands or the ducts, the passages that drain milk from the lobules to the nipple<sup>2</sup>.

Breast cancer is a global health issue and a leading cause of death among women internationally<sup>3</sup>. In India, it accounts for the second most common cancer in women. Around 80,000 cases are estimated to occur annually. The age-standardized incidence rate of breast cancer among Indian women is 22.9 and the mortality rate is 11.19<sup>4</sup>. In the present scenario, roughly 1 in 26 women are expected to be diagnosed with breast cancer in their lifetime<sup>5</sup>.

Breast cancer is distinguished from other types of cancer by the fact that it occurs in a visible organ and be detected and treated at an early stage<sup>6</sup>. The 5-year survival rate reached to 85% with early detection whereas later detection decreased the survival rate to 56%<sup>7</sup>. The low survival rates in less developed countries can be attributed to the lack of early detection as well as inadequate diagnosis and treatment facilities.

Breast Self Examination (BSE) is one important step for identifying breast tumor at an early stage. BSE is a process whereby the women examine their breast regularly to detect any swelling or lumps in order to seek prompt medical attention.

Early detection of Breast cancer and early treatment increases the chance of survival. According to Breast Health Global Initiative guidelines for low and middle income countries, diagnosing BCs early by promoting breast self-awareness, clinical breast examination (CBE) and resource adapted mammographic screening will reduce Breast cancer mortality<sup>8</sup>.

An editorial stated that by 2020, there would be 200 percent rise in incidence of Breast Cancer in India. Between the ages of 40-50 years, it is the most common single cause of death in women. Even we are entering in a new millennium, 70-80% of the Breast Cancer patients in India are presented in stages 3<sup>rd</sup> and 4<sup>th</sup> in contrast to 80-90% as early cancers in the developed countries.

Studies from developed countries showed that attitude and orientation of healthcare providers are important determinants of use of breast-screening programs<sup>9</sup>. Promotion of public health measures also requires that both health-care workers and general public have appropriate knowledge, attitude and beliefs concerning the behavior being promoted<sup>10</sup>. Thus, increasing comprehensive knowledge and awareness of breast cancer could facilitate breast self-examination (BSE) and mammography screening.

## 2. Literature Survey

A study conducted in Madras to determine the risk factors for female Breast Cancer showed that Nulliparous women have a 2.2 fold higher risk than parous women. It has been found that the late age at marriage (30 years and above) and late age at first pregnancy (30 years and above) showed excess risks of 2.5 and 5.4 compared with women married at

the age of 14 years and age at first pregnancy of  $\leq 14$  years<sup>11</sup>.

Delayed presentation of symptomatic breast cancer for 3 months or more from the first detection to the time of diagnosis and treatment has been associated with increased tumor size and poor long-term survival<sup>12</sup>. In developing countries, it is suggested that negative socio-cultural perception of breast cancer, strong beliefs in traditional medicine and perhaps strong religious beliefs are the main reasons for the delay in presentation<sup>13</sup>.

A cross sectional study conducted to assess and compare the knowledge and perception of Breast Cancer among women of various ethnic groups in Penang concluded that women have serious knowledge deficits about Breast Cancer and poor awareness of Breast Self Examination and Clinical Breast Examination guidelines and has highlighted the need of an intensive Breast Cancer awareness campaign which should also stress the importance of early detection and reporting of Breast Cancer<sup>14</sup>.

A study carried out to determine the relationship between social support and the frequency and accuracy of BSE practice of women of 55 years and older having routine examinations at gynaecologic clinic. It concluded that planners of nursing intervention for BSE should consider healthcare providers as important resources in social support networks for the reinforcement of frequency and accuracy of BSE for older women<sup>15</sup>.

Even though BSE is a simple, quick, and cost-free procedure, the practice of BSE is low and varies in different countries; like in England, only 54% of the study population practised BSE<sup>16</sup>. Furthermore, in Nigeria, the practice of BSE ranged from 19% to 43.2%, and in India, it varied from 0 to 52%<sup>17</sup>. Several reasons like lack of time, lack of self-confidence in their ability to perform the technique correctly, fear of possible discovery of a lump, and embarrassment associated with manipulation of the breast have been cited as reasons for not practicing BSE<sup>18</sup>.

### 3. Statement of the Problem

A descriptive study was conducted for women of 20-50 years of age attending the OPDs of a selected Hospital of Haryana with following objectives:

- To assess knowledge among women regarding Breast Cancer and Breast Self Examination.
- To assess attitude among women regarding Breast Cancer and Breast Self Examination.
- To determine the correlation between Knowledge and Attitude among women regarding Breast Cancer and Breast Self Examination.

