

A cross sectional study on awareness of breast self-Examination and its practice in women of rural area in South India

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Abstract

Background: Breast cancer is the most common cancer among women worldwide, and it can be detected at an early stage through self-examination. BSE is an inexpensive, simple, noninvasive method for early detection of breast tumors. Thus, knowledge about the procedure and consistent practice could protect women from severe morbidity and mortality due to breast cancer. This study assessed the knowledge and practice of BSE among women in Chittur taluk before participating in the study and after participating in the study. **Methodology:** This cross-sectional study was conducted for a period of 1 month in August 2018 in the Rural Health Training Centre (RHTC) service area of the Karuna Medical College Hospital. 250 women aged above 30 years were included in the study. A questionnaire was used to obtain information about the knowledge of breast cancer and BSE, attitude, practice of BSE. Women were explained about significance of BSE, how it is done, and the frequency to be done. Later after 1 week the same houses were visited and women were asked if they practiced BSE, the steps, their finding if any and whether they have visited surgeon. **Results:** Out of the 250 participants, 195 (78%) were aware about breast cancer. 87(35%) were aware about Breast Self-Examination (BSE). The percentage of women performing BSE increased after education about BSE from 21% to 85%. After participating in the study and getting educated about BSE there was decrease in the number of women who do not know any step of BSE from 74% to 12%. **Conclusion:** BSE is considered to be a simple, inexpensive, quick, noninvasive, nonhazardous intervention. Lack of knowledge about how to perform BSE is one of the most important reason amongst women for not performing BSE. Efforts should be made to develop educational programs to increase knowledge and practice of breast self examination among women.

Keywords: Awareness, Breast self examination, Breast cancer, Women.

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Received Date: 22/11/2020 Revised Date: 19/12/2020 Accepted Date: 10/01/2021

DOI: <https://doi.org/10.26611/10111721>

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Access this article online

Quick Response Code:	Website: www.medpulse.in
	Accessed Date: 10 February 2021

INTRODUCTION

Breast cancer is the second most common cancer worldwide and is the most common cause of cancer among women both in developed and also in developing countries. It is commonly associated with high levels of morbidity and mortality in India due to late presentation. Breast cancer is the most common cause of death due to cancer among women.¹ Breast cancer reduces the life expectancy of the population at risk specially those between 31-50 years. Breast self examination can help in early detection of the disease. Studies have shown that most patients with breast cancer in developing countries present late for the first time at 2nd and 3rd stages. The reasons for late

detection of breast cancer includes low awareness, presence of stigma, fear about pain during screening and fear about the disease, gender inequity, lack of screening test and infrastructure, low literacy, and low income levels.^{2,3} This indicates a need for increased community awareness of methods for early detection of the disease .There are various methods of early detection of breast cancer ,these include breast self examination ,clinical breast examination and mammography screening. Breast self examination involves visualization and palpation of breast by oneself for size, shape, texture lumps and contour. Frequent breast self examination (BSE) has been shown to have favourable clinical outcome among breast cancer patients.⁴ Early detection helps in the treatment before metastasis and associated with excellent prognosis. Breast cancer screening was found to reduce the risk of mortality by 20%.⁵. Despite the presence of various screening methods, majority of breast cancer cases can be detected by women themselves, stressing the importance of BSE.

RESULTS

Analysis was done to evaluate the practice of BSE in these women above 30years of age in Chittur taluk and to find out whether education about BSE can increase the practice of BSE. This study included 250 participants .Awareness of participants about breast cancer and Breast Self Examination (BSE) before participating in the study is shown in the Table 1.

Table 1: Awareness of participants about breast cancer and Breast Self Examination (BSE)

	Yes	No
Awareness of breast cancer	195(78%)	55(22%)
Awareness of Breast Self Examination (BSE)	87(35%)	163(65%)
Awareness Benefits of doing BSE	160(64%)	90(36%)

Out of the 250 participants, 195 (78%) were aware about breast cancer. 87(35%) were aware about Breast Self Examination (BSE). 160 (64%) were aware that BSE helps in early detection of breast cancer. 52(21%) were practicing BSE .Amongst the women who were practicing BSE most of the women (77%) were performing BSE on irregular basis. 5(9%) women were performing BSE monthly while 7(13%) were performing BSE yearly. Out of 87 women who were aware about Breast Self Examination 67(77%) were educated more than 8th standard and 33%were educated up to 7th standard indicating the importance of education of women in awareness about BSE.

Table 2: Distribution of performing BSE

		Before participating in the study	After participating in the study
Done BSE		52(21%)	212(85%)
Performing BSE	Know all steps of BSE	23(9%)	47(22%)
	Know few steps of BSE	41(16%)	140(66%)
	Do not know/remember any step of BSE	186(74%)	25(12%)
Reasons for not performing BSE	Do not know how to perform	112/198(56%)	2/38(5%)
	Lack of Time	20/198(10%)	20/38(52%)
	No Privacy	7/198(4%)	1/38(3.3%)
	Do not understand	25/198(13%)	4/38(10%)
	Not interested	34/198(17%)	11/38(28%)

The percentage of women performing BSE increased after education about BSE from 21% to 85%. Before participating in the study, lack of knowledge about how to perform BSE was the most common reason 112/198(56%)

