Breast Cancer awareness and practice of breast self examination among rural women in Enugu State

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Abstract

There is a growing concern that many rural women lack awareness and knowledge about breast cancer and never engage in breast self-examination. This study investigates breast cancer awareness and practice of breast self-examination among rural women in Enugu State. Descriptive survey design was used for the study while a sample of 384 women was selected from rural communities in Enugu State. The questionnaire was the instrument for data collection while data was analysed using mean and standard deviation. The result showed that most of the rural women in Enugu State get information from family and friends. It was also found that most of them are not aware of symptoms and risk factors of breast cancer and do not engage in self-examination of their breasts for possible signs of cancer. Based on the findings, the study, recommends, among others, that health communication agents should incorporate opinion leaders into their campaigns considering that most of the women get information from family and friends.
Keywords: breast cancer, awareness, knowledge and breast self-examination

Introduction

Breast cancer is one of the causes of death among women the world over. The World Health Organization (2013) reports that in 2012, about 14.1 million women were diagnosed with cancer, of which 1.7 million were breast cancer cases; 56.8% of the 1.7 million cases were from low-income countries. It adds that some 522 000 deaths due to breast cancer were recorded the same year, with the majority from sub-Saharan Africa. The World Health Organization estimated that by 2025 over 19.3 million women, with the majority from Sub-Sahara Africa , will be suffering from breast cancer.

Breast cancer is one of the public health problems in Nigeria. According to Globocan, (2012) Nigeria recorded 102,079 cases of cancer, out of which 27,304 (26.7%) cases were breast cancer, 14,089 (13.8%) for cervix uteri, 12,047 (11.8%) for liver and 11,944 (11.7%) for prostate cancer. The age standardized incidence rates (ASR) for these common cancers; breast, cervix uteri, liver and prostate were 50.4, 29.0, 11.5, and 30.7 per 100,000 respectively. Globocan's 5-year prevalence study in Nigeria also showed almost the same trend as breast cancer being the leading cases with 87,579 (37.7%), followed by cervix uteri 35,644 (15.4%), prostate 31062 (13.4%) and then liver 8,447 (3.7%). Enugu State, which is the focus of this study has high prevalence of breast cancer especially among rural women. The National System of Cancer Registries (2016) report cited in Morounke, Ayorinde, Benedict, Adedayo, Adewale and Oluwadamilare

(2017) shows that between 2009-2012, a total of 1959 breast cancer cases were recorded among women in Enugu State. Enugu is located in South-East Nigeria and shares boundaries with Benue,Kogi and Anambra States.

Rural women are the focus of the study because of their peculiar demographics such as low level of education, limited access to the media and low income, among others. The United Nations Education Scientific Cultural organization , UNESCO (2010) states that over two-thirds of the world's 796 million illiterate people are women, many of whom live in rural areas. Inpapermagazine, (2013) describes rural women as those that are resident in the rural region of the country with low literacy rates. They serve as useful economic agents that contribute to the income of families and the growth of communities in a multitude of ways. They work as entrepreneurs, farmers and non-farm labourers, in family businesses, for others and as self-employed; while they take on a disproportionate share of unpaid work at home (Inpapermagazine, 2013). Breast cancer has high mortality rate and that rural women are vulnerable to breast cancer because of their demographics. As a result, a study of breast cancer awareness and self-examination practice of rural women is imperative.

Self-examination has been regarded as fundamental in the fight against breast cancer. The American Cancer Society(2008) recommends self-examination for early detection of breast cancer as it assists women in two main ways; first by becoming familiar with both the appearance and the sense of their breasts and second by helping them to detect any changes in their breasts as soon as possible. Nwaneri, Emesowum, Osuala, Okoronkwo, Okpala and Adeyemo (2016) explained that most breast tumours are self- discovered and that the majority of the early self-discoveries were by women who regularly practice self-examination. Therefore, breast self-examination entails looking at the shape of the breasts and feelings (palpation) in order to detect any changes or abnormalities by oneself. Although self-examination is useful in the fight against breast cancer, awareness remains key. Medical experts consider awareness as essential in the fight against breast cancer. For example, Iheanacho , Ndu and Emenike (2013) posit that for women to present themselves early, they need to be "breast aware" and must be able to recognize symptoms of breast cancer through regular practice of self-examination. Iheanacho et al (2013) further stated that late presentation of patients at advanced stages is thus the cause of breast cancer death in Nigerian women. Morounke et al (2017) averred that breast cancer patients have low rates of survival because they are diagnosed at advanced stages of the disease.

