

**ATTITUDES TO, KNOWLEDGE AND PRACTICE OF BREAST SELF-
EXAMINATION AMONG FEMALE HEALTH CARE WORKERS IN MURTALA
MUHAMMAD SPECIALIST HOSPITAL, KANO**

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Abstract

Introduction

Cancer of the breast is the most common malignancy in women. Its incidence is increasing due to lifestyle and dietary changes. Breast self examination is a useful prevention strategy that can be promoted amongst women so as to reduce morbidity and mortality from this dreadful disease.

Materials/Methods

A self administered questionnaire was used in this survey of 200 randomly selected female health workers in Murtala Muhammad Specialist Hospital, Kano, Nigeria

Results

The results show that there is good knowledge of BSE with positive attitude (94.5%) towards BSE but the practice of BSE was fair (57.0%) amongst female health workers.

Conclusions

This study showed fair practice of BSE amongst female health workers despite good knowledge and positive attitude to BSE.

KEY WORDS: *Breast Self Examination, Breast Cancer, Female Health Workers*

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Introduction

Breast cancer is the most common cancer and the second most common cause of death from cancer in women.¹ And because of the high frequency of this disease and the aesthetic and symbolic value invested in the breast, breast cancer has always been a source of severe distress to patients and the families. Medical advancements and increased public awareness have led to earlier diagnosis at stages usually amenable to complete resection and potential cure of the disease.² Carcinoma of the breast is a worldwide public health problem even though it is more prevalent in certain parts than others. It is twice more common in Caucasians than in other races.^{1, 3}

Breast cancer is the commonest malignancy among women In North America, accounting for about 27% of all female cancers. Eighteen percent of all cancer deaths are due to cancer of the breast.¹ In Britain one in 12 women will develop cancer of the breast in their life time and the incidence is rising.¹ In Accra, Ghana, it accounts for about 16.0% of all female cancers, being now the commonest cancer in females .³ In Kenya, it constitutes about 9.4% of all the cancers in women. In Zimbabwe 8.5%, in Tanzania about 8.1% , in Sudan 26.0%, in Malawi 5.5%, in Liberia 15% and Uganda 4.0%.³ In Nigeria, the incidence of breast cancer has doubled from 15.3 per 1000,000 women in 1976 to 33.6 per 1000,000 in 1992 and is currently the commonest malignancy in Ibadan.^{3,4} Almost 20,000 women will contract breast cancer this year and over 3,500 will die from this disease.⁵ With rising life expectancy, and the increasing standard of living, cancer of the breast is likely to become a major problem in Africa.³

It is believed that early detection and treatment of breast cancer may improve the prognosis of this deadly disease.⁴ This has led to screening programs (e.g. Mammography, Regular Breast Self-examination (BSE) and Clinical Breast Examination) that can help in early detection of this disease. Effectiveness of breast self-examination as a screening program has been equivocal, but since mammography may prove too costly in our environment, BSE may be a useful alternative in our society.^{4, 5, 6}

The aim of this study is to examine attitudes to, knowledge and practice of breast self-examination among female health care workers in Murtala Muhammad Specialist Hospital, Kano. Female health care workers are expected to possess good knowledge, practice of and attitudes towards BSE which will ultimately have an impact on their female clients.

Methodology

Murtala Muhammed Specialist Hospital, Kano was established in the year 1926 as the city hospital, Kano, with a capacity of 16 beds. It is one of the oldest and largest hospitals in the country. Presently, the hospital has 20 departments within the hospital consisting of both clinical and non clinical departments. The hospital has about 1500 permanent staffs and about 200 casual workers. Among this sum of 1700 workers, females constitute close to two- third. And these are distributed in those various departments. The female workers are of various educational statuses, profession, ages, nationality, state of origin, marital status, and income. The study population comprises of all female health workers found during the study period in the hospital. The study design was a descriptive cross-sectional study of attitudes to, knowledge and practice of breast self-examination in female health workers. The calculated sample size was 191, which was increased to 200 so as to cover for non response. The prevalence value used in the sample size calculation was 85% which was the proportion of respondents found to be aware of BSE in a study conducted at Port Harcourt Nigeria.⁴

