



## A QUANTITATIVE STUDY ABOUT AWARENESS OF BREAST CANCER, ITS PREVENTION AND BREAST SELF-EXAMINATION (BSE) AMONG THE FEMALES OF AGE GROUP 40-65 YEARS IN RURAL AREAS

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### Abstract

**Background:** According to the World Health Organization, Breast Cancer is the most common cancer among women worldwide, claiming the lives of thousands of women each year. So much can be achieved if it is diagnosed in early stages. In India, sizable population present with progressive stages of disease and early detection can significantly affect the treatment cost and quality of life of patients. Breast health awareness programs and aid to breast screening practices play a key role in achieving this.

**Objective:** Aim of this cross-sectional study was to discover the level of knowledge of Breast Cancer, its prevention, screening and to measure the performance of Breast Self-Examination (BSE) in women aged above 40 years. Goal of this study included providing the sufficient knowledge about finding out abnormalities in breast by practising BSE and moving forward with the crucial diagnosis and treatment. It was also aimed to increase the knowledge level of females living in rural areas and to convince them to practise BSE regularly.

**Methods:** This quantitative study was performed on women from rural areas who visited Radiology Department regarding diagnosis purpose including X-ray, Ultrasound, etc. (but not necessarily regarding the breast problems). Information was collected from women by using a structured questionnaire and private interviews. Data was collected from the participants in the form of two questionnaires: Pre counselling and Post counselling forms and individual interview. Pre counselling questionnaire included questions about their own knowledge and Post Counselling questionnaire included questions that were asked after authors themselves indulged personally into session about breast cancer and its prevention including BSE. After the interview, authors had an individual and private interactive discussion with the participants about the breast cancer, its prevention and steps of BSE. Furthermore, to help they remember about the discussed information and to share with other females, we provided the participants with a figurative hand out with the intention to implement what had been taught.

**Result:** 46% of women had heard of Breast Cancer but few knew anything about it and 53% participants didn't know what Breast Cancer was. Only 6% women ever heard of BSE and none of them practise BSE. This revealed that there is a huge lack of knowledge of BSE in the participants. After the awareness session the data revealed that all of the participants found our session helpful and informative. 28 women said that they were going to practise BSE regularly, 50% women said that they will practise BSE once every month and 28% said that they will practise BSE weekly. 60% women expressed that Clinical Breast Exam (CBE) should be done at least once every year. Most of the women agreed to share all the information they gained from authors to other women among their family and friends.

**Conclusion:** With the increasing rate of breast cancer among women, it becomes crucial to assess the knowledge of breast cancer, its risk factors and practise of BSE among women. The overall knowledge of the breast cancer and BSE was very poor. This poor knowledge reveals that ample public education is necessary to facilitate early detection of breast cancer. When the attitude towards our counselling session was analysed, majority of women found all the information they were told very helpful. Moreover, the study revealed that the participants were eager to gain more information and interested in regularly performing BSE.

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## **INTRODUCTION**

Cancer is a disease characterized by cells with abnormal growth and can affect healthy cells in the body. Breast cancer occurs in cells of the breast that can invade into surrounding tissues or spread to other organs of the body. The most common types of breast cancer are invasive lobular carcinoma, inflammatory breast cancer, Ductal carcinoma, Paget disease, triple negative breast cancer. Women with risk factors are more susceptible to develop breast cancer. A risk factor is something that can increase the possibility of acquiring a disease. Some risk factors including unhealthy living practices such as smoking, drinking, eating unhealthy food, lack of exercise can be avoided while some cannot be avoided such as being a woman or genetics. Also, It is not necessary that women who has risk factors will acquire breast cancer. Some women with most risk factors can never develop breast cancer.

Breast examination is performed by doctors to feel and examine the breast along with the lymph nodes in the armpit to rule out any lump or other abnormalities. Mammogram is an imaging examination that uses X-ray to produce images of internal structures. Diagnostic mammogram is performed if a patients presents with any visible symptoms such as breast pain, formation of a lump, thickening of skin on breast, nipple discharge, changes in shape or size of breast. Ultrasound is a comparatively safer imaging procedure that uses sound waves to produce the images and it can be done to rule out any abnormalities. MRI transmits radio frequency pulses to produce images of internal structure and it can produce more detailed images of breast by scanning the tissues. In case any abnormality is found, further tests such as biopsy that includes removal of a tissue sample and examining it for the presence of breast cancer, Lab tests like hormone receptor test can be advised to select the treatment.

Awareness about breast cancer can help people to understand about the screening, symptoms and treatment. This can lead to early detection of breast cancer which is directly related to increased survival rate. If a breast cancer is diagnosed when it has reached advanced stage, it contributes to high mortality rate. This can be a effect of low awareness among people, low status of knowledge about breast cancer, its risk factor, prevention and breast self-examination (BSE), stigma, fear, limited access to treatment, cost of treatment or incomplete treatment. BSE is an inspection of

breasts that can be done at home to differentiate between normal and abnormal structures of breast and to look for any symptoms closely. Regular practise of Breast self-examination can aid in early detection of abnormalities Breast health awareness programs and aid to breast screening practices play a key role in achieving better breast health.