### 4. Methodology

A non experimental study using Survey approach and descriptive research design was conducted for 100 women between the age group of 20-50 years attending the Medical, Surgical and Gynecology OPD of a selected Hospital of Haryana who were present at the time of study, could read

and write Hindi and were willing to participate in the research study. Purposive sampling technique was used to select the sample for the research study.

A validated structured self administered questionnaire was developed to gather the demographic data and to assess the knowledge of the women regarding concept, risk factors, causes, signs and symptoms, treatment and practices related to Breast Cancer and Breast Self Examination.

A validated structured Likert's Scale was used to assess the attitude of the women regarding Breast Cancer and Breast Self Examination and it consisted of several statements expressing viewpoints and the degree to which they agree and disagree with each statement.

The reliability co-efficient for the structured knowledge questionnaire was calculated by using the Kuder Richardson 20 (KR-20) formula. The reliability co-efficient was found to be 0.69, thus the tool was found to be reliable.

Ethical approval was taken from the Medical Superintendent of the Hospital to conduct the study. Written informed consent was taken for the study sample regarding their willingness to participate in the research study and the purpose for carrying out research study was explained to the participants. Confidentiality of the information of the sample was maintained.

Data was analyzed by descriptive and inferential statistics i.e. frequency and percentage distribution, mean percentage, median of knowledge and attitude scores. 't' test was used to determine the significance of difference between the knowledge and attitude scores at 0.05 level of significance.

### 5. Result

Frequency and percentage distribution of women according to their demographic data revealed that most (42%) of women were below 30 years of age, 39% were between 31-40 years of age and 19% were between 41-45 years of age. Maximum (85%) women were married, 15% were single while very few (2%) were widow. Most (59%) of the study sample were Hindu, 28% women were Muslim, few (8%) were Sikh while very few (5%) women belonged to Christian religion. Educational status of the women varied consistently i.e. 34% were illiterate, 36% women were educated upto high school, 14% studied till secondary school and only 16% were graduate. More than half (67%) of women were housewife, equal number (12%) of women were working in private sector and self employed while less (9%) were in government service. The data further shows that 34% of women had monthly income below Rs.1000, 37% had monthly income between Rs. 1001-5000, 17% had between Rs. 5001- 10,000 and less (12%) of women had monthly income above Rs. 10,000. Majority (87%) of women had no family history of cancer and less (13%) had family history of cancer. Majority (97%) of study sample had no history of lump in breast and out of remaining 3% women having lump in breast, 2% had history of removal of lump in breast.

**Table 1:** Frequency and Percentage Distribution of Women as Per their Knowledge Score Regarding Breast Cancer and Breast Self Examination

N= 100

Level of knowledge score	Range of knowledge score	Frequency (%)
Excellent	25-30	00
Good	18-24	06
Average	11-17	46
Below average	0-10	48

Maximum score: 30; Minimum score: 0

Data in Table 1 reveals that the maximum (48%) of women had poor knowledge, 46% of the women had average knowledge, very few (6%) had good knowledge regarding Breast Cancer and Breast Self Examination while none of the women had excellent knowledge regarding Breast Cancer and Breast Self Examination.

**Table 2:** Area wise Mean, Mean% of Knowledge Score Obtained by Women on a Structured Knowledge Questionnaire, N= 100

S. No.	Areas	Maximum Score	Mean Score	Mean%
1.	Concept	03	1.02	34.00
2.	Risk factor and causes	09	4.26	47.33
3.	Sign and symptoms	03	0.86	28.66
4.	Treatment	01	0.2	20.00
5.	Breast Self Examination	14	4.79	34.21

Maximum score: 30; Minimum score: 0

The data presented in Table 2 depicts the mean and mean percentage of knowledge score obtained by women in five areas. The highest mean percentage of knowledge score (47.33%) was in the area of risk factor and causes of Breast Cancer followed by Breast Self Examination (34.21%). The mean percentage of concept of Breast Cancer and Breast Self Examination was 34%, signs and symptoms of Breast Cancer had mean percentage of 28.66% while the lowest mean percentage was in the area of treatment of Breast Cancer. This data indicates that the selected adults had very less knowledge regarding the treatment of Breast Cancer while they had more knowledge in the area of Risk factor and causes of Breast Cancer.

