

Study of Breast Cancer Examination Awareness Among Women with Low Socio-Economic Status

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ABSTRACT

Background: Breast cancer is the most prevalent cancer in women worldwide. Breast cancer accounts for 20% to 35 % of all the cancer cases, the most common cancer that is prevalent in women of India (WHO, 2020).

Aim: The study aims to identify and analyze women's knowledge and awareness of breast cancer and mammography risk factors in India.

Methods: The sample of the study consisted of 63 low socio-economic women in India and was selected by using convenience sampling method. Structured interview schedule and questions from a prepared questionnaire were used for the sample.

Results: The results showed that out of 63, only 24 women (40%) knew about mammogram. Out of which, only 5 women (3%) have taken mammogram before. The women who were not concerned or a little bit concerned about their health is 29 (48.36%) and 23(38.91%) respectively. 20 women (33.3%) were detected to have pain or painless breast lumps who were then referred to cancer Hospital for breast examination.

Conclusion: This study concluded that the awareness regarding breast cancer and mammogram as detection and screening is very low and women were not concerned about their health, and any sign or symptom if present were being ignored, shows the literacy rate among the women residing in these blighted areas.

Implications: The findings of the study can help to raise breast cancer and mammography awareness among women with poor socio-economic status. Also, to emphasize the importance of early detection, breast self-examination (BSE) all of which has a vital function in the diagnosis and treatment of breast cancer and to provide free manual examination of breast to the women.

INTRODUCTION

The increasing rate of fatality is because of detection or diagnosis in later stages. and the patients examine themselves to the health worker in the advanced stages due to lack of awareness and lack of knowledge of self-examination. The late diagnosis and raising mortality and incidence rate make it necessary and important to understand the illiteracy related to breast cancer. In India, a woman is diagnosed with breast cancer every four minutes, with majority of the cases occurring at an advanced stage. A woman dies of breast cancer every thirteen minutes (Oncostem blog) As a result, just 60% of women survive at least five years after therapy, compared to 89% in the United States. In the third or fourth stage of breast cancer, survival rates are very poor. Breast cancer incidences in India appear to be on the rise, especially in the 25-50 age range, with 70 percent of cases in the advanced stages having poor survival and high mortality, and this trend is expected to continue. This number is projected to increase to 17.3 lakhs by 2020, according to the ICMR (India Today, 2018). Many studies show that breast cancer occurrences are on the rise and that the high death rate is frequently attributable to a lack of awareness and late-stage screening and diagnosis since most women are not affluent or literate enough to know and receive the knowledge and treatment that they need. (Society, n.d.).

Sun, et al., (2017), states that most women lack the appropriate awareness about the diagnosis and the treatment of breast cancer. Even though it is the most common cancer in women globally, majority of women do not know about it. They are only aware of breast cancer as life threatening disease, but they do not have an in-depth knowledge of it on things such as its early signs and symptoms, these results in them being diagnosed at a later stage that is advanced. This leads to low survival rated. So, to raise awareness of breast cancer in the world, each October in the whole world is designated to be the breast cancer awareness month also known as the pink month. all the medical procedures and treatment procedures that one goes through after being diagnosed with breast cancer can cause trauma and emotional turmoil to a person. The illness and the long hospital stays end up having long lasting effects on the patient. This is because the breast cancer treatment journey is a very complicated and complex process that usually involves more than just treating the tumor in the breast (Greenlee et al, 2017).

Sample: The sample of the study consisted of 63 low socio-economic women of Tamilnadu, India and was selected by using convenience sampling method. Structured interview schedule and questions from a prepared questionnaire were used for the sample in order to achieve the anticipated exploratory objectives. Females between the ages of 20 and 65 were chosen for the study.

Inclusion Criteria were: Women from low-income groups who live in southern Tamilnadu, India. Women between the ages of 20 and 65 years old. Willing to participate.

Exclusion Criteria were: Women who were under the age of 20. Women from high-income families. Women who refused to take part in the research. Women who had other medical conditions.