Awareness is a critical concept in communication research. Without communication, there can hardly be awareness. When people get to the point of awareness, it means that information has been transmitted either through the mass media, or new media or human communication. Isara and Ojedokun (2011) corroborate that awareness is a direct product of communication and that without communication, nobody will be aware of anything. In studying awareness within the lenses of communication and particularly breast cancer self-examination, attention was paid to the sources through which awareness is raised, knowledge of breast cancer self-examination, the frequency of self-examination practice as well as awareness of risk factors.

Statement of the Problem

Breasts cancer is one of the serious public health challenges facing Nigeria today. It is a public health problem that is increasing throughout the world especially in developing countries like Niggeria (Isara A, Ojedokun, 2011). Although, breast cancer is more common in women than in men, women tend to have worst consequences due to delay in diagnosis. Breast cancer affect rural women most because of their demographic features like low educational level, high poverty, among others. It seems that lack of awareness, poor knowledge and insensitivity to breast self-examination, among rural women contribute to the prevalence of breast cancer cases in Enugu State. It is against this backdrop that this study sought to examine the level of awareness of self-breast cancer among rural women identify the sources attention to sources through which awareness is raised, knowledge of breast cancer self-examination and the frequency of self-examination practice among rural women in Enugu State.

Objectives of the Study

This study sought to achieve the following:

1. Ascertain the level of awareness of breast cancer among rural women in Enugu State
2. To ascertain the knowledge about breast cancer symptoms among rural women in Enugu State.
3. To ascertain the frequency of breast cancer self-examination among rural women from Enugu State.
4. Identify the sources of information from which rural women from Enugu State are exposed to breast cancer messages.

Research Questions

This study sought answers to the following research questions:

1. What is the level of awareness of breast cancer among rural women in Enugu State?
2. What is the knowledge level about breast cancer symptoms among rural women in Enugu State?
3. What is the frequency of breast cancer self-examination among rural women from Enugu State?
4. What are the sources of information from which rural women in Enugu State are exposed to breast cancer messages?

Review of Literature

Health Communication, Awareness and Behaviour Change

Health communication is an area of research that combines both health and communication. As a multi-disciplinary area of research, health communication describes the application of communication strategies in solving health-related challenges. Scholars, such as (Bennett & Glasgow ,2009; Ratzan, 1994; Schiavo & Anderson, 2014; Kungu, 2013) are in agreement that health communication entails the use of communication techniques in health promotion. Ratzan (1994) posits that health communication is the art of informing, influencing, and motivating an individual, institutional, and public audiences about health issues through planned learning experiences based on sound theories. Health communication is considered essential in health promotion. Catalán-Matamoros (2011) avers that huge amounts are expended every year for materials and salaries that go into the production and distribution of

booklets, pamphlets, exhibits, newspaper articles, and radio and television programmes. Such media are used at all levels of public health for three broad objectives: (1) the learning of correct health information and knowledge, (2) the changing of health attitudes and values and (3) the establishment of new health behaviour. This tripod is relevant to the current study because when people are aware of breast cancer, it is expected that such awareness would provide adequate information to enable people posses adequate knowledge about the disease and engineer change in health behaviour. Bennett and Glasgow (2009) aver that the effectiveness of a health communication programme can be determined through the measuring of the impact vis-a-vis improving the quality of life or reducing the adverse effects of diseases on individuals, which in this case is , breast cancer. Kungu (2013) reveals that the factors as media use, source likeableness, attitude, risk perception and social and cultural ties influence health communication success. Health education is carried out at three main levels, individual, group and the general public through mass media of communication. When health information are passed to the general public, the essence is to increase awareness. . Catalán-Matamoros (2011) states that awareness creation is part of the reason health promotion are planned and executed. Lapointe, Ramaprasad and Vedel (2014) state that awareness occupies a fundamental place in health communication. Lapointe, et al, add that increased awareness of possible warning signs of cancer and the existence of and benefits to screening among the general public can have a great impact on the disease trajectory. Awareness creation is a conscious endavour done to ignite behaviour modification.

