SOCIO-DEMOGRAPHIC CORRELATES TO PREVENTIVE BEHAVIOUR TOWARD BREAST CANCER AMONG WOMEN IN RIVERS EAST SENATORIAL DISTRICT

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ABSTRACT: *This study investigated how socio-demographic correlates to breast cancer's preventive behaviour among women in Rivers East Senatorial District. The descriptive cross-sectional research design was adopted for the study. The study population consisted of all 545,056 women in Rivers East Senatorial District with a sample size of 1,200 women determined using the Taro Yamane's formula and selected using the multistage sampling procedure. Data was collected using a structured questionnaire with a reliability coefficient of 0.71 and analysed using mean and standard deviation (SD) and regression statistics at 0.05 alpha level. The study's finding showed that preventive behaviour towards breast cancer was significantly related to educational level (r = 0.102; p<0.05) only. While marital status and age were not found to have a statistically significant relationship with preventive behaviour towards breast cancer, it was concluded that preventive behaviour towards breast cancer which were significantly related to their educational level. It was recommended that health educators establish a sustainable awareness campaign for women about breast cancer preventive practices through mass and social media and other communication channels such as posters, handbills, and flyers.*

KEYWORDS: Socio-Demographic, Breast Cancer, Women, Behaviour, Nigeria

INTRODUCTION

Cancer is a group of diseases involving abnormal cell growth with the potential to invade or spread to other parts of the body (World Health Organization, 2014). Cancers are a large family of diseases that involve abnormal cell growth with the potential to invade or spread to other parts of the body (Siu, 2016). They form a subset of neoplasms or tumours, a group of cells that have undergone unregulated growth and will often form a mass or lump but may be distributed diffusely (Gøtzsche and Jørgensen, 2013). Knowledge means that the individual has all data necessary to understand what oral disease is and how it arises and understand the protective measures that need to be adopted (Miller, Lee, DeWalt & Vann, 2010).

In Africa, a study done by Fregene, (2009) in Okobia (2011) in sub-Saharan Africa also revealed that by 2020, approximate 70% of new cancer cases would occur among individuals in developing countries and population groups that have previously enjoyed low incidence. In Nigeria, 166,000 estimated cases of breast cancer were recorded in Abuja, with about 41,000 cancer-related deaths in 2018. Early diagnosis could help to improve survival rates which a good knowledge of the diseases could enhance.

Socio demographic variables such as age, educational level and marital status had also been noted to predict preventive behaviour towards breast cancer. Age is a pattern of life changes that occurs as one grows older. The process of ageing includes the physiological, psychological, social and economic changes that accompany ageing affect the breast tissues, especially the female breast (WHO, 2013). Younger women may be less likely to develop breast cancer than most older adults. Still, the peak age of breast cancer in Nigeria is between 35-45, about (10) ten years earlier than many Western women's experience. Women who have their first full childbirth after 30 are prone to develop breast cancer 5-10 years after the pregnancy. It was also revealed that early menarche before age 12 have a slightly higher risk of developing breast cancer, most common among women who have their first full childbirth after 30 years, and about 5-10 years after the pregnancy are prone to develop breast cancer. It was also revealed that early menarche before age 12 have a slightly higher risk of developing breast cancer (Cancer Research UK KsClaUCL 2011 in Negalign 2017). A report on breast cancer prevention and control in Geneva Taioli and Gail (2015), revealed age as a predictor to breast cancer. With the Lokossou and Ogoudjobi (2018) study, the average age of the respondents are 22-25years old, with extremes ranging from 30-48 years old, which may also be significant to preventive behaviour among the women towards breast cancer.

Educational status is also a relevant factor, and education exposes the innate potentiality and power of a person that can facilitate one's ability to learn or acquire knowledge. The study by Azubuike, (2017) demonstrated that educational status predicts cancer in women who are ignorant of breast cancer. Good numbers of those women who have the knowledge were yet to translate their knowledge into practice. Similarly, Vodouhe and Lokossou's (2018) study shows that education level is an indicator of breast cancer prevention, with the level of education not exceeding the primary school in 42% of cases. Lios, Cajetan, and Omaka-Amari (2015) revealed that knowledge of breast cancer is significantly higher among those women in secondary school of about (60%), primary (49%), and non-formal education (39%), respectively, showing a significant difference in educational attainment. This study is similar to that done by Ngowa, (2015) and Zine, (2016), which shows that knowledge plays a significant role in breast cancer prevention.

Marital status expresses once the status of being single, married, divorced, cohabiting, separated or widowed. Alagoa, (2014) in Tayo, (2017) conducted a study, and the result showed that most of the respondent, 67.1% were married, but a good number of them had poor knowledge of breast cancer. Saleh and Fayez (2018) revealed more than 8 out of 10(84%) respondents were married women and that a good number of them do not have adequate knowledge of breast cancer preventive behaviour. This reveals that the researcher must study socio-demographic correlates to preventive behaviour towards breast cancer among women in Rivers East Senatorial.

Statement of the Problem

Breast cancer remains a worldwide public health dilemma and is currently the most common tumour in the globe. Awareness of breast cancer, public attentiveness, and advancement in breast imaging has positively impacted breast cancer recognition and screening. Breast cancer is a life-threatening disease in females and the leading cause of mortality among the women population. For the previous two decades, studies related to breast cancer has guided to astonishing advancement in our understanding of breast cancer, resulting in further proficient treatments. Among all the malignant diseases, breast cancer is considered one of the leading

causes of death in postmenopausal women accounting for 23% of all cancer deaths. It is a global issue now, but still, it is diagnosed in its advanced stages due to the negligence of women regarding the self-examination and clinical examination of the breast.

