

Awareness, Attitude and Practice of Rural Women regarding Breast Cancer in Northeast Nigeria

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Abstract

Background: Breast cancer is the second leading cause of cancer deaths in northeast Nigeria, while it predominates in the south-western part of the country. The situation in rural areas is compounded with poor access to health facilities, low socio economic status and illiteracy. It has been shown that early detection can reduce the risk of the disease by 40 per cent. Knowledge of the risk factors of breast cancer is very important in the prevention of the disease as it provides the individual the opportunity to seek early intervention. The objective of this study was to determine the level of awareness and examine the attitude and practice of rural women in northeast Nigeria regarding breast cancer.

Materials and Methods: A cross sectional descriptive community based study involving 1600 rural women aged 20-40 years randomly selected from 28 village units was carried out using a 23 item structured validated questionnaire between April and June 2010.

Result: Only 931 (58.2%) of them have heard of breast cancer. Of these, 263 (28.2%) perceive the cause as being brought about by a medical condition, 199 (21.4%) spiritual, 194 (20.8%) hereditary, 143 (15.4%) use of brassieres and 21 (2.3%) excessive breastfeeding. Three hundred and sixty (38.7%) know of Breast self-examination (BSE). Only 176 have ever done it: of those, 16 (9.1%) did it because one of their family members had breast cancer. More than half (58.8%) will use BSE if it is of benefit to them, 19.9% if their husbands agree and 4.2% if there is known cure.

Conclusion: The results suggest the critical need for more and sustained awareness of Breast cancer.

Keyword: Breast cancer; Community education; Breast self-examination

Introduction

Breast cancer is the leading female malignancy in the world [1] and is now the most common cancer in Nigeria. Pindiga et al. [2] have shown that breast cancer is second to cancer of the cervix in the northern part of Nigeria, while cancer of the breast predominates in western Nigeria. Breast cancer has always been a source of severe distress to the patients and their families because of the high frequency of the disease, and the esthetic and symbolic value invested in the breast. Despite advances in diagnosis and treatment, almost one fourth of women who develop this cancer will die of the disease worldwide. About seventy per cent of women with breast cancer are older than fifty years; only five per cent are younger than forty years. The incidence of breast cancer is increasing in the developing world due to increased life expectancy, increased urbanization and adoption of western lifestyle [3].

Breast cancer causes are unknown, thus it is considered as a disease primarily associated with some risk factors. These factors are simply being a female, getting older, family history of breast cancer especially a first-degree relative, early menarche at the age of 12 and under, late menopause after the age of 55 years, and having the first child after the age of 30 years [4]. Breast-feeding appears to be protective against breast cancer, and null parity is associated with an increased risk of developing breast cancer. Prolonged use of oral contraceptive pills, hormonal therapy, and being overweight or obese have been found to increase breast cancer risk among menopausal women [4]. Obesity, known to be associated with the poor prognosis primarily as a consequence of increased estrogen production and bioavailability, is more common in black than in white breast cancer patients. An additional factor may be an early age at first completed pregnancy for black women, which is associated with a reduced breast cancer risk but also a poorer prognosis [5]. This information is not readily available to the rural populace in Nigeria and most developing countries. The incidence is high in both

urban and rural areas of Nigeria and this can be attributed to the poor knowledge of breast cancer among women in these areas. Only a few of the health workers in these areas have adequate knowledge of the risk factors and preventive measures or screening techniques for early detection [6,7]. The poor knowledge and wrong beliefs about breast cancer prevention among black women are responsible for a negative perception of the curability of a cancer detected early and of the efficacy of the screening tests [4]. Also, silence and lack of understanding of the concept of risk factors associated with cancer of the breast discourage people from seeking early intervention or even to admit that symptoms they may be experiencing are related to breast cancer. As such there is need for a study to assess the level of awareness of these risk factors in our communities.

This study attempts to determine the level of awareness of breast cancer and its predisposing factors among females aged 20-40 years in rural northeast Nigeria as well as their practice of breast-self examination. This will, in turn, inform medical training institutions and health workers to formulate appropriate health talks, and for the government to formulate effective policy that will enable better access to screening and early diagnosis. Thus, reducing and converting the number of advanced irredeemable cases to redeemable ones.

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Methodology

The study was carried out in four Local Government Areas (LGAs) of northeastern Nigeria - Konduga, Bama, Gwoza and Madagali - over a period of eight weeks (April to June, 2010) to assess the knowledge, attitudes and practice of rural women aged 20 – 40 years regarding risk factors of breast cancer. A cross sectional descriptive community based study involving 1600 rural women randomly selected from 28 village units was carried out using a 23 item interviewer administered structured validated questionnaire. Four groups of final year medical students administered the questionnaire during their eight week community based medical posting [8]. In each LGA a total of 400 questionnaires (based on sample size estimation) [9] were administered across an average of seven village units.

