Original Research Article

KNOWLEDGE AND PRACTICE OF BREAST SELF EXAMINATION A CASE STUDY OF WOMEN OF OKRIKA KALIO-AMA COMMUNITY OKRIKA LOCAL GOVERNMENT AREA OF RIVERS STATE

Abstract

Background: Breast cancer is the most common type of cancer among women, particularly in low and middle income countries. Breast self-examination is one of the non-invasive methods of screening in which a woman looks at her breast for any abnormal findings like lumps, distortions, or swellings. Despite effects of breast self-examination in detecting breast cancer earlier, the vast majority of the cases still present with an advanced stage. **Objective:** This study aimed to assess knowledge and practices of breast self-examination and among women of childbearing age in Kalio-Ama community in Okrika LGA of Rivers State. **Methods:** A cross-sectional study was conducted on women living in study area. A simple Random sampling method was used to select 250 participants. Interviewer administered questionnaires were used for data collection. Data was analyzed using SPSS version 23. **Result:** From the total of 250 women participated in the study with a response rate of 100%. Of these, 250 (100%) of the respondents have heard of breast-self examination, 25 (10%) heard about it at home, 180 (72%) heard about it at the health facility while 45 (18%) heard on social media, 190 (76%) said breast-self examination is necessary for early detection of breast cancer, 180 (72%) had knowledge and skills of BSE, 190 (76%) agreed that BSE will lead to early detection of breast cancer, 250 (100) of the respondents have practiced breast-self examination, 160 (64%) practice BSE on monthly bases while 90 (36%) practice BSE when necessary, 160 (64%) will continue the practice of BSE, 160 (64%) derive pleasure in carrying out BSE. There was a significant relationship (p-value<0.05) between the following factors (health motivation, higher perceived self efficacy of breast-self examination, marital status, family history of breast cancer and age) and practice of breast self examination. **Conclusion:** The findings of this study revealed that there is adequate knowledge and practice of BSE among women of childbearing age in the study area and factors such as health motivation, higher perceived self efficacy of breast-self examination, marital status, family history of breast cancer and age impact of the practice of BSE among women in Rivers State.

Keywords: *Knowledge, Practice, Breast self-examination, Factors.*

Introduction

Breast cancer (BC) is a global health concern and a leading cause of morbidity and mortality among women [1]. It is among the top three leading causes of cancers and top five causes of deaths of cancers among women [2]. Globally, BC recent evidences exhibit that about 25% of new cancer cases and 15% of cancer deaths among females in the globe are due to BC [3]. For instance, in 2018, it is estimated that about 627,000 women died from BC worldwide [2]. Breast cancer incidence rate (BCIR) remains highest in more developed regions, but mortality is relatively much higher in less developed countries [2,3]. This is mostly due to lack of advanced laboratory investigations for early screening and diagnosing BC in resource limited countries. Early detection of BC plays a key role for better outcomes, and BC is preventable and treatable if it is detected and treated early [2]. In this aspect, there are two early detection strategies for BC. These are early diagnosis and screening. Screening consists of testing women

to identify cancers before any symptom appears and can be undertaken through mammography, clinical breast exam (CBE), and breast self exam (BSE) [2,3]. Although clinical breast examination and mammography are ideal for breast cancer diagnosis, access to healthcare in most sub-Saharan African (SSA) countries may be a major challenge. A recent scoping review on BSE among women in SSA demonstrates limited published research and revealed varied level of knowledge ranging from 8.7% to 98.9% [4] and practice ranging from 11.7% to 78%. It further suggests that BSE practice remains a challenge in SSA. In sub-Saharan Africa only 32% of women are still alive five years after a breast cancer diagnosis, compared with 81% in the USA [5]. Appropriate preventive strategies focusing on both primary and secondary preventive mechanisms are needed to reduce the incidence of breast cancer. One key strategy is to assess the awareness and knowledge of breast cancer and breast self-examination; and the second major strategy is to help raise breast self-examination among vulnerable women especially those in poor and resource constrained settings. Early identification of breast abnormality is an important step in treating breast cancer and limiting morbidity and mortality caused by breast cancer. Clinical Breast Examination (CBE) and Mammography are now the mainstays for early detection of breast cancer [6]. However, these technologies such as mammography screening are too expensive and out of reach of millions of women around the world and in developing countries in particular [7]. As such for many women in poor resourced settings, regular BSE is a critical strategy in early detection of breast cancer and cure, especially in resource limited settings [8,9] like Nigeria. Therefore, BSE is the most feasible option in such settings (SSA) as it is easily workable, at any place and time [2,10]. Therefore, efforts need to be harmonized to increase awareness and practice of BSE among women. In this regard, gathering reliable and representative data on each segment of the population is an integral part of generating evidence-based strategies to improve women's health thereby to achieve target four of Sustainable Development Goal (SDG) three.

Methodology

Study Design

Thestudy adopted a descriptive cross-sectional design for this study involving a total of 250 respondents.