## **AIMS AND OBJECTIVE**

Aim of this cross- sectional study was to discover the level of knowledge of Breast Cancer and to measure the performance of Breast Self-Examination (BSE) in a group of 30 women aged 40 years and above. Goal of this study included providing the sufficient knowledge about finding out abnormalities in breast by practising BSE and moving forward with the crucial diagnosis and treatment. It was also aimed to increase the knowledge level of females living in rural areas and to convince them to practise BSE regularly.

## **METHODOLOGY**

This is a quantitative study performed on women living in rural areas. This study was carried out to assess the knowledge regarding Breast Cancer, in addition to its prevention, causes of Breast Cancer and practise of Breast Cancer screening techniques including Breast Self- Examination (BSE). The total study population comprised of 30 women aged above 40 years and mean age of females was 45 years. This survey also intended to increase knowledge of breast cancer and its prevention among females of rural areas. It also included the knowledge of risk factors which include unhealthy lifestyle choices, Reproductive history and genetic factors. Other knowledge aspects included symptoms and causes of breast cancer and the practise of BSE.

Data was collected in the form of two questionnaires: Pre counselling and Post counselling and private interviews. Pre counselling questionnaire included data on the basis of their own knowledge and Post Counselling questionnaire included data after authors themselves indulged personally into a session about breast cancer and its prevention including BSE steps. The questionnaire was designed in multiple choice formats and divided into sections which included socio-demographic characteristics, knowledge of Breast Cancer and its prevention; knowledge of BSE. Post counselling questionnaire was little different from the pre counselling questionnaire as it included an additional feedback section in which participant's

feedback was taken in several questions. After the Awareness session they were asked to fill the Post counselling questionnaire. Some questions were same as the pre counselling questionnaire to assess the level of participant's knowledge after being explained everything that was necessary regarding breast cancer and BSE.

Reasons for non-performance were inquired as well. We included precautionary measures and when it is the right time to visit the doctor and why it is necessary to visit immediately. All these were clarified including the ancient myths from their minds. Additionally a figurative hand out was distributed to each woman with the intention to implement and share what had been taught.

## **RESULT**

The result shows that knowledge and awareness level was very low. This study resulted that the participants included in this survey didn't have all the necessary information about Breast Cancer and BSE. But after the sessions about each topic they tend to acquire the knowledge that was sufficient for them. The Post counselling questionnaire's data revealed that our interactive session helped them to achieve knowledge on Breast Cancer and BSE steps. At last when data from both questionnaires was compared, it showed that the sessions really helped women understanding about Breast cancer.

Most of the women were from age group 45- 50 years. 60% women were literate but most of them were not even graduated and the 40% were illiterate. There were 2 participants who had Breast Cancer in the past: one of them was cured and the other was undergoing chemotherapy. 46% women had heard of Breast Cancer but few of them knew anything about it and 53% participants didn't know what Breast Cancer was. 2 women selected books as their source of little knowledge of Breast Cancer, 3 selected media as their source and 5 of them had heard of Breast Cancer from their friends. 4 women had Breast Cancer history in their family, one participant's mother had Breast Cancer and 2 participant's sister had it. Only 6% women ever heard of BSE. None of them practise BSE. This revealed that there is huge lack of knowledge of BSE in the participants. 5 women have heard about CBE and 2 of them think that CBE should be done once a year. Only 3 women had undergone Mammography in the past.

After the awareness session the data revealed that all of the participants found our session helpful.

There was only one woman who didn't understand the steps of BSE due to her poor mental condition and the remaining 29 women understood it well. 28 women said that they were going to practise BSE regularly, 50% women said that they will practise BSE once every month. Most of the women agreed to share all the information they gained to other women in their family and friends. 3 women were not confident enough to talk to other women or doctor about Breast Cancer due to hesitation and 27 women were confident enough to share.

## **CONCLUSION**

With the increasing rate of breast cancer among women, it becomes crucial to assess the knowledge of breast cancer, its risk factors and practise of BSE among women. The overall knowledge of the breast cancer and BSE was very poor. This poor knowledge reveals that ample public education is necessary to facilitate early detection of breast cancer. Early detection significantly affects the treatment cost and quality of life of patients. When the attitude towards our counselling session was analysed, majority of women found all the information they were told very helpful. Moreover, the study revealed that the participants were eager to gain more information and interested in regularly performing BSE.

It is highly recommended to organize more educational camps and awareness sessions among the women of rural areas. It can really help in increasing the level of knowledge of breast cancer and regulate practise of BSE among them.

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