

Awareness of Breast Self Examination (BSE) Among Women of Andhra Pradesh, India

Pawan Kumar Sharma, Disha Nagda, T. Kamaraju and Enakshi Ganguly
Mediciti Institute of Medical Sciences, Ghanpur, Ap-501401, R.R. District, India

Abstract: Breast Self Examination (BSE) makes women more breast health aware which may lead to an earlier diagnosis of breast cancer. To investigate the awareness of BSE among women patients and other female attendees visiting a teaching hospital. A cross sectional study was conducted in a teaching hospital for 2 months. Total 300 women were studied. A semi structured questionnaire about the awareness of BSE and source of information was administered by the investigator to collect data and analyzed using Epi Info. Mean age of the participants was 26.5 years. About 2% women were aware about BSE. Main information source was health workers in 50% of aware women. Younger, married women and with more years of schooling were significantly more aware. Awareness about BSE among women of Andhra Pradesh is very poor. Knowledge of women about BSE may be improved through various means like health workers, breast health care programs and targeting girl students.

Key words: Breast self examination, breast cancer, awareness, knowledge, women, Andhra Pradesh

INTRODUCTION

The prevalence of cancer in India is estimated to be around 2.5 million with over 0.8 million new cases and 0.5 million deaths occurring each year (Balogun and Owoaje, 2005). Breast cancer accounts for 19-34% of all cancer cases among women (Rao *et al.*, 2005). Over 70% of the patients report for diagnostic and treatment services in advanced stages of the disease, resulting in poor survival and high mortality rates (Dinshaw *et al.*, 1999). In India, the incidence/mortality ratio is 0.48 compared with 0.25 in North America (Parkin *et al.*, 2002). Late diagnosis has been cited as a major factor for this high mortality.

Breast Self Examination (BSE) is widely recommended for early breast cancer detection for all ages globally (Gastrin *et al.*, 1994). Despite being simple, non-invasive process requiring little time and no medical cost knowledge and awareness of breast self examination has been found to be very low especially among rural population. Hence, the present study was undertaken with the objective to investigate about the knowledge and practice of BSE among the women patients and attendees aged 15-45 years in a teaching hospital in Andhra Pradesh.

MATERIALS AND METHODS

The present cross sectional study was conducted from June through August 2012 in a teaching hospital in

rural Rangareddy district of Andhra Pradesh. Ethical clearance for conducting the study was given by the Institutional Ethical Committee. All female patients and healthy female relatives accompanying patients aged 15-45 years, visiting different outpatient departments were included and explained the purpose of the study. Informed consent was obtained from 300 women who agreed to participate in the study. The investigator collected data by interviewing the women by administering a pre designed, semi-structured questionnaire translated in local language. The questionnaire included background information and questions on awareness and practices about breast self examination. Confidentiality was strictly maintained.

The data was entered and analyzed using Epi Info 2000 Software and descriptive statistics. Chi-square analysis was done to determine the relation between BSE awareness and age, school years, place of residence and marital status.

RESULTS

Total 300 women of reproductive age were interviewed. Their socio-demographic characteristics are shown in Table 1. Their mean age was 26.50 ± 7.16 years. Most of the women (75%) came from rural areas whereas 25 (25%) belonged to peri-urban areas. Total 265 (88.33%) were married and the remaining 11.67% were single. The mean years of schooling for women in all age groups was found to be 7.16 ± 5.18 years.

Table 1: Socio-demographic characteristics of the study participants and relation with awareness about breast self examination

Characteristics	No. of women (n)	Aware of BSE	Percentage	χ^2 -test	p-value
Age group (years)					
15-19	26	0	0.00	1.511	0.4697
20-24	135	3	2.22		
25-29	55	2	3.63		
30-34	28	0	0.00		
35-39	27	0	0.00		
40-45	29	1	3.44		
Education					
Illiterate	86	1	1.16	12.575	0.0019
Primary	25	0	0.00		
Secondary	111	1	0.90		
Intermediate	43	0	0.00		
Graduation and more	35	4	11.42		
Residence					
Rural	225	2	0.88	5.556	0.0184
Urban	75	4	5.33		
Marital status					
Married	265	4	1.51	2.733	0.0983
Unmarried	35	2	5.71		

Only 6 (2%) women were aware about Breast Self Examination (BSE) of which 5.33% were from urban and 0.88% were from rural areas. About 5 (2.31%) women in 15-29 years age group and only 1 (3.45%) in 40-45 years age group was aware, the difference in awareness across age groups was not statistically significant ($\chi^2 = 1.511$, $df = 2$; $p = 0.469$). Awareness about BSE was highest in the group that had completed graduation studies (11.42%) followed by the illiterate (1.16%) and secondary schooling (0.90%) groups which was statistically significant ($\chi^2 = 12.575$, $df = 2$; $p = 0.0019$). The mean years of schooling among the aware women was higher (13.0 ± 5.97 years) compared to the unaware group (7.10 ± 5.15 years). Unmarried women had better awareness (5.71%) compared to the married (1.51%) though the difference was not significant ($\chi^2 = 2.733$, $df = 1$; $p = 0.0983$).