**Table 3:** Frequency and Percentage Distribution of Women as Per their Attitude towards Breast Self Examination, N= 100

Attitude Score	Range of knowledge score	Frequency (%)
Unfavourable	0-25	06
Less favourable	26-50	38
Favourable	51-75	55
More favourable	76-100	01

Maximum score: 10; Minimum score: 0

Data in Table 3 reveals that only 1% of women had more favorable attitude while more than half (55%) of women had favorable attitude. Some (38%) of women had less favorable attitude while 6% of women had unfavorable attitude towards Breast Self Examination while none of the women had excellent knowledge towards Breast Self Examination.

**Table 4:** Correlation between Knowledge and Attitude Score among Women Regarding Breast Cancer and Breast Self Examination, N= 100

Knowledge Mean	SD	Attitude Mean	SD	't' value
11.38	3.78	50.21	3.78	0.5*

Maximum score: 10; Minimum score: 0

Table 4 depicts that coefficient of correlation between knowledge score and attitude score is 0.5 suggesting positive correlation of knowledge with attitude among women regarding breast cancer and breast self examination at 0.05 level of significance.

## 6. Conclusion

The study illuminates that maximum women had inadequate knowledge regarding Breast cancer and Breast self examination which can be the leading cause of death in women. This study provided such a detailed in-depth picture about the various issues related to breast cancer like lack of education and awareness about causes, risk factors, prevention, early detection and treatment of breast cancer were captured quite ably by this study. We need to focus more closely on some of these issues, which were brought to the surface by the current study while using these findings to create better ways and better content for targeting populations for increasing breast cancer awareness. Many women showed very less favorable attitude towards breast self examination which can be corrected or made more favorable by educating them about the correct technique and skills of performing breast self examination right from the age of adolescence in form of formal education as well as informal education for women (including men) using planned and targeted program and mass-media for effective breast cancer control, improve its treatment outcomes and to decrease the mortality rate.

## 7. Future Scope

In-depth health education messages through mass media, newspapers should be tailored to fulfill knowledge gap among all population. Intensive educational campaigns to tackle the observed educational deficits should be planned in order to raise awareness towards breast cancer its risk factors with emphasis on role of prevention and guidelines for screening through self -breast examination, clinical breast examination and mammography.

A similar study can be conducted with an experimental research approach with pre-test and post-test control group design. The study can be replicated on large sample thereby finding can be generalized for larger population. We as nurse must continue to remind and update the community women about breast cancer disease and women's cancer screening practices must be reinforced.

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1. **Project Name:** A study to determine the effect of Yoga Nidra on stress level among BSC Nursing 1<sup>st</sup> year students of MM college of Nursing Mullana.  
**Start Date:** September 2010      **End Date:** June 2011      **Funding:** Self
2. **Project Name:** A descriptive study to asses level and factors among influencing deviant behavior among adolescences of selected Sr. sec schools of Mullana Ambala Haryana,  
**Start Date:** September 2010      **End Date:** June 2011      **Funding:** Self
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**Start Date:** September 2010      **End Date:** June 2011      **Funding:** Self
4. **Project Name:** A study to asses contributing factors of revolving door syndrome among schizophrenic patients in terms of knowledge of their primary care givers in psychiatric OPD of Govt. Medical college and hospital sec 32 Chandigarh.  
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5. **Project Name:** A study to assess knowledge and attitude about Breast cancer and breast self-examination among women of 20-50 years of age in selected OPD of MMISR and Hospital Mullana.  
**Start Date:** August 2010      **End Date:** July 2010      **Funding:** Self
6. **Project Name:** A study to develop and test the effectiveness of an informational booklet on home management of pts with BPAD for the family members of BPAD pts receiving treatment in selected hospitals of Delhi.  
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### **Achievements**

- Certificate for attending Basic Life-Support Training organized by Department of Casualty and Emergency in Lok Nayak Hospital in December 2006
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- First Prize for Hepatitis Day Skit Competition in December 2008
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- Attended various seminars and National conferences at the college level.
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- Certificate for being trained under GFATM project for Tuberculosis and HIV & AIDS for GNM and ANM respectively at Maharishi Markandeshwar College of Nursing, Mullana, Ambala in 2014 and 2015.
- Certificate for attending a workshop on Basic newborn care and resuscitation at Amity College of Nursing, Amity University Haryana in Feb 2017

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2. Research article titled as “Study to Assess the Knowledge Regarding Hypertension among Adults of Selected Rural Community” published in International Journal in Management and Social Science. Vol.05 Issue-01, (January, 2017)