Tool Description: The purpose of this research was to evaluate women's knowledge about breast cancer and mammograms, as well as to detect early instances of breast cancer. Consequently, a systematic questionnaire was created and used to gather information. The questionnaire includes both open- ended and closed-ended questions. It was a 39-question survey in total. Demographic information, knowledge of breast cancer and mammograms, health-related experience and workplace viewpoint were all included in the survey. The most efficient and objective technique was deemed to be the questionnaire.

Analysis: The data was analyzed by calculating the percentage of cases in order to find the prevalence of awareness.

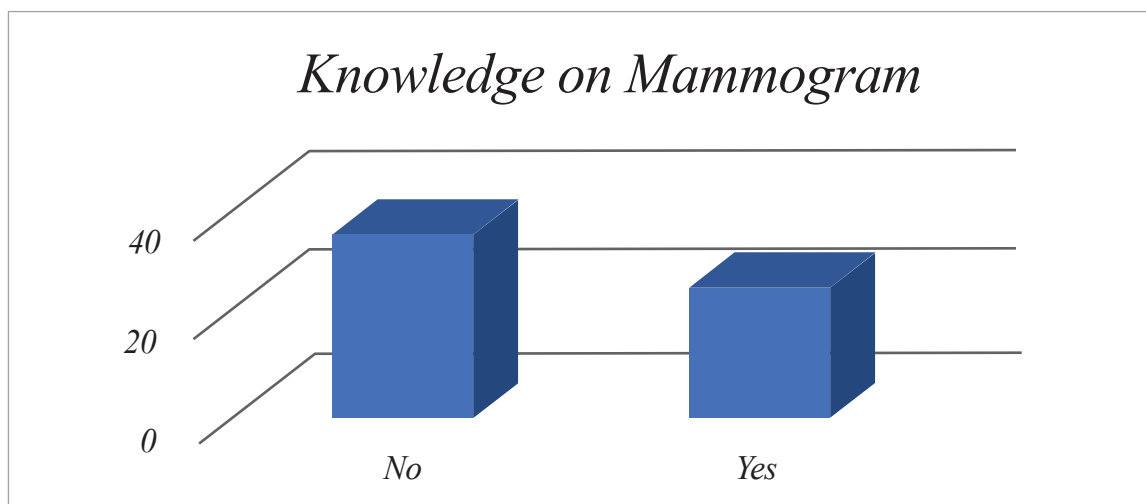
Demographic Characteristics: The total data collected in this survey and study is 60, the results confirms that a majority of the women were found from the age group of 30-39 years of age which is 24 (40.19%). Most of the women who participated in this study were from the location of Ariyalur, 46 (77.90%) and specifically from perambalur and other places which is 6 (8.76%) and 4 (8.14%) respectively. It is seen that most of women living in their current residence was in the period of 21-30 years that is 15 (25.01%) followed by 31- 40 years which is 14 (22.99%). A major proportion which is a bit more than half of the women who had participated in the survey had only completed their education below high school which is 32 (53.35%). This indicates that the educational and literacy status of the women is very low. This relates as to why women were having lesser knowledge and information regarding breast cancer and mammogram and its awareness. It is also seen that major number of the women were married which is 58 (96.55%) and that mostly were housewives which is 55 (92.27%). Another aspect is that women had family members of four which is 20 (34.16%) and number of children as two which is 21 (35.29%). Majority of women, i.e. 33 (54.66%) had family income which ranged between Rs.10,001 - 20,000 per month. Many women had no health insurance which is 56 (94.30%), as they had no idea about it.