Permission and ethical clearance was obtained from the management of Murtala Muhammed Specialist Hospital, Kano. Informed consent was also obtained from each participant before the commencement of administration of questionnaires. The provisions of Helsinki Declaration were duly respected. A multistage sampling technique was used to select 10 out of the 20 departments in the hospital. And 20 female health workers were selected from each of the 10 departments to obtain the 200 respondents recruited for the study. The instrument for data collection was a self administered questionnaire which consisted of both closed and opened ended responses. Data was analyzed using Epi-Info software. Categorical data was presented as absolute numbers and percentages as depicted in tables drawn using Microsoft Word[®]. Test of association was also conducted between the selected variables using χ^2 test. Responses to questions on knowledge were given a score of 2 if answered correctly, and no point was given for any wrong answer. A total of 16 points was obtainable under this section. Respondents who scored 11 – 16 points in

this section were adjudged to have good knowledge, and those who scored 6 – 10 points were said to have fair knowledge while those with five points or less were adjudged to have poor knowledge. The section on attitude had a total of 9 questions, and each correctly answered question is given a score of 2 and a total of 18 marks are obtainable under this section, a score of 8 and above denotes a positive attitude while a score of 7 and below denotes a negative attitude. These scoring systems were adapted from KAP studies^{16,17} in the field of reproductive health.

Results

Socio-demographic Characteristics

The response rate was 100%. Table I shows the distribution of the social and demographic variables of the respondents. Most of the respondents fall within the age group 26 – 30 years (36%), with majority 147 (73%) belonging to the Hausa/Fulani ethnic group and belonging to the Islamic faith while only 45% are Christians. Table I also shows the respondents' highest educational attainment, slightly above 50% have attended tertiary institution.

Knowledge, Practice and attitudes towards BSE

Tables II, III and IV show the respondents' knowledge, practice and attitude towards BSE. Using a scoring system (see methods section), about 44.5% of the respondents had good knowledge of BSE, while 45.5% had fair knowledge. Attitudinal scores were highly positive (94.5%) while good practice was observed in slightly over half of the respondents.

Social and Demographic factors influencing respondents' knowledge of BSE

Table V shows the effect of age, marital status and parity on the knowledge of BSE. Ages less than or equal to 30 years and greater than 30 years were considered. It shows that there is a statistically significant difference between age less than or equal to 30 and age greater than 30 years in their level of knowledge ($\chi^2 = 27.47$, $df = 1$ and $P < 0.05$). Table V also shows relationship between marital status and level of knowledge on BSE. There is a statistically significant difference between marital status and level of knowledge of BSE ($\chi^2 = 9.58$, $df = 2$ and $P < 0.05$). Table V also shows the relationship between parity of the respondents and their level of knowledge of BSE. There is a statistically difference between the parity of the respondents and level of knowledge of BSE ($\chi^2 = 46.08$, $df = 1$ and $P < 0.05$).

Source of information

Table VI shows the respondents' sources of information on breast cancer, with the majority 72 (36%) sourcing their information from their friends. Sourcing of information from the parent is the least, sources from the doctors constitute only 8.5% and news media sources form 23.5% of the sources.

Discussion

Muslims of Hausa/Fulani ethnic extraction form the majority in this study and most of them are between 26 and 30 years old. This is consistent with the demographic profile of Kano. Fifty percent of the respondents had tertiary education while only 4% had no formal education. This finding of high literacy level among respondents is because the study was conducted on a spectrum of health workers.

About 50-87% of breast cancers in Scotland and Greece are picked up by women early enough to aim at curing the disease.⁷ A study conducted in Port Harcourt, Nigeria, among 76 health workers showed (85%) of the respondents were aware of BSE but 39% practiced BSE only occasionally, while 24% did not practice it at all. Only one doctor could describe how to perform BSE correctly. The news media, nurses and physicians were the commonest sources of information on BSE⁴ in a similar study conducted in Ikeja, Nigeria among nurses in Lagos.⁵ However, in the study conducted in Kano, 45% of the respondents' demonstrated good knowledge of BSE, 46% had fair knowledge and 10% had poor knowledge. This contrasts with the findings of similar studies done in Port Harcourt⁴ which showed 86% to have good knowledge of BSE. This may be related to cultural factors in the northern part of the country which does not encourage discussion of reproductive health issues freely even amongst health workers. Other studies^{8, 9, 10,11,15} showed values ranging between 27% and 68% of the respondents' awareness/knowledge of family history of breast cancer as a risk factor for developing breast cancer.

