

Original article

KNOWLEDGE AND PRACTICE OF BREAST SELF-EXAMINATION (BSE) AMONG FEMALES IN A RURAL AREA OF SOUTH INDIA

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ABSTRACT

Introduction: Breast cancer is the most common cancer among women worldwide and it can be detected at an early stage through breast self-examination (BSE) which increases chances of survival. The study was aimed to assess knowledge and practice of breast self examination among females in a rural area of South India.

Materials and methods: This descriptive cross-sectional study was carried out among a total sample of 314 women in rural area of South India. Females were interviewed using interviewer administered questionnaires to obtain information on their socio demographic characteristics, knowledge and practice of breast self-examination. Data were entered using SPSS 13.01.

Results: In the present study, 30.89% women were in the age group 31-40 yrs. Most of the women (71.34 %) were married. Most of the women (44.27%) had secondary education and 13.69% were illiterate. Only 30.89% of the women were aware of breast self-examination. In the study only 22.61% of the females had ever checked their breast. The level of awareness of breast self examination was highest among those aged 51- 60 years. Awareness of breast self examination was found to be significantly associated with educational attainment.

Conclusion: The level of knowledge and practice of breast self-examination among female is unacceptably low. Efforts should be made to increase level of knowledge and practice of breast self-examination through health education programmes.

Keywords: Breast self-examination, knowledge and practice, rural area

INTRODUCTION

Carcinoma breast is one of the world's leading causes of mortality and is the most frequent malignancies amongst Indian women after cervical cancer with a steadily increasing incidence mostly in metro cities.. It is estimated that one out of seven women either has or will develop breast cancer in her life time. ¹ It accounts for 19-34% of all cancer cases among women in India. ²In early stages, breast cancer is less aggressive, with low incidence of metastasis and is

potentially curable. Since the degree of success in treating this disease is influenced primarily by the stage at which intervention is introduced, secondary prevention (early detection) is the mainstay. ³

There is no definite primary prevention as yet. Therefore, early detection and prompt and adequate treatment (i.e. Secondary prevention) of breast cancer would be helpful to decrease mortality from this disease. In developing countries, early detection by Breast Self Examination

(BSE) is considered to be a simple, inexpensive, non-invasive, and non-hazardous intervention, which is not only acceptable, cost-effective and appropriate method of early detection of cancer, but also encourages women to take an active responsibility in preventive health. BSE is the most important individual preventive health strategy to be practiced by women on a regular basis. However, correct and thorough BSE has to be ensured and prompt and adequate medical help should be available when needed.

The objective of this study was therefore to assess knowledge and practice of breast self-examination among females and to identify associated factors. This will be useful in making recommendation with regards to health education of women concerning BSE.

MATERIALS AND METHODS

This study was conducted in the RHC(Rural Health Centre), Prathipadu which is field practice area of dept of Community Medicine, Katuri Medical College, Guntur .All women attending General OPD of Rural Health Centers during three months, from April to June 2010 above 20 yrs of age were selected for the study by convenient sampling method. Total 314 women were agreed to participate in the study out of 360 women above 20 yrs of age who attended the General OPD during this 3 month study period. A pretested structured questionnaire containing both closed and open-ended questions was administered to the women by trained interviewers. The questionnaire sought information on sociodemographic data, knowledge and practice of breast self-examination. Statistical analysis was done using Statistical Package for

Social Sciences software programme (SPSS) Version 13.01 to calculate frequencies and chi-square analysis to test for associations between categorical variables.

RESULTS

A total of 314 respondents were interviewed and their social and demographic characteristics are presented in **Table 1**. Most of the women, 166(52.87%) were aged between 31 and 50 years and 43(13.69%) were between the age of 51-60 years. Most of the women, 224 (71.34 %) were married and 47(14.96%) were single. Majority, 139 (44.27%) had secondary education and 43 (13.69%) were illiterate.