Results: Distribution of Knowledge Regarding Mammogram

Knowledge of Mammogram	Frequency	percentage
No	35	58.3%
Yes, it is test to check breast cancer/tumor	25	41.6%
Grand total	60	

Figure 9

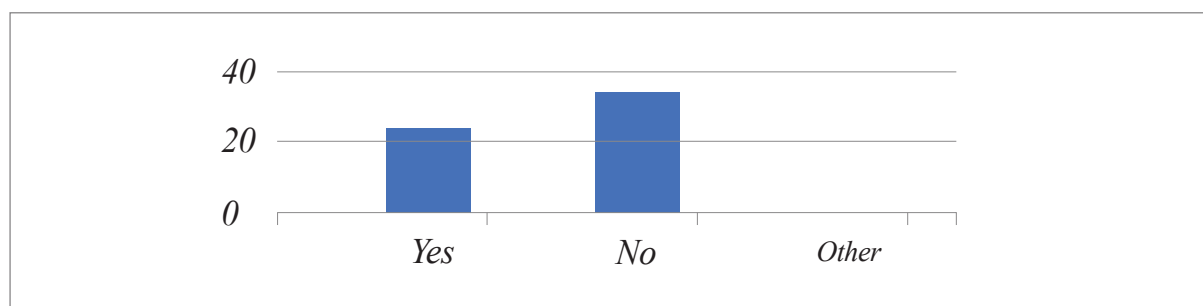
Distribution of Knowledge Regarding Mammogram



Distribution of mammogram as the standard method to identify breast cancer

Mammogram as the standard method to identify breast cancer	Frequency	Percentage
Don't know	35	58.3%
Yes	24	40%
Other	1	1.6%
Grand total	60	

Distribution of mammogram as the standard method to identify breast cancer



Knowledge regarding breast cancer and mammogram:

The result revealed that only 25 women (41.6%) had the knowledge regarding mammogram as a technique to detect tumor or cancer and a huge number which is 35 (58.3%) women were not having any knowledge or idea regarding it. This number shows that how women are so much unaware about the current situation of breast cancer and having no information regarding the test for detection. These 25 women also agreed with the statement that mammogram is the standard method to identify breast cancer or to detect a tumour and the rest 35 women didn't have an idea about it. It indicates that the women in this study were lacking knowledge regarding mammogram at a very higher rate. Lack of awareness regarding breast cancer and mammogram were found to be the major reason of having lesser or no knowledge among the Indian women. This result could be compared to a study conducted among Female Primary Healthcare Workers in Diyarbakir, Turkey which had revealed that the knowledge regarding mammogram was very low considering the fact that they were health workers (Erdem&Toktas, 2016) . These results are also built on the existing evidence of another study conducted in Eastern Iran for evaluating the knowledge and attitude regarding breast cancer screening tests in 1469 women which confirms that 84% of the participants were not well aware regarding breast cancer screening tests (Izanloo et. al, 2018) . Thus, basic lack of knowledge and lack of awareness about the cancer is one of the leading causes of increased incidence and mortality rates.

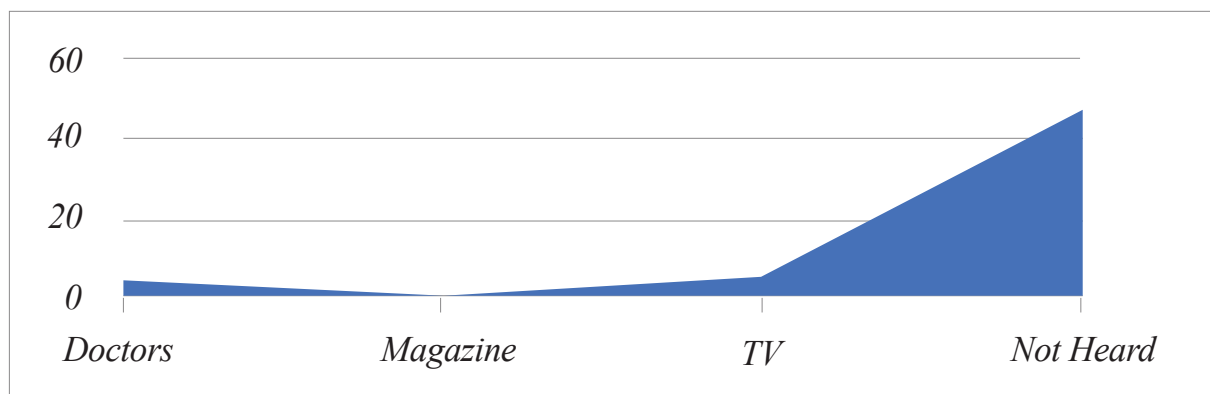
Distribution of age at which women should start having mammogram