Findings from a study¹³ among Asian women suggest that older women demonstrated better knowledge of BSE than younger ones, and in that study a statistically significant difference was found between the knowledge of BSE and of respondents ($\chi^2 = 27.47$, $df = 1$ and $P < 0.05$). In

another study¹⁴ conducted among Saudi Arabian women, those above 30 years were more likely to possess good knowledge of BSE when compared with their younger counterparts. Other studies¹² also indicate, that married respondents and those with high parity were more knowledgeable about BSE than those who were single or had low parity ($\chi^2 = 9.58$, $df = 2$ $P < 0.05$), and ($\chi^2 = 46.08$, $df = 1$, $P < 0.05$) respectively. This was also found in the study conducted in Kano and could be explained by the better knowledge and experience seen in older women. Most of the respondents in this study had positive attitude towards BSE. This is in congruence with similar studies^{14, 15}. This is expected because all the respondents in this study are female health worker who may be involved with care-giving activities to patients with breast cancer. Negative attitudes toward BSE was also evident among some of the respondents with up to 11% describing feelings of unhappiness while doing it and 6% thinking it is not worthwhile. Some of the reasons adduced include “BSE is troublesome” it is “difficult to perform” (13%) “BSE is time consuming” (23%).

Up to 57% of the respondents admitted practising BSE, However, respondents’ frequency of BSE practice varied considerably. What is appalling here is that the majority of the respondents do not practice it in the desired frequency. This is demonstrated by only 15% who performed it monthly. A few (3%) performed BSE on a daily basis and daily BSE is inappropriate and has been associated with a lot of anxiety especially in families in whom history of breast cancer was found. These findings are consistent with the study in Port Harcourt and other studies⁸.

Although, BSE is not the most sensitive screening method; it is useful in detecting breast lesions in order to reduce mortality from the disease. Breast cancer is believed to lend itself to detection sooner by routine self-examination than by accidental finding of an abnormality in the breast³. It appears that doctors/health workers are constrained by their ability to correctly health educate a large number of patients on BSE because of their limited numbers and heavy workload. This is seen from the fact that most respondents got information about breast cancer and BSE not from doctors but from the news and mass media. A very disturbing finding in this study was that, although majority of the respondents showed considerable knowledge, and majority also believed BSE was a worthwhile exercise, it was practiced only occasionally. Sustained and dedicated dissemination of information on BSE and its importance to patients can never be achieved in such circumstances of poor BSE practices.

There is need for urgent and vigorous health campaign to educate health workers and the general

populace on the need for BSE. And through this those at risk can be reached and hopefully the morbidity and mortality from breast cancer will be reduced.

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Table I: Socio-demographic Characteristics

Characteristics	Freq	%
Age Groups		
16 - 20	12	6.0

21 -25	63	31.5
26 - 30	72	36.0
31 - 35	30	15.0
36 - 40	16	8.0
> 40	7	3.5
Total	200	100.0
Educational Level		
Quranic/None	8	4.0
Primary	16	8.0
Secondary	75	37.5
Tertiary	101	50.5
Total	200	100.0
Religion		
Islam	191	95.5
Christian	9	4.50
Total	200	100.0
Ethnic group		
Hausa/Fulani	147	73.5
Yoruba	20	10.0
Igbo	16	8.0
Others	17	8.5
Total	200	100.0

Most of the respondents (73.5%) are from the Hausa/Fulani ethnic group and nearly all of them (95.5%) are Muslims. Mean age 27.9 years with standard deviation of 5.8 years.

Table II: Respondents' knowledge level of BSE

Level of knowledge	Freq	%
Good	89	44.5
Fair	91	45.5
Poor	20	10.0
Total	200	100

Table III: Selected questions on respondents' attitude towards BSE.

Questions	Positive	%
Is BSE worthwhile	189	94.5
Would you advice women to be doing it?	180	90.0
Do you feel unhappy while doing BSE?	22	11.0
Do you think BSE is a waste of time?	43	21.5
Is BSE difficult to perform?	26	13.0
Is BSE time consuming?	46	23.0
Do you worry about cancer while doing BSE?	86	43.0

Table IV: Practice of BSE among respondents.

	Frequency	%
Practicing	114	57.0
Not practicing	86	43.0

Total	200	100.0
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Table V: Social and demographic factors influencing respondents' knowledge of BSE

Characteristics (n=200)	Knowledge		Chi-squared (χ^2) statistic	P - value	Significance
	Good & Fair	Poor			
Age				P<.05	significant
< 30 years	39	47	27.5		
> 30 years	94	20			
Marital status				P<.05	significant
Single	35	21	9.6		
Married	63	15			
Divorced/Widowed /Separated	56	10			
Parity					
< 4 children	34	50	46.1	P<.05	significant
> 4 children	100	16			

Table III: Distribution of the respondents sources of information on breast cancer.

Source of information	Frequency	Percentage
News media	47	23.5
Parents	13	6.5

Friends	72	36.0
Doctors	17	8.5
Nurses	51	25.5
Total	200	100