Hence the researcher decided to study socio-demographic correlates to preventive behaviour towards Breast Cancer among the women in Rivers East Senatorial District.

Purpose of the study

This study focused on socio-demographic correlates to preventive behaviour toward breast cancer among women in Rivers East Senatorial District.

Research Questions

To guide the study, the following research questions were posted:

1. What is the preventive behaviour towards breast cancer among women based on age in Rivers East Senatorial District?

2. What is the preventive behaviour towards breast cancer among women based on Rivers East Senatorial District's educational status?

3. What is the preventive behaviour towards breast cancer among women based on marital status in Rivers East Senatorial District?

Research Hypotheses.

The following null hypotheses were used to guide the study and were tested at 0.5 alpha level.

1. There is no significant relationship between age and preventive behaviour towards breast cancer among women in Rivers East Senatorial District.

2. There is no significant relationship between educational level and preventive behaviour toward Breast cancer among women in Rivers East Senatorial District.

3. There is no significant relationship between marital status and preventive behaviour towards breast cancer among women in Rivers East Senatorial District.

METHODOLOGY

The study adopted a descriptive cross-sectional research design. The population of the study consists of all women in Rivers East Senatorial District. The sample size for the study was 1,200. The study ehavior a Mult-Stage sampling technique. A self-structured questionnaire titled "Preventive ehavior towards breast cancer among women in Rivers East senatorial District" (KAPBC) with two (2) sections was used. The instrument was validated by the researcher's supervisor and three other specialists. The reliability of the instrument was tested using the Cronbach alpha. The instrument attained a reliability coefficient of 0.76. Therefore, it was considered reliable for the study. The questionnaire titled "Preventive ehavior towards breast cancer among women" was administered by the researcher and trained research

assistants on Rivers East Senatorial District's women. Data were analysed using percentages, mean(x) scores, standard deviation (SD). While the y6 hypothesis was tested using regression.

Results Presentation

Hypothesis 1: There is no significant relationship between age and preventive   ehavior towards breast cancer among women in Rivers East Senatorial District.

Table 1: Regression analysis showing the relationship between age and preventive ehavior towards breast cancer among women in Rivers East Senatorial District

Model	R	R square	Adjusted R-square	P	B	Decision
	0.003	0.000	-.001	0.918	3.125	Not Sig.

Not Significant. P>0.05.

Table 1 shows the regression analysis of the relationship between age and preventive behaviour towards breast cancer among women in Rivers East Senatorial District. The result shows a non-significant very low positive relationship between age and preventive behaviour towards breast cancer (r = 0.003; p>0.05). Therefore, the null hypothesis which states that there is no significant relationship between age and preventive behaviour towards breast cancer among women in Rivers East Senatorial District was accepted.

Hypothesis 2: There is no significant relationship between educational level and preventive behaviour towards breast cancer among women in Rivers East Senatorial District.

Table 2: Regression analysis showing the relationship between educational level and preventive behaviour towards breast cancer among women in Rivers East Senatorial District

Model	R	R square	Adjusted R-square	P	B	Decision
	0.102	0.010	.009	0.001	-3.009	Sig.

Significant. P<0.05.

Table 2 shows the regression analysis of the relationship between educational level and preventive behaviour towards breast cancer among women in Rivers East Senatorial District. The result shows a significant low negative relationship between educational level and preventive behaviour towards breast cancer (r = 0.102; p<0.05). Therefore, the null hypothesis, which states that there is no significant relationship between educational level and preventive behaviour towards breast cancer among women in Rivers East Senatorial District was rejected.

Hypothesis 3: There is no significant relationship between marital status and preventive behaviour towards breast cancer among women in Rivers East Senatorial District.

Table 3: Regression analysis showing the relationship between marital status and preventive behaviour towards breast cancer among women in Rivers East Senatorial District

Model	R	R square	Adjusted R-square	P	B	Decision
	0.020	0.000	-.001	0.513	3.105	Not Sig.

Not Significant. P>0.05.

Table 3 shows the regression analysis of the relationship between marital status and preventive behaviour towards breast cancer among women in Rivers East Senatorial District. The result shows a non-significant low positive relationship between marital status and preventive behaviour towards breast cancer (r = 0.020; p>0.05). Therefore, the null hypothesis, which states that there is no significant relationship between marital status and preventive behaviour towards breast cancer among women in Rivers East Senatorial District was accepted.

DISCUSSION OF FINDINGS

Age and preventive behaviour towards breast cancer among women

The result shows that good preventive behaviour towards breast cancer was found more among respondents aged 25-34 years (X = 3.08±.99), followed by those aged ≥45 years (X = 3.07±.99), 15-24 years (X = 3.04±1.01), and those aged 35-44 years (X = 2.97±.99). Thus, based on age, those within the age range of 25-34 have better preventive behaviour towards breast cancer than those of other age groups. The result shows a non-significant, very low positive relationship between age and preventive behaviour towards breast cancer (r = 0.003; p>0.05). This study's finding may be surprising because older women are more at risk of developing breast cancer and, as such, are expected to engage more in breast cancer preventive behaviour than the younger women, but this was not the case. The finding of this study is in keeping with that of Olorunfemi and Emmanuel (2015). Their report from a study on predictors of breast self-examination as cancer prevention practice among women of reproductive age-group in a rural town of Ogun State Nigeria showed that age was not a predictor of breast cancer preventive practice among women. This study's finding is also in line with that of Brandth, & Ingrid (2015), which showed that 80 years or more was a prognostic factor for poor survival, independent of the stage at diagnosis and