Age at which women should start having mammogram	frequency	percentage
30-40 years	15	25%
41-50 years	10	16.66%
50 -60 years	0	0
Don't know	35	58.3%
Grand total	60	

Distribution of women have mammogram learned before

Mammogram learned before	Frequency	percentage
Friends		
Doctors	5	8.33%
Magazine	1	1.66%
TV/Radio	6	10%
Not heard before	48	80%
Grand total	60	

Distribution of women have mammogram learned before

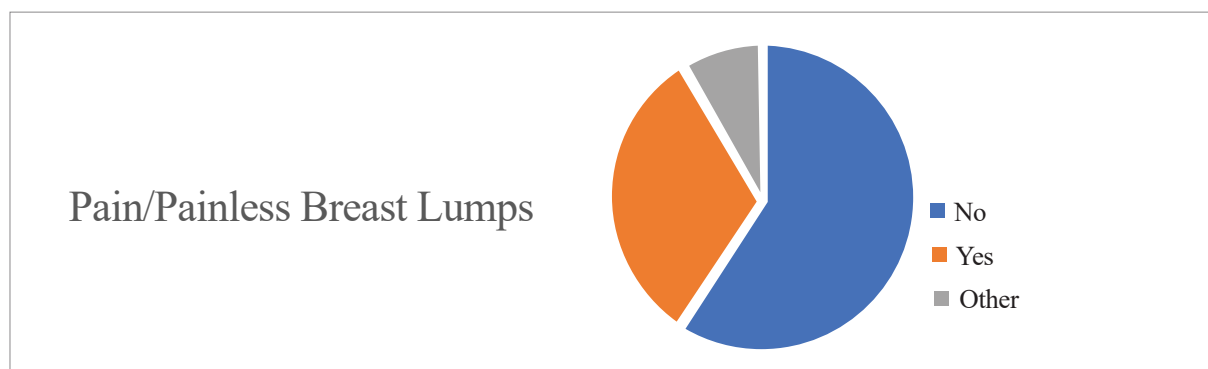


Regarding the age at which women should start having mammograms, out of 60 women 15 women (9%) had said between 30-40 years of age and 10 women (6%) had said between 41-50 years is the age when women should start having mammogram and the rest 35(58.3%) had no clue about it. It is a noticeable fact that none of the women knew about the frequency of mammogram taken. Only 6(8.98%) women have learned about mammogram via media like TV/radio, newspapers and magazines. Similar findings can be found in a study conducted to assess the knowledge, experiences and barriers to mammography among working women from Delhi, India and it had shown that less than half of the women (45.1 per cent) recognized the intent of a mammogram correctly. Only 11.8% of the women knew about the age at which women should start getting mammogram. Around 12 women (21.6%) correctly knew about the frequency of getting mammogram which was very low. It is very important to educate the women regarding how to recognize the symptoms of breast cancer so that the treatment or the diagnosis can be done as soon as it can be. (Khokhar, 2016).

Distribution of women having pain/ painless breast lumps

Women having pain/ painless breast lumps	frequency	percentage
No	35	58.3%
Yes	20	33.3%
Other	5	8.3%
Grand total	60	

Distribution of women having pain/ painless breast lumps



It is seen that 20 women (12%) have encountered breast lumps. The total women who had attended the medical camp in S.R.Hospital is 30 out of which 14 women had their breast manually examined by the gynecologist, 10 were recommended for ultrasonography, 2 women for mammogram and 4 women for sonomammography.