Study Area

The study was conducted in Kalio-Ama community. It one among the communities in Okrika Local Government Area of Rivers State. The major language is Engenni and other ethnic groups as minority. The major economic activities of the community are farming [fishing] but also consist of civil/public servants as well as businessmen/ women. The community is made up of plastered and un-plastered block houses among others There is only one health Centre in the community. The population for this study consists of all women of reproductive age in Kalio-Ama community, Okrika LGA of Rivers State.

Ethical Considerations

Approval for the study was obtained from the Ethics Committee of University of Port Harcourt Teaching Hospital. Also, a written consent was obtained from the traditional leaders and executives of Kalio-Ama community as well as the respondents.

Inclusion and Exclusion Criteria

Inclusion Criteria

Women of reproductive age in Kalio-Ama community who have resided in the study area for at least one year and who accepted to participate in the study.

Exclusion
Women who are eligible but are not ready to participate in the study were excluded including those not available at the time of data collection and those who were too sick to participate in the study.

Sampling Technique
A simple random sampling technique of balloting was used for the selection of the sample population [11-13].

Data Collection
Data for this study was collected using structured self-administered questionnaire on women of Kalio-Ama. A structured questionnaire (study tool) was used to obtain data on the knowledge and practice of breast self examination among women of Kalio-Ama community. The questionnaire consisted of four sections. Section A focused with the demographic data of the respondents, section B focused with the knowledge of Calio-Ama women on breast self examination, section C focused with the practice of Calio-Ama women on breast self examination, section D focused with the factors associated with the practice of breast self examination among women of Kalio-Ama community.

Data Analysis
Data for this study was analyzed for Chi-square using Statistical Package for Social Sciences (SPSS) version 23.0. The result was presented with frequency distribution tables and percentages and the test was considered significant at p-value < 0.05.

Validity/ Reliability of the Study Tools
Validity of the Study Tools
To ensure the validity of the study tool, content validity was carried out by the research supervisor and was further given to a statistician who also validate it.

Reliability of the Study Tools
To ensure that the study tool is reliable, the questionnaire was pretested around the study area.

Table 1: Socio-demographic information of respondents

Variable	Frequency [n = 250]	Percentage [100%]
Age:		
15-19 years	50	20
20-24 years	30	12
25-29 years	100	40
30-35 years	50	20
35-49 years	20	8
Educational level attained:		
Non-formal education	50	20
Primary	40	16
Secondary	50	20
Tertiary	110	44
Marital status:		
Single	100	40
Married	120	48
Widowed	10	4
Divorced	20	8
Occupation:		
Trading	70	28
Student	20	8
Civil servant	90	36
Unskilled	70	28
Religion:		
Christianity	190	76
Islam	20	8

Traditional worshippers	40	16

From the above table, 50 (20%) of the respondents were between 15-19 years, 30 (12%) of them were within 20-24 years, 100 (40%) were 25-29 years, 50 (20%) were 30-34 years while 20 (8%) of them were 35-49 years, 50 (20%) of the respondents had no formal education, 40 (16%) had first school leaving certificate, 50 (20%) had SSCE while 110 (44%) are graduates, 100 (40%) are single, 120 (48%) are married, 10 (4%) are widows while 20 (8%) are divorcees, 70 (38%) are traders, 20 (8%) are students, 90 (36%) are civil servants while 70 (28%) are unskilled, 190 (76%) are Christians, 20 (8%) are Moslems while 40 (16%) are pagans.

Table 2: Knowledge of respondents on breast self examination

Variable	Frequency [n = 250]	Percentage [100%]
Have heard of breast self examination		
Yes	250	100
No	0	0
If yes, where?		
Home	25	10
Health facility	180	72
Mass/ social media	45	18
Breast self examination is necessary for early detection of breast cancer		
Yes		
No	190	76
	60	24
Do you have knowledge and skills to practice breast self examination?		
Yes		
No	180	72
	70	28
Breast self examination will lead to early detection of breast abnormality?		
Yes	190	76
No	60	24

From table 2 above, 250 (100%) of the respondents have heard of breast-self examination, 25 (10%) heard about it at home, 180 (72%) heard about it at the health facility while 45 (18%) heard on social media, 190 (76%) said breast-self examination is necessary for early detection of breast cancer while 60 (24%) disagreed, 180 (72%) had knowledge and skills of BSE while 70 (28%) of them lack knowledge and skills of BSE, 190 (76%) agreed that BSE will lead to early detection of breast cancer while 60 (24%) objected the notion.

Table 3: Level of practice of respondents on breast self examination

Variable	Frequency [n = 250]	Percentage [100%]
Have you practice breast self examination?		
Yes	250	100
No	0	0
If yes, how often?		
Every month	160	64
When necessary	90	36
Will you continue breast self examination?		
Yes	160	64
No	90	36
I derive pleasure carrying out breast self examination		

Yes	160	64
No	90	36

From table 3 above, 250 (100) of the respondents have practiced breast-self examination, 160 (64%) practice BSE on monthly bases while 90 (36%) practice BSE when necessary, 160 [64%] will continue the practice of BSE while 90 (36%), 160 (64%) derive pleasure in carrying out BSE while 90 (36%) do not.

