

BREAST SELF-EXAMINATION AS A METHOD OF EARLY DETECTION OF BREAST CANCER: KNOWLEDGE AND PRACTICE AMONG ANTENATAL CLINIC ATTENDEES IN SOUTH EASTERN NIGERIA

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ABSTRACT

Objective: To determine antenatal women's knowledge and practice of breast self-examination as a method of early detection of breast cancer.

Methodology: It is a descriptive study involving 100 consecutive and consenting patients at the antenatal clinic of Abia State University Teaching Hospital, Aba, over the period 1st June, 2007 to 15th June, 2007. Using a structured questionnaire, the respondents' socio-demographic data were obtained as well as their knowledge of breast cancer, breast self-examination for early detection of breast cancer and the practice of breast self-examination.

Results: The majority (98%) of the women were married. Whilst 78% of the respondents practiced breast self-examination regularly, only 34% of them knew the reason for practising breast self-examination. This means that the breast self-examination practiced was mostly ineffective. Only 3% of the respondents knew about a mammogram whilst none had had a mammogram done in the past. The vast majority (97%) of the respondents had heard of cancer of the breast. Breast self-examination was positively associated with educational level attained.

Conclusion: The level of practice of breast self-examination is very low in our community. Public health programmes that teach women to regularly examine their breast and to seek early treatment for any detected lesions should be publicized through the mass media, seminars, conferences, workshops at the grassroots level and health education at health facilities.

KEY WORDS: Breast, Self-examination, Knowledge, Practice, Women.

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INTRODUCTION

Breast cancer is the most common cancer among women in many parts of Africa and the leading cause of mortality associated with cancer in African women.¹ Although, the true incidence of breast cancer is generally not known in many African countries, several publications indicate a trend towards an increasing incidence of the disease in many parts of Africa.^{1,2} While very little can be done to limit the main causative risk factors which have been

documented in epidemiological studies,³⁻⁵ important advances have been made in strategies for early detection and in therapeutic interventions which may contribute to more favourable outcomes for breast cancer patients.⁶

Several studies have shown that barriers to diagnosis and treatment can be addressed by increasing women's awareness of breast cancer.⁷ A positive correlation also exists between breast cancer awareness & screening practice.⁸

There is a paucity of data on the knowledge of breast cancer, knowledge and practice of breast self-examination (BSE) in Aba. It is against this background that in a first of many studies on the prevention of cancer of the breast, it was decided to examine the knowledge of breast cancer and the knowledge and practice of BSE among these antenatal women as a first step towards the introduction of intervention programmes which are currently non-existent.

If the practice of breast self-examination is found to be low in this study, the information obtained will enable us to design culturally sensitive health education materials that will be useful in preventing mortality from breast cancer in Nigeria. Hence, the need for the study.

METHODOLOGY

This was a hospital based descriptive study done between 1st June, 2007 and 15th June, 2007 at the ante-natal clinic of Abia State University Teaching Hospital, Aba. One hundred consecutive antenatal women who gave informed consent to participate in the study were enrolled. A structured questionnaire was administered to elicit demographic data, knowledge of breast cancer, breast self-examination and the practice of breast self-examination.

On completion of the administration of the questionnaires, the ante-natal women were taught how to practice breast self-examination as follows:

a) while standing, raise your left arm. Using your right hand and beginning at the outer edge of the breast, press the flat part of the fingers in small circles, moving slowly

around your breast and towards the nipple. Give attention also to the area between your underarm and breast.

b) Lying flat, position a pillow under your left shoulder, and place the left arm over or behind your head. Use the same circular motion as described earlier. Repeat the procedure for the right side.

c) Gently squeeze your nipple to check for any discharge. Carry out the same procedure for the right breast.

Data analysis included descriptive statistics for demographic data and content analysis for interview data. Data generated was analyzed using SPSS version 10. $P < 0.05$ was considered significant. Ethical approval was obtained from the ethical committee of Abia State University Teaching Hospital, Aba, Nigeria. All the participating antenatal women gave informed consent.

RESULTS

A total of one hundred consecutive antenatal clinic attendees were recruited for the study. Table-I shows the socio-demographic characteristics. Two participants were teenagers, fifty

Table-I: Socio-demographic characteristics.