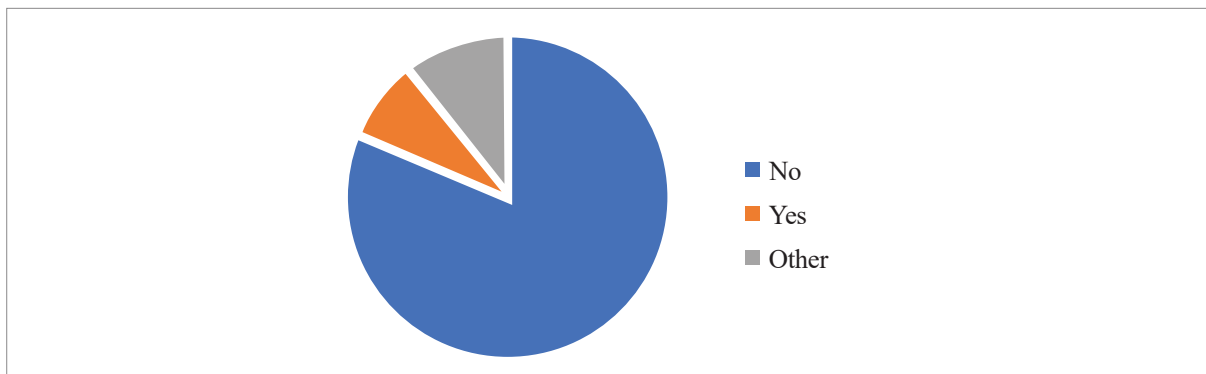
Analysis of Mammogram Experience of Women.

In this section, data regarding mammogram experience of women have been displayed to show the distribution, frequency and percentage.

Distribution of women who had their mammogram taken

Women who had their mammogram Taken	frequency	percentage
No	49	81.66%
Yes	5	8.33%
Other	6	10%
Grand total	60	

Distribution of women who had their mammogram taken



Experience of mammogram:

This study reveals that only 5 women (3%) had taken their mammogram before and had taken only once in their lifetime. This is because they had shown symptoms of breast cancer such as pain and presence of breast lumps. Similar result can be found in a study was that was conducted suburban area in Terengganu, Malaysia where it was found that only 10.5% of respondents has taken mammogram before (Nik Roswamati, 2010) . Another study conducted in Malatya, Turkey had shown that 72.7% of the participants had never taken a mammogram before (Deniz et al, 2017). The reason for such a low level of mammography rate is because women don't know about breast cancer screening tests even the standard test such as mammogram. This is a high time to provide the information to women using various sources as the number of women getting diagnosed with breast cancer is on the peak.

CONCLUSION

According to the research, community-based women's understanding of breast cancer warning signals and causal variables was lacking. The findings of the survey revealed that women understood very little about breast cancer and mammograms, according to the researchers. Results indicate that women are less aware about breast cancer and mammograms. This may be due to the fact that health authorities and doctors are not doing enough to raise public awareness. It was also suggested that healthcare professionals' participation might be improved by training them to improve women's education and keep them informed about the illness and its prevention. To combat the growing incidence of breast cancer, the present research aims to raise public awareness. Due to the significance of breast cancer prevention via different screening methods, it is vital to urge the general population to participate in community-based programmes and interventions that

address awareness deficits. This may be achieved by putting up booths manned by junior physicians who are well-versed in the subject matter, and by distributing breast cancer pamphlets in public places.

For adoption of prevention strategies of breast cancer appropriate practices are needed for awareness of factors that can be modify as well as the one that can't be modify in Indian women's. It is needed to have an emergency call for more beneficial state and national level cancer literacy programmes, along with the engagement at level of community organizations and the system of health.