Table 4: Factors associated with the practice of breast self examination

Variable	Frequency [n = 250]	Percentage [100%]	df	Chi-square	P-value	Remark
Higher health motivation enable one to carry out breast self examination regularly						
Yes	200	80	1	180	0.00	SS
No	50	20				
Higher perceived self efficacy of breast self examination encourages the practice of breast self examination						
Yes						
No	150	60	1	20	0.00	SS
	100	40				
Marital status of individual enhances breast self examination						
Yes						
No	200	80	1	180	0.00	SS
	50	20				
Family breast cancer history is associated with breast self examination						
Yes						
No	180	72	1	96.8	0.00	SS
	70	28				
Age of the individual is a factor associated with breast self examination						
Yes						
No	195	78	1	156.8	0.00	SS
	55	22				

From table 4, 200 (80%) said higher health motivation enable the practice of breast-self examination while 50 (20%) disagreed, 150 (60%) said higher perceived self efficacy of breast-self examination encourages the practice of breast-self examination while 100 (40%) disagreed, 200 (80%) said that the marital status of individual enhances breast-self examination while 50 (20%) disagreed, 180 (72%) said family history of breast cancer is associated with the practice of breast-self examination while 70 (28%) disagreed, 195 (78%) said age is an associated factor in breast-self examination while 55 (22%) disagreed. These factors were significantly (p-value <0.05) associated with the practice of breast self examination.

Discussion

Recall that 250 (100%) of the respondents have heard of breast-self examination, 25 (10%) heard about it at home, 180 (72%) heard about it at the health facility while 45 (18%) heard on social media, 190 (76%) said breast-self examination is necessary for early detection of breast cancer, 180 (72%) had knowledge and skills of BSE, 190 (76%) agreed that BSE will lead to early detection of breast cancer. This findings is in line with a Nigerian study conducted by Agonifoh on knowledge of breast self examination among female students in a tertiary institution on course of study and knowledge of BSE, the findings showed that the course of study has significant influence on the knowledge and practice of BSE [14]. This is also

consistent with a study by Casmir in 2015 on the risk factors for BC, source of information on BSE, The age of the respondents and practice of BSE, showed that there is a significant relationship between knowledge of risk factors for BC, source of information on BSE, The age of the respondents and practice of BSE [4]. This is also consistent with a study conducted by Obaji and his team on level of education and awareness of BSE among women of reproductive age, revealed that 387% of the women admitted that BSE is a means of early detection of BC, awareness of BSE is associated with the level of education [15].

Also recall that 250 (100) of the respondents had practiced breast-self examination, 160 (64%) practice BSE on monthly bases while 90 (36%) practice BSE when necessary, 160 (64%) would continue the practice of BSE, 160 (64%) derive pleasure in carrying out BSE. This findings is in agreement with a Nigerian study conducted by Agonifoh on knowledge of breast self examination among female students in a tertiary institution on course of study and knowledge of BSE, the findings showed that the course of study has significant influence on the knowledge and practice of BSE [14].

The significant relationship shown to be exisiting between higher health motivation and practice of BSE among women may be due to the fact that these set of women are likely going to take more proactive steps as it relates to their health because they are more informed and motivated to take care of their health. Higher perceived self-efficacy of BSE was found to be associated with the practice of BSE in women probably because if women have confidence in their ability to perform BSE, they are more likely to perform BSE than women with lower perceived self-efficacy [16]. Also, women who have higher knowledge regarding breast cancer and BSE are more likely to practice BSE than women with lower knowledge [17]. The study revealed that married women demonstrated better practice of BSE than the unmarried women and this can be logically explained on the basis that married women are likely to be more aware, informed on BSE from their regular visit to healthcare facilities during their routine antenatal and other gynecological issues. Due to their family responsibilities, they find it necessary to take care of their health more than the single women who are not committed or responsible to anyone. Also, as married women, they are likely going to receive social support towards enhancing their health, including BSE. While this study showed that more women were with family history breast cancer practice BSE than those with no family history, it also revealed that there was a relationship between history of breast cancer and practice of BSE. This may be due to that fact that they have increased awareness due to the experience from their family member [18]. Also, this may precipitate fear of occurrence in them and as such will result to high practice of BSE among these women. Age was reported to be related with the practice of BSE and this can be explained on the fact that older women are more at risk of breast cancer than the younger women as supported by the study conducted by Abdurrahman & Florence (2014) [19]. It is therefore recommended that women from the age of 20years should always practice BSE [20].

Conclusion

This study has demonstrated that a greater percentage of women of reproductive age in Kalio-Ama community are not only aware of BSE but they practice it. It was also revealed that certain factors such as as health motivation, higher perceived self efficacy of breast-self examination, marital status, family history of breast cancer and age were identified to impact on the practice of BSE among the women of reproductive age in the community.

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