Table 1: Sociodemographic characteristics of the study subjects (n=314)

Age (Yrs)	Subject (%)
21-30	78(24.85)
31-40	97(30.89)
41-50	69(21.98)
51-60	43(13.69)
>60	27(8.59)
Marital status	
Single	47(14.96)
Married	224(71.34)
Divorced	13(4.14)
Widowed	30(9.56)
Education	
Illiterate	43(13.69)
Primary	101(32.17)
Secondary	139(44.27)
Graduate & above	31(9.87)

Table 2: Awareness of Breast Self-Examination by Age and Level of education of study subjects (n=314)

Characteristic	Awareness of Breast Examination		Odds Ratio	P value
	Yes (%)	No (%)		
Age group(yrs)				
21-30	11(14.10)	67(85.90)	1	P< 0.004
31-40	36(37.11)	61(62.89)	3.59 (1.68-7.67)	
41-50	26(37.68)	43(62.32)	1.02 (0.54-1.96)	
51-60	17(39.53)	26(60.47)	1.08(0.49-2.36)	
> 60	7(25.93)	20(74.07)	0.53(0.18-1.53)	
Level of education				
Illiterate	7(16.28)	36(83.72)	1	P< 0.001
Primary	31(30.69)	70(69.31)	2.27 (0.91-5.67)	
Secondary	39(28.06)	100(71.94)	0.88(0.50-1.54)	
Graduate and above	20(64.52)	11(35.48)	4.66(2.04-10.62)	

Table 3: Practice of Breast Self Examination by Age and Level of education of study subjects

Characteristic	Practice of Breast Self Examination		Odds Ratio	P value
	Yes (%)	No (%)		
Age group(Yrs)				
20-30	09(11.54)	69(88.46)	1	P< 0.021
31-40	23(23.71)	74(76.29)	2.38(1.03-5.50)	
41-50	18(26.09)	51(73.91)	1.13(0.55-2.31)	
51-60	16(37.21)	27(62.79)	1.67(0.74-3.80)	
>60	05(18.52)	22(81.48)	0.38(0.12-1.21)	
Level of education				
Illiterate	07(16.28)	36(83.72)	1	P <0.003
Primary	18(17.82)	83(82.18)	1.11(0.42-2.90)	
Secondary	31(22.30)	108(77.7)	1.32(0.69-2.52)	
Graduate and above	15(48.38)	16(51.62)	3.26(1.45-7.34)	

Table 2 showed awareness of BSE among women by age and level of education. Most of the women, 217 (69.11%) were not aware of breast self-examination while 97(30.89%), were aware. The level of awareness of breast self examination was highest (39.53%) among those aged 51-60 years and was lowest among those less than 30 years (14.10%). The association between age and awareness regarding BSE was found to be statistically significant (P=0.004) The women who had education upto graduate level and above were more knowledgeable (64.52%) about breast self-examination while those who were illiterate were the least knowledgeable (16.28%) (P = 0.000).

Table 3 showed that 71(22.61%) of the women reported that they practiced breast self-examination. The practice was highest amongst those aged 51-60 years (37.21%), and lowest for those aged less than 30 years (11.54%) which was found to be statistically significant (P=0.021). The practice of breast self examination was reportedly higher among women who had education upto graduate level and above (48.38%) and lowest amongst those who are illiterate (16.28%) which was also found to be statistically significant (P = 0.003).

DISCUSSION

Breast self-examination (BSE) provides an inexpensive method for early detection of breast tumors, thus knowledge and consistent practice could protect women from severe morbidity and mortality due to breast cancer. ⁴ This study assessed the knowledge and practice of breast self-examination among women in South India. Less than one- third of the respondents (30.89%) were aware of BSE. This is lower than 85.5% of women studied in Port Harcourt and 50% of those studied in South Africa. ^{5, 6}The level of

awareness is however higher than 11.9% of women in China who were aware of BSE. ⁷This could be due to the fact that 98% of women studied in Port Harcourt had formal education while 90.1% of those studied in China were rural women.

In this study association was observed between age of women and their awareness of breast self-examination. Association was also observed between education of women and their awareness of breast self-examination. Respondents with higher education were more knowledgeable about BSE. This finding is consistent with other studies conducted among nursing students in Saudi Arabia and health workers in Iran. ^{8,9}

In this study, less than one-fourth of the women interviewed reported practicing BSE, this level is however higher than women studied in United Arab Emirates, South Asia and Brazil. ^{10, 11, 12}There was association between age and level of education of women and practice of BSE in this study.

CONCLUSION

This study shows that level of awareness and practice of breast self- examination among women is low. So the mass media should be used to disseminate information on BSE.

Health workers should intensify health education on the importance of BSE when they come in contact with women such as Antenatal and Immunization clinic sessions the group approach would also foster regular practice of BSE as some of the women could be trained to act as peer educators for the other women. Efforts should be made to increase Literacy especially among female.

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