Behaviour change describes an alteration in human behaviour. It is essential to health campaigns because when awareness is created through health communication, the overall aim is to change behaviour through the adoption of new health behaviour which could be preventive or curative. Tengland (2012) states that behaviour change is one of the approaches to health promotion. Scholars (Buchanan, 2000; Earl & O'Donnell, 2007: 81; Holland, 2007) agree that professionals working with the behaviour-change approach want to influence (other) people to change their health-related behaviour, be it to stop smoking, eat less, eat better, exercise more, drink less alcohol, use condoms, abstain from unsafe sex, drive more carefully, use bike helmets or stop using drugs. Earl and O'Donnell, (2007) Holland, (2007) say this is sometimes expressed as wanting to make people change their 'lifestyles'. Concerning breast cancer self-examination, the desired health behaviour change to frequent examination of the breast for possible signs of cancer.

Review of Empirical Studies

In this segment of the study, the researcher reviewed previous empirical studies that are related to the current one. Iheanacho, Ndu and Emenike (2013) examined awareness of breast cancer risk factors and practice of breast self examination among female undergraduates in University of Nigeria Enugu Campus. The descriptive survey design was used for the study, with the questionnaire as the instrument for data collection. The population of the study was all the female students that reside in hostels on the campus (2400) in number. A sample of 240 students was selected using quota sampling technique. The results of the study showed that most of the students have little knowledge of breast cancer risk factors and majority of the students do not practise breast cancer self-examination monthly.

Dina, Boulos, Ramy and Ghal (2014) determined knowledge of breast cancer risk factors, symptoms and early detection methods and to identify knowledge and practice of breast self-examination among Ain Shams University female students. Descriptive cross sectional study approach was used for the study. The result showed that most study participants had low level of knowledge of breast cancer risk factors. The most widely known risk factors by the students were smoking 66.9%, followed by radiation to the chest 63.7% and genetic factors 63.7%. Most of the students (81.6%) identified breast lump as a symptom for breast cancer. However, non lump symptoms were less known and less than half were aware of other warning signs. Mass media such as TV and/or radio were identified as the main source of information on breast cancer by 89.1% of students followed by relatives 39.2%. Only 8.8% of students identified correctly the appropriate time to perform breast self examination and 1.3% reported performing it regularly every month. The most common reasons for not practicing BSE were" did not know how to perform it" (47.7%) and lack of interest (35%).

Nwaneri, Emsowum, Osuala, Okoronkwo, Okpala and Adeyemo (2016) investigated the practice of breast self-examination among rural women in Umuowa, Orlu local government area, Imo state, Nigeria. Descriptive survey design with the aid of a questionnaire which served as an interview schedule was conducted among 349 women in Umuowa Orlu Local government area of Imo State. The main outcome measures were the level of awareness and practice of BSE. The result showed that, a little above half (50%) of the respondents understood the meaning of BSE. Few of the respondents knew that BSE increases survival rate of breast cancer by early detection of abnormalities. Majority of the respondents did not know the abnormalities to check during BSE. Only a few of the respondents knew that BSE should be performed by every woman. Generally, the practice of BSE was inadequate for majority of the participants. There was a positive relationship between the respondents' awareness of breast cancer and their practice of BSE (P-value = 0.000<0.05).

Patrick and Ferdinand (2016) investigated the information seeking behaviour of women in rural areas. The study adopted a survey design. Four objectives were used for the study and a structured interview and questionnaire were used to collect data. The result showed that the information needs of rural women in the top rank are occupational related with 85% of respondents, child care and family relationship with 64% of respondents. The study clearly indicates that the major source of information for the respondents is friends and family members with 95% of the respondents attesting to that, another 75% of the respondents indicated age groups as their source of information. The study revealed that the major use of information by respondents was to improve their occupation with 91% of respondents, to care for children and run the family with 78% of respondents. From the studies reviewed, it can be seen that none of them examined the breast cancer awareness and self-examination from communication perspective.

Theoretical Framework

The researcher used the theory of Planned Behaviour for this study. This theory is an offshoot from the theory of Reasoned Action. The theory was propounded by Ajzen in 1988. It posits that an individual's behaviour is mainly dependent on his or her intention to perform that behaviour which, in turn, is determined by (a) the person's attitudes toward the behaviour, (b) the subjective norms he or she believes significant

others have concerning the behaviour, and (c) his or her perception of whether the behaviour can be performed (i.e., perceived behavioral control) (Ajzen, 1991). This theory was regarded most suitable for this study because awareness is not an unconscious thing, rather, it is a conscious effort that is planned. For example, people are exposed to different cognitions on a daily basis. They consciously chose to pay attention to few. It is a planned behaviour which is based on their needs, problems and expectations. When women consider breast cancer as a problem to be solved, they may be more conscious in getting information and knowledge about it.