<i>Characteristics</i>	<i>Number</i>	<i>Percentage (%)</i>
<i>Respondents:</i>		
Age (years)	2	2
< 19	50	50
20 - 29	46	46
30 - 39	2	2
40 - 49		
<i>Marital Status:</i>		
Married	98	98
Single	2	2
Widowed	0	0
<i>Educational Level:</i>		
Primary	2	2
Secondary	48	48
Post-Secondary	50	50
No formal education	0	0
<i>Ethnic Origin:</i>		
Igbo	94	94
Yoruba	2	2
Hausa/Fulani	1	1
Others	3	3

were between 20-29 years old, forty six were between 30 and 39 years old and two were between 40 and 49 years old. Majority of the study women (98%) were married.

Whilst 78% of the respondents practiced BSE regularly, only 34% of them knew the reason for practicing breast self-examination. This means that the breast self-examination practiced was mostly ineffective. Only 3% of the respondents knew about a mammogram whilst none had had a mammogram done in the past. The vast majority (97%) of the respondents had heard of cancer of the breast. Breast self-examination was positively associated with educational level attained (Table-II).

DISCUSSION

Breast cancer screening can involve a number of different types of examinations, which include breast self examination, clinical breast examination, mammography, magnetic resonance imaging and ultrasound.⁹ Screening mammography is widely practiced in the developed world but is expensive and beyond the reach of most patients in Nigeria and other countries in Sub-Saharan Africa.¹⁰ In populations such as ours where mammography is not widely available as a screening modality, breast self-examination becomes particularly impor-

tant. However, BSE remains the most controversial of commonly recommended strategies for breast cancer screening.¹¹ Some studies have shown an association with earlier diagnosis of breast cancer¹²⁻¹⁶ & others failing to do so.¹⁷⁻¹⁹ However, researchers in Egypt, consistent with most published reports,^{11,12,14} found that BSE performers regardless of the regularity or quality of the practice were three times more likely to have their breast tumours diagnosed at an earlier stage. Foster and Costanza (1984) reported a 5-year survival rate of 75% in women with breast cancer for women who performed BSE compared with 57% in those who did not.¹² Breast examination is the predominant method of detecting breast cancer in Australia where mammographic screening accounts for 30% of detected breast cancers and the remainder being found by the women themselves and their medical advisers.²⁰ BSE may be seen in this context as an easy and free, evidence - based modality of breast cancer screening in a low resource setting such as ours.

Although 78% of the respondents in our study regularly examined their breasts, 34% of them knew what BSE screened for, meaning that the BSE practiced was largely ineffective. In an Iranian study, 63% of the respondents claimed that they knew how to examine their

Table-II: Comparison of breast self examination (BSE) practice by age, ethnic group and educational level.

	<i>Do not practice BSE</i>		<i>Practice BSE</i>		<i>P-Value</i>
	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	
<i>Age (years)</i>					
< 19	0	0	1	1.3	0.3 (n/s)
20 - 29	14	63.6	36	46.1	
30 - 39	8	36.4	39	50.0	
40 - 49	0	0	2	2.6	
> 50	0	0	0	0	
<i>Educational level.</i>					
No formal education	0	0	0	0	0.003 (sig)
Primary School education	1	9.1	0	0	
Secondary School education	14	63.6	34	43.6	
Post Secondary education	6	27.3	44	56.4	
<i>Ethnic Group.</i>					
Igbo	21	95.5	73	93.6	---
Yoruba	0	0	0	2.6	
Hausa/Fulani	1	4.5	0	0	
Others	0	0	3	3.8	

breast, but only 6% performed BSE monthly.²¹ Only 10.4% of patients in an Egyptian study reported any BSE and 2.65% practiced it monthly.¹¹ Thus, the frequency and quality of BSE in our community and that of these other developing countries are inadequate. BSE is an easy and cost effective method of early detection of breast cancer and should be integrated into the existing public health policies. Public Health programmes that teach women to regularly examine their breasts and to seek early treatment for any detected lesions should be publicized through the mass media and through seminars, conferences, workshops at the grassroots level and health education at health facilities. Physicians should also be taught to instruct their patients in the technique of BSE and advise them to report for medical evaluation if a mass or other abnormality is detected.²²

In conclusion, regular BSE is a cost-effective method of making an early recognition of breast cancer. The widespread introduction of BSE in our community will improve the prevention of breast cancer and contribute to a reduction in mortality in women.

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