Along with the broad transition in the burden at state level, there is an urge of a Systematic, integrated intervention programme on health promotion that is based on causative factors, precautions, Breast cancer diagnosis and therapy. To ensure women's health in India, medical education programmes with a strong emphasis on breast cancer in nursing curriculum at universities and other healthcare training institutions must be promoted. Because information has to be conveyed in a manner that best catches the awareness of the population, we propose the establishment of policy guidelines that may disseminate adequate knowledge about breast cancer and mammograms to all women as soon as feasible, based on our findings. Because breast cancer is on the rise in the United States, women may postpone getting treatment because they are unaware of the signs and indications. Women in one of India's most advanced cities have a poor knowledge of breast cancer, despite the need for further research at the national level. These interventions are recommended to raise and improve breast cancer awareness among women in the particular region, with a high emphasis on females with a low level of education and those who reside in disadvantaged groups By creating health education materials that concentrate on preventable causes and lifestyle changes, we can increase public knowledge of breast cancer preventive measures and encourage early detection. According to this research, rural women's knowledge of breast cancer was low, while their knowledge of BSE was almost nonexistent.

One-third of survey respondents had heard of breast cancer, and no one understood how to treat BSE appropriately. Without understanding how to conduct it correctly, the ladies took part in some kind of BSE experimentation. During showering, they examine their breasts on and off. No one practices BSE on a regular basis and in the proper manner. Lack of information and the absence of a breast problem were the most prevalent reasons for not doing so. This revealed that rural women are unaware of the need of breast cancer screening. As a result, information on BSE should be disseminated through the media. The compatibility in correspondence with a decrease in knowledge of breast cancer as well as a decrease in level of education prioritize an urge to broaden the programmes regarding public awareness that highlights on females with an educational background of lower level.

BIBLIOGRAPHY

Ahmed, H. G. (2017). Assessment of Breast Cancer Awareness Level among Saudi Medical Students.

Akram, M. et al., 2017. Awareness and current knowledge of breast cancer.

Biological Research. Available at: <https://biolres.biomedcentral.com/articles/10.1186/s40659-017-0140-9> [Accessed April 24, 2021].

Awatif Ali Aslam, knowledge of breast cancer and its risk factors and protective factors among women in Riyadh. (3 Aug 2006) <https://doi.org/10.5144/0256-4947.2006.272>

Erdem, O., Toktas, I. (2016, March 3). Knowledge, Attitudes, and Behaviours About Breast Self-Examination and Mammography among Female Primary Healthcare Workers in Diyarbakir, Turkey. *BioMed Research International Journal*. Vol (2016),1-5, <https://doi.org/10.1155/2016/6490156>

Grunfeld, E. A., Ramirez, A. J., Hunter, M. S & Richards, M. A. (2002 May 6). Women's knowledge and beliefs regarding breast cancer [Volume 86(9)].

Greenlee, H., DuPont-Reyes, M. J., Balneaves, L. G., Carlson, L. E., Cohen, M.

R., Deng, G'Tripathy, D. (2017). Clinical practice guidelines on the evidence-based use of integrative therapies during and after breast cancer treatment. *CA: cancer journal for clinicians*, 67(3), 194-232.

Hochstetler, S. (2015). 4 Breast Cancer and Shame. *Communicating Women's Health: Social and Cultural Norms that Influence Health Decisions*, 47.

India Today. <https://www.indiatoday.in/education-today/gk-current-affairs/story/cancer-rate-stats-cure-treatment-1386739-2018-11-12> India-

Khokhar, A. (2016, March 10). Study on knowledge, experiences and barriers to mammography among working women from Delhi. *Indian Journal of Cancer*. Vol 52(4), 531-535. <https://doi.org/10.4103/0019-509X.178401>

Sun, Y. S., Zhao, Z., Yang, Z. N., Xu, F., Lu, H. J., Zhu, Z. Y., & Zhu, H. P. (2017). Risk factors and preventions of breast cancer. *International journal of biological sciences*, 13(11), 1387.

Yuanlu Sun. (2016). Return to work among breast cancer survivors: A literature review.