A multi-stage sampling method was used to select respondents from each LGA, each having an average of four districts. In the first stage, one district was chosen randomly for the study. In the second stage, two village units were chosen by simple random sample. In the third stage, of the village units selected, two wards were selected by simple random sampling. In the last stage, households were selected from each ward using a systematic sampling method from which a respondent within the age group of 20-40 years was selected. A total of 56 wards were selected from which the 1600 respondents were obtained. Informed consent was obtained from each respondent.

The questionnaire comprised of four sections which sought information on the demographic background of the respondent, knowledge on breast cancer and breast self-examination (BSE), attitude towards risk factors associated with breast cancer; and practice of breast cancer and BSE. The data were analyzed using Epi Info 3.4.1.

Result

Table 1 shows that of the 1600 respondents, 979 (61.4%) are within the age limit of 20 to 29 years. The education status of the respondents is low with 813 (50.8%) having no western education. The majority are Muslim 1135 (70.9%) and married (76.7%).

Table 2 shows that only 931 (58.2%) of the total respondents have heard of breast cancer. Figure 1 shows that majority of those who are aware of breast cancer obtain their information on breast cancer through friends and health workers. Table 3 indicates that of the 931 respondents who are aware of breast cancer, 263 (28.2%) perceive the cause as being brought about by a medical condition, 199 (21.4%) spiritual, 194 (20.8%) hereditary, 143 (15.4%) use of brassieres and 21 (2.3%) excessive breastfeeding.

The attitude towards breast cancer is depicted in Table 4. It shows that a total of 632 (67.9%) and 624 (67%) of the respondents disagreed that breast cancer patients should be isolated or it is a punishment from God respectively, while the majority of them agreed that breast cancer patients should live in the community (72.3%) and be supported (91.9%). Though, 780 (77.6%) of the respondents are afraid of the disease.

Table 5 shows that only 360 (38.7%) of those aware of breast cancer were aware of Breast Self-Examination as a method for detection of breast cancer, while only 176 (24.8%) have ever done it. Of those who had done BSE, 60 (34.1%) did so on the advice of health workers, 16 (15.5%) did so because one of their family members had breast cancer. More than half (58.8%) will have Breast Self-Examination if it would be of benefit to them, 19.9% if their husbands agree and 4.2% if there is known cure.

DEMOGRAPHIC CHARACTERISTICS	FREQUENCY	PERCENTAGE (%)
AGE GROUP		
20-24	563	35.2
25-29	419	26.2
30-34	303	18.9
35-40	315	19.7
TOTAL	1600	100
RELIGION		
Islam	1135	70.9
Christianity	440	27.5
Others	25	1.6
TOTAL	1600	100
MARITAL STATUS		
Married	1228	76.7
Single	256	16.0
Divorced	116	7.3
TOTAL	1600	100
EDUCATIONAL LEVEL		
None	557	34.8
Quranic	256	16.0
Primary	230	14.4
Secondary	322	20.1
Tertiary	235	14.7
TOTAL	1600	100

Table 1: Demographic characteristics of females 20-40 years in rural northeast, Nigeria.

RESPON	FREQUENCY	PERCENTAGE (%)
Aware	931	58.2
Not Aware	669	41.8
Total	1600	100

Table 2: Awareness of breast cancer among females 20 – 40 years in rural northeast, Nigeria.

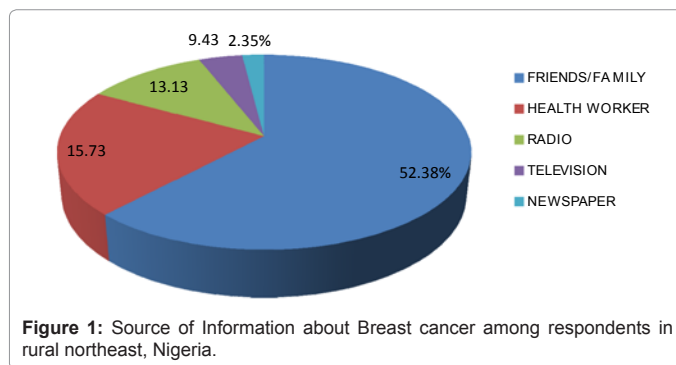


Figure 1: Source of Information about Breast cancer among respondents in rural northeast, Nigeria.

Discussion

It is worth noting that the results of this study indicate that 58.2% of the respondents are aware of breast cancer, which is contrary to that of the study carried out by Okobia [7] in southern Nigeria (Edo state) which reported that the mean knowledge score was about 42.3% and only 21.4% were aware of breast cancer. It may be attributed to the increase in awareness through other means of information especially the media, friends and health workers. Thus, education should be intensified to enlighten the population in general and women of child bearing age in particular on the importance of the risk factors of breast cancer. Also doctors and health workers should endeavor to educate women on “breast awareness” during regular clinic visits for other health issues. Information on breast cancer obtained via friends seems important in increasing the level of awareness of breast cancer

RESPONSE	FREQUENCY	PERCENTAGE (%)
Spiritual	199	21.4
Inherited/familial	194	20.7
Excessive breastfeeding	21	2.3
Diet	47	5.1
Medical condition	263	28.2
Use of Brassieres	143	15.4
Old age	24	2.6
Others	40	4.3
Total	931	100

Table 3: Perceived risk factors of breast cancer among females 20 – 40 years in rural northeast, Nigeria.