METHODOLOGY

This cross sectional study was conducted for a period of 1 month in August 2018 in the Rural Health Training Centre (RHTC) service area of the Karuna Medical College Hospital. Adult females aged above 30 years residing in RHTC area were included in the study. After obtaining informed written consent, a preformed questionnaire about awareness of BSE was used to obtain information about the knowledge of breast cancer and knowledge, attitude, practice of BSE. A total of 250 women were interviewed. BSE was explained to these women, about its significance, how it is done, and the frequency to be done .Later after 1 week the same houses were visited and women were asked if the done BSE, the steps, their finding if any and whether they have visited surgeon .Spearman correlation and Chi-square tests were used to analyze the association between the variables and $P < 0.05$ was taken as statistically significant.

amongst the women who were not performing BSE. 34/198(17%) women were not performing BSE because non interest in BSE. 25/198(13%) women were not performing BSE due to lack of understanding of the steps

of BSE. Lack of time (10%) and non-availability of privacy (4%) were also the reasons in these women for not performing BSE. After participating in the study and getting educated about BSE there was decrease in the number of women who do not know any step of BSE from 74% to 12%. Educating women about BSE also improved their knowledge of performing BSE stepwise and there was increase in the women who know all the steps (9% Vs 22%) or few steps of BSE (16% Vs 66%). Improvement in the number of women practicing BSE, women knowing all steps of BSE is shown in the figure 1.

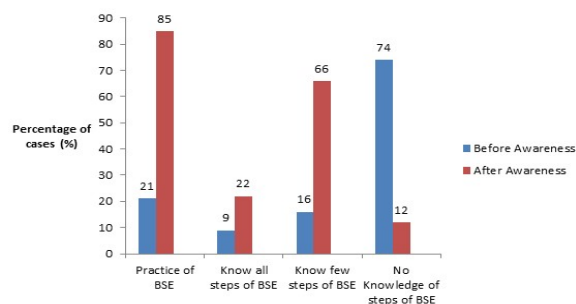


Figure 1: Distribution of cases about practice and knowledge of steps of BSE before and after participating and educating in the study

Breast cancer is the most common type of cancer affecting women worldwide and its prevalence is increasing particularly in developing countries where the majority of cases are diagnosed in late stages. The low survival rates in less developed countries can be explained mainly due to the lack of early detection programs resulting in a high proportion of women presenting with late-stage disease, as well as by the lack of adequate diagnosis and treatment facilities. BSE is an inexpensive, simple, noninvasive method for early detection of breast tumors. Thus, knowledge about the procedure and consistent practice could protect women from severe morbidity and mortality due to breast cancer. This study assessed the knowledge and practice of BSE among women in Chittur taluk before participating in the study and after participating in the study. Nearly 35% of the participants were aware of BSE. This proportion was almost close to the results reported by other studies^{6,7}. Women with higher level of education had better knowledge regarding breast cancer and BSE than women with low education status. This was concordant with the reports presented by other studies^{8,9}. In present study Out of 87 women who were aware about Breast Self-Examination 67(77%) were educated more than 8th standard and 33% were educated up to 7th standard indicating the importance of education of women in awareness about BSE. In the present study, proportion of women who practiced BSE regularly on monthly basis was 5% which was low compared to the observations made by

Parsa and Kandiah.¹⁰ Another South Indian study has also reported lower practice of BSE than the present study¹¹ Positive relation between knowledge and practice of BSE has already been described.¹² Hence, improving knowledge regarding the importance of BSE at community level would help sustaining the practice. The result of the current study revealed that the percentage of women performing BSE increased after education about BSE from 21% to 85%. Similar to the results of study^{13, 14} Despite the fact that 35% of the participants had heard about BSE, significant proportion of the participants had limited knowledge about BSE. Almost only 21% participants were performing BSE. only 9% knew how to perform BSE, similar to the study by Zavare *et al.*¹⁴ In a study¹⁵ indicated that only 9.6% good knowledge towards BSE. In present study 9% women were knowing all the steps of BSE. There was improvement in the practice of BSE after participating in the study and getting educated about BSE. The percentage of women performing BSE increased after education about BSE from 21% to 85%. Before participating in the study, lack of knowledge about how to perform BSE was the most common reason (56%) amongst the women who were not performing BSE. After participating in the study and getting educated about BSE there was decrease in the number of women who do not know any step of BSE from 74% to 12%. Educating women about BSE also improved their knowledge of performing BSE stepwise and there was increase in the women who know all the steps (9% Vs 22%) or few steps of BSE (16% Vs 66%). Hence increasing the awareness about breast cancer, BSE, benefits of performing BSE is important. This can be achieved through health professionals who should create awareness about BSE and breast cancer through health information dissemination and health education programs. Finding of this study should be interpreted with the following limitations. The study was cross-sectional, so causal conclusions cannot be drawn. The study was carried out in RHTC) service area of the Karuna Medical College Hospital in Chittur taluk and therefore might not be representative of other places of the country. In general, and the practice of BSE may be different in other sectors of the population.

CONCLUSION

BSE is considered to be a simple, inexpensive, quick, noninvasive, nonhazardous intervention. This could be a useful measure for early identification of breast cancer in resource poor countries where accessibility to better screening methods is less. BSE can be used to as a measure to improve self-care among women. It is shown to increase the awareness regarding breast abnormalities and risk factors for breast cancer. Raising awareness may also empower women to follow healthy behaviors and health

promotion activities. However, correct and thorough BSE technique has to be ensured and prompt and adequate medical need should be available when needed. There is a need to develop educational programs that can increase knowledge and practice of breast self examination among women

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Source of Support: None Declared
Conflict of Interest: None Declared