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Knowledge, Attitude and Practice of Breast Self Examination in Women of Okrika Kalio-Ama Community Okrika Local Government Area of Rivers State

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

Background: Breast self-examination is one of the non-invasive methods of screening in which a woman looks at her breast for any unusual changes like lumps, distortions, or swellings. Despite the impact of breast self-examination in detecting breast cancer earlier, the vast majority of cases still present with an advanced stage. Breast cancer is the most common type of cancer among women, particularly in low income countries.
Objective: This study sought to evaluate breast self-examination habits and knowledge among women in their reproductive age in the Kalio-Ama village in Okrika LGA, Rivers State.
Methods: Women residing in the study area were the subjects of a cross-sectional study. A straightforward random selection technique was employed to choose 250 individuals. Questionnaires given by interviewers were utilized to gather data. Data analysis was done with SPSS version 23.
Results: 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

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it at home, 180 (72%) heard about it at the health facility while 45 (18%) heard on social media, 190 (76%) said self-examination of the breast is essential 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 execution of BSE.

Conclusion: The findings of this research showed that there is adequate sufficient understanding and experience in 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.

1. INTRODUCTION

One of the main causes of illness and death for women worldwide is breast cancer (BC) [1]. It is one of the top three primary causes of cancer and one of the top five reasons why cancer kills women [2]. BC is responsible for 15% of cancer deaths and 25% of new cancer case among women worldwide, according to recent data [3]. For example, through statistics it has been shown that 627,000 women globally passed away from BC in 2018 [2]. While the incidence rate of breast cancer (BCIR) is still highest in more developed regions, the death rate is comparatively considerably greater in less developed nations [2,3]. The primary cause of this is the lack of sophisticated laboratory tests in resource-constrained nations for early BC diagnosis and screening. Better results can only come from early detection of BC, which can also be prevented and treated if caught early [2]. There are two early detection methods for BC in this regard. These are screening and early diagnosis. Women are screened to find cancers before any symptoms manifest. This cn be done with mammography, breast self exams (BSE), and clinicl breast exams (CBE) [2,3]. Access to healthcare in most sub-Saharan African (SSA) nations may be a big barrier, despite the fact that clinical breast examination ad mammography are optimal for the diagnosis of breast cancer. There has been little published research on BSE among women in SSA, according to a recent scoping review, and knowledge levels range from 8.75% to 98.9% [4] and practice spanning from 11.7% to 78%. It also implies that in SSA, BSE practice is still difficult. 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, since BSE is simply implementable at any location and at any time, it is the most pratical choice in places like SSA [2,10]. As a result, coordinated measures are required to raise women's BSE awareness and practice. In this sense obtaining trustworthy and representative data on every demographic group is essential to developing evidence-based plans that will enhance women's health and help reach Sustainable Development Goal (SDG) three.

2. METHODOLOGY

2.1 Study Design

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

2.2 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.

2.3 Inclusion and Exclusion Standards

Inclusions: Females already in the age of reproduction 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 practice and knowledge of BSE in 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 elements connected to the breast self-examination practice 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.

2.4 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.

From the Table 1, 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.

From Table 2, 250 (100%) of the participants have heard of BSE, 25 (10%) heard it at home, 180 (72%) heard about it at the health facility while 45 (18%) heard on social media, 190 (76%) said BSE is required for detection of early 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.

From Table 3, 250 (100) of those surveyed have engaged in BSE, 160 (64%) practice self-examination of the breast 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.

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 examination of breast by oneself encourages the practice of BSE while 100 (40%) disagreed, 200 (80%) said that the marital status of individual enhances breast self-examination while 50 (20%) disagreed, 180 (72%) said breast cancer in the family history is associated with routine 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.

Table 1. Socio-demographic data of participants

Variable	Frequency [n = 250]	Percentage [100%]
Age (years):		
15-19	50	20
20-24	30	12
25-29	100	40
30-35	50	20
35-49	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

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
BSE is significant for early detection of BC		
Yes	190	76
No	60	24
Do you have knowledge and skills to practice breast self-examination?		
Yes	180	72
No	70	28
Breast self-examination will lead to early detection of breast abnormality?		
Yes	190	76
No	60	24

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

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 BSE encourages the execution of self-examination of the breast						
Yes	150	60				
No	100	40	1	20	0.00	SS
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	180	72	1	96.8	0.00	SS
No	70	28				
Age of the individual is a factor associated with breast self-examination						
Yes	195	78	1	156.8	0.00	SS
No	55	22				

SS: statistically significant

3. DISCUSSION

Recall the fact that 250 (100%) from 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 BSE is required for breast cancer early detection, 180 (72%) had knowledge and skills of BSE, 190 (76%) agreed that BSE will enable early breast cancer detection. 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 impact 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 substantial impact on BSE understanding and practice [14].

The significant relationship shown to be existing between higher health motivation and BSE practice in 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. It was discovered that BSE practice was connected with higher reported self-efficacy 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 [19]. As a result, it is advised that women begin practicing BSE at the age of 20 [20-23].

4. 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, age and family history of breast cancer have been found to have an impact on women of reproductive age who practices BSE.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of manuscripts.

CONSENT AND ETHICAL APPROVAL

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.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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