The most important source of information was health workers from whom 3 (50%) of the women aware of BSE gained knowledge about the procedure followed by newspaper in 2 (33.33%) women, television in 1 (16.67%) and friends and other sources among 1 (16.67%) woman.

DISCUSSION

Breast cancer is the commonest cause of cancer in Indian females as per recent statistics (Murthy *et al.*, 2009). But the facilities of breast clinics for early detection of breast cancer are not available to a major percentage of the population. This has resulted in late reporting of patients to health clinics and ultimately poorer prognosis.

The findings from the study show that very few participants knew about breast self examination as an early detection measure for breast cancer. From the data, researchers could detect that urban women (5.33%) were

more aware about BSE than women from rural background (0.88%). When studied on the basis of education, graduates (11.42%) were better aware than less educated (0.9%) or illiterate group (1.16%).

Abdel-Fattah *et al.* (2000) studied 565 women in Alexandria and found that only 10.4% practiced BSE of which many had learnt the method from their relatives or friends and others from specialists or magazines or educational campaigns similar to the findings. They also reported that women with higher education, employment and family history of breast cancer and socioeconomic status were well aware about BSE. Balogun and Owoaje (2005) also reported high proportion of unaware Nigerian women with 68% not aware of BSE and 18.1% ever checking their breast. However, they found that women between 50-59 years of age were well aware about BSE. Educational attainment also affected awareness similar to the present study.

As far as the sources of information for BSE are concerned, researchers found that health workers formed about 50% of the sources while newspapers and other media contributed much less. Since, these sources (health workers, newspapers and television) are widely available there should be maximum utilization of these sources to spread awareness about BSE and breast cancer among masses. Promotion of health awareness amongst schools and teachers has also achieved positive results (Iverson and Kolbe, 1983). One study carried out in Karnataka has suggested that breast self examination can be used to create breast health awareness among women by training female health workers (Rao *et al.*, 2005) where in an education program on breast health had a significant impact on overall awareness and performance (93%). However, forgetfulness and being too busy appeared as barriers.

The results obtained in the present study differed from the expectations and the figures were worrisome. Indian women are hesitant to talk about sexual organs; breast being a secondary sexual organ, women are hesitant to discuss about it which was evident when few women refused to participate in the study. Therefore, researchers felt that cultural taboo may form a major reason for lack of awareness about breast self examination.

CONCLUSION

This study has shown that women visiting a tertiary care hospital (Rangareddy district of Andhra Pradesh) have very poor knowledge of breast self examination. Therefore, it is important to create awareness and educate the community about breast self examination through community based health programs, especially among the girl students and younger women. The hospital

environment provides a favorable location to educate the women on importance of BSE and teaching them to examine themselves. Information need to be disseminated in forms, like newspapers and television having mass impact which appeal to the community.

ACKNOWLEDGEMENTS

Researchers duly acknowledge the ICMR for providing permission and financial assistance for conducting the study under ICMR-STC Grant 2011.

REFERENCES

- Abdel-Fattah, M., A. Zaki, A. Bassili, M. El-Shazly and G. Tognoni, 2000. Breast self-examination practice and its impact on breast cancer diagnosis in Alexandria, Egypt. *East. Mediterr. Health J.*, 6: 34-40.
- Balogun, M.O. and E.T. Owoaje, 2005. Knowledge and practice of breast self-examination among female traders in Ibadan, Nigeria. *Ann. Ibad. Post Med.*, 3: 52-56.
- Dinshaw, K.A., D.N. Rao and B. Ganesh, 1999. Tata memorial hospital cancer registry annual report. Mumbai, India.
- Gastrin, G., A.B. Miller, T. To, K.J. Aronson and C. Wall *et al.*, 1994. Incidence and mortality from breast cancer in the mama program for breast screening in Finland, 1973-1986. *Cancer*, 73: 2168-2174.
- Iverson, D.C. and L.J. Kolbe, 1983. Evaluation of a national disease prevention and health promotion strategy-establishing a role for the schools. *J. School Health*, 53: 294-302.
- Murthy, N.S., K. Chaudhry, D. Nadayil, U.K. Agarwal and S. Saxena, 2009. Changing trends in incidence of breast cancer: Indian scenario. *Indian J. Cancer*, 46: 73-74.
- Parkin, D.M., F. Bray, J. Ferlay and P. Pisani, 2005. Global cancer statistics, 2002. *CA Cancer J. Clin.*, 55: 74-108.
- Rao, R.S.P., S. Nair, N.S. Nair and V.G. Kamath, 2005. Acceptability and effectiveness of a breast health awareness programme for rural women in India. *Indian J. Med. Sci.*, 59: 398-402.