STATEMENT	AGREED (%)	DISAGREED(%)	NOT SURE(%)	TOTAL(%)
Breast cancer patients should be isolated	214 (22.9)	632 (67.9)	85 (9.2)	931(100.0)
Breast cancer patients should be allowed to live freely in the community	673 (72.3)	197 (21.2)	61 (6.5)	931(100.0)
Breast cancer is a punishment from God	189 (20.3)	624 (67.0)	118 (12.7)	931(100.0)
Breast cancer patients should be provided with support and home care by the community	856 (91.9)	36 (3.9)	39 (4.2)	931(100.0)
Breast cancer patients should not be allowed to breast feed	525 (56.4)	273 (29.3)	133 (14.3)	931(100.0)
Women should be afraid of breast cancer	780 (77.6)	106 (10.5)	120 (11.9)	931(100.0)

Table 4: Assessment of Attitude towards Breast Cancer among Females 20-40 years in rural Northeast Nigeria.

in the community. In contrast to the result of a study done in South Eastern Nigeria by Ibrahim and Odusanya [10], health workers were the main information source with regards to breast cancer knowledge. Out of the 931 respondents in Table 3, 199 respondents (21.4%) believe that breast cancer is acquired spiritually. This also agrees with current literature that many women in Nigeria still associate breast cancer with spiritual causes [7]. None of the respondents, when asked, mentioned prolonged use of contraceptive pills, hormonal therapy or being overweight/obesity as risk factors, whereas in developed countries such as America, Japan and France, breast cancer is believed to be purely of medical cause as reported by Grunfelt et al. [11].

The attitude of the respondents regarding risk factors of breast cancer is worrisome with 189 (20.3%) still believing that breast cancer is a punishment from God which is similar to the reasons reported in the study by Ibrahim and Odusanya [10]. Even more worrisome is the finding that almost a quarter of respondents, 214 (22.9%), 197 (21.2%) agreed that breast cancer patients should be isolated and not allowed to live freely in the community respectively.

Table 5 shows that respondents' awareness of breast self-examination (BSE) was very low. Only (38.7%) of those who were aware of breast cancer were aware of BSE as a method for detection of breast cancer. This may be as a result of the low level of education of the respondents because education has been shown to also contribute

significantly when it comes to knowledge and practice of BSE [7]. Among the 360 respondents that were aware of BSE, 176 (48.9%) have done it, which is similar to the study done by Kayode et al. [12], while 60 (34.1%) of them obtained the information/advice from health workers. Other reasons given for doing BSE included routine medical checkup, noticing breast lump, other medical condition and positive family history of breast cancer. These are very good reasons for carrying out BSE and show the depth of knowledge and positive attitude which have translated into good practice among the few who knew about it. However, the result of the study carried out in southern Nigeria revealed that almost 100% of the participants who were aware of BSE also knew why it is practiced [13], but the majority of them do not do it as shown by Salaudeen et al. [14]. While Ibrahim and Odusanya [10] in their study revealed that the women that are aware of breast cancer were not fully informed about the disease condition.

The low level of knowledge found in this study is in keeping with reports of other researchers [11,13]. In a survey of risk factors associated with breast cancer knowledge, Okobia [7] noted that only 32 percent of the respondents knew how to practice BSE while 58 percent were unaware of it.

From the results of this study it is recommended that culturally specific and sensitive health education should be developed on risk factors associated with breast cancer to enlighten women and emphasize the importance of breast self-examination as a key factor in the early detection of breast cancer.

Women of child bearing age should be taught how to perform daily, weekly or monthly breast self examination, go for clinical breast examination and mammography so that an early breast lesion can be

AWARENESS/ PRACTICE	FREQUENCY	PERCENTAGE (%)
Are you aware of BSE		
YES	360	38.7
NO	571	61.3
Total	931	100.0
Have you ever done BSE		
YES	176	48.9
NO	184	51.1
Total	360	100.0
If YES, for what purpose		
Advice from a health worker	60	34.1
Medical reason	31	17.6
Noticed a breast lump	22	12.5
One of my family members had cancer	31	17.6
Routine medical examination	32	18.2
Total	176	100.0
If NO, why?		
I do not know about it	133	72.3
I cannot afford it	5	2.7
I am afraid of knowing the result	7	3.8
My beliefs do not permit it	6	3.3
I am not interested	33	17.9
Total	184	100.0
Condition that warrants going for breast cancer screening		
If my husband agrees	192	20.6
If the result will be of benefit	463	49.7
If there is a known cure for breast cancer	80	8.6
Others	196	21.1
Total	931	100.0

Table 5: Awareness and Practice of BSE among women who are aware of Breast Cancer in rural Northeast Nigeria.

detected. They should be encouraged to seek health care from orthodox doctors rather than traditional practitioners. This enlightenment strategy should be incorporated in the family support programme and should be carried out in every health centre be it primary, secondary or tertiary. Facilities for early detection of breast lesion should be made easily accessible at health centres to women of child bearing age.

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