Methodology

Survey research design was used for this study. The study was conducted in Enugu State; Nigeria. The target population of this study was all the women in Enugu State. According to the National Bureau of statistics (2012) the total number of women in Enugu projected up to 2016 put the population of women in Enugu State to 2,161,448.

The sample size for the study was 385 women from Enugu State. The Cochran formula (1963, p.75) was used to select the sample. With 95 percent level of confidence (confidence interval - $\pm$ 5%), the population estimate of 50% (.5) and a permitted margin of error at .05 (5 percentage points), the Cochran Equation '1' which yielded a representative sample for the population that is large. The researcher adopted multi-stage sampling technique to select the sample for the study. Therefore, at the beginning stage, all the three senatorial zones in Enugu State were selected. At the second stage, one Local Government Area was purposively selected in all the three senatorial zones. They are Awgu from Enugu West; Nsukka from Enugu North and Nkanu east from Enugu East At the third stage, one rural community was selected from each of the local government areas. Therefore, Eha-Alumona was selected from Nsukka, Ituku was selected from Awgu and Amagunze was selected from Nkanu. In each community visited, purposive sampling was adopted to selected house hold. In each household visited, only women within the ages of 40 and above were sampled. This is because breast cancer is associated with age and the older people are, the more vulnerable to it (see VanderWalde & Hurria, 2011).

The researcher used a self-developed questionnaire to collect data for the study. The questionnaire was administered to the respondents as interview guide because most of the women were illiterates. This means that the questions were read and interpreted for them in Igbo language and the options they chose were indicated. The reliability of the instrument was ascertained using test-retest approach, and this yielded Pearson's Correlational coefficient 0.082 which was considered high reliability. In the analysis of data for the study, simple percentages mean and standard deviation were used for the study. All the results were presented in tables.

Results

A total of 384 copies of the questionnaire were administered to the respondents. They were all retrieved because the administration of the instrument followed interview pattern. The mean age of the respondents was 51 (range 40 and 62). Also, most of the respondents (87%) were illiterate and also farmers (91%). The result is presented below:

Table 1: Level of Awareness of breast Cancer

S/N	Items	Freq.	%
1	High level	94	24

2	Moderate level	127	33
3	Low level	164	43
4	Total	385	100

The result from the table above sought to determine the level of awareness of breast cancer among rural women in Enugu State. The result showed that most of the women reported low level of breast cancer. The researcher further examined the respondents' knowledge of the risk factors as presented in the blow table.

Table 2: Awareness of risk factors of breast Cancer

S/N	Items	Mean	SD	Decision
1	Aging	3.0	0.71	Accepted
2	Obesity	2.1	0.34	Accepted
3	Smoking	2.2	0.22	Accepted
4	Radiation to the chest	2.2	0.73	Rejected
5	Alcohol	2.0	056	Accepted
6	Oral contraceptive use	2.1	0.56	Accepted
8	Family history of breast cancer	1.0	0.72	Rejected

Table 2 above sought to determine the awareness of risk factors of breast cancer among rural women from Enugu State. The result showed that the respondents are only aware of aging as a risk factor but have awareness about other risk factors.

Table 3: Knowledge about breast cancer symptoms

S/N	Items	Mean	SD	Decision
1	Breast lump	2.3	0.73	Rejected
2	Bloody nipple	2.5	0.33	Accepted
3	Discharge Pain in breast	2.5	0.61	Accepted
4	Change in shape and/or breast size	2.3	0.78	Rejected
5	Redness of breast skin	2.6	0.36	Accepted
6	Change in shape and/or retraction of nipple	2.4	0.88	Rejected

The result from the table above showed that out of the six symptoms of breast cancer examined in this study, the respondents reported knowledge of only three while not aware of the other three. This is because, the other three-Breast lump, Change in shape and/or breast size and Change in shape and/or retraction of nipple- had mean scores less than 2.5.

Table 4: frequency of breast Cancer self-examination

S/N	Items	Mean	SD	Decision
1	I do not engage in breast cancer self-examination	3.3	0.73	Accepted
2	Once a month	2.1	0.33	Accepted
3	Once in two months	2.2	0.61	Accepted
4	Once in three months	2.2	0.78	Rejected
5	Anytime that is convenient	2.1	0.36	Accepted

The result from the table above suggests that most of the respondents reported that they do not engage in breast cancer self-examination. This is because the mean scores for the frequency of breast cancer self-examination was low for all the duration presented to the respondents.

Table 5: Media of exposure to Breast cancer messages

S/N	Items	Mean	SD	Decision
1	Radio	1.6	0.23	Rejected
2	TV	2.2	0.34	Rejected
3	Newspaper	1.2	0.56	Rejected
4	Magazine	1.1	0.65	Rejected
5	Family and friends	3.4	0.78	Accepted
6	New media	1.0	0.67	Rejected

The result from the table above showed that most of the respondents reported that they got information about breast cancer from family and friends. They rejected traditional media like radio, TV, newspaper and magazine as the source of their information. Also, the new media was rejected as the source of their information about breast cancer. This is because, only family and friends had a mean score of above 2.5 which is the accepted benchmark for accepting or rejecting a statement.

Discussion of Findings

This study investigated breast cancer awareness and practice of breast self-examination among rural women in Enugu State, Nigeria. In doing so, attention was paid to sources of information, engagements in self-examination, awareness of symptoms and risk factors. The result showed that most of the respondents reported low level of awareness of breast cancer. The study also showed that the only risk factor which the respondents were aware of was aging. This again, could expose the respondents to breast cancer because of poor knowledge of many other risk factors. The result is similar to that of Iheanacho, Ndu and Emenike (2013) who reported little knowledge of breast cancer risk factors and majority of the people studied do not practice breast cancer self-examination monthly. The result of this study also revealed that the respondents were not aware of three out of the six symptoms. Such include breast lump, change in shape and/or breast size and change in shape and/or retraction of nipple. This result is not cheering because breast cancer is a deadly medical condition and women should have full information about all known symptoms for early detection and

possible treatment. This result is contrary to that of Dina, Boulos, Ramy and Ghal (2014) who reported that most known risk factor was smoking followed by radiation to the chest.

The findings of this study also suggest that most of the respondents do not engage in breast self-examination. This findings is a negative outcome because it suggests that most rural women are not involved in self-examination of their breast for possible symptoms of cancer. This could make them vulnerable to breast cancer. This finding is similar to that of Nwaneri, Emesowum, Osuala, Okoronkwo, Okpala and Adeyemo (2016) who reported that most women do not engage in self-examination of their breasts for possible symptoms of cancer.

It was also found that that they most of the respondents get information on breast cancer from families and friends. This result is not surprising because most women from rural community are largely illiterate with low income level. They have little or no access to TV, cannot read newspaper stories and can hardly understand radio contents in English. They cannot consume social media contents either (see table I). This result is consistent with that of Patrick and Ferdinand (2016) who investigated the information seeking behaviour of the women in rural areas and reported that the most source of information among rural women was family and friends.

Conclusion

Based on the result of this study, the study concludes that most of the rural women in Enugu State are not aware of breast cancer. The study also concludes that most of the rural women in Enugu State were not aware of symptoms of breast cancer and did not engage in self-examination of their breasts for possible signs of cancer. It is also the conclusion of this study that most of the respondents get information about breast cancer from family and friends. This result has theoretical, scholarly and practical contributions. Theoretically, the result of this study has contributed to our understanding of the theory of planned behaviour because it has shown that the engagement in breasts cancer self-examination is a conscious act that must be planned for. Most of the women studied did not engage in self-examination of their breasts as it was not part of the behaviour they have planned to carry out. Scholarly, this study has provided empirical data that could be useful for researchers who may be interested in data on breast cancer awareness and self-examination among women. Practically, this result has provided evidence that could be useful to health communication experts and behaviour change agents.

Recommendations

Based on the result of this study, the researcher makes the following recommendations:

1. Journalists should design contents on breast cancer in local languages so as to accommodate rural women.
2. There is the need for health communication agents to incorporate opinion leaders into their campaigns considering that most of the women get information from family and friends,
3. The Enugu State Ministry of health should intensify awareness on the symptoms and risk factors of breast cancer.
4. Further studies should be replicated in other states of Nigeria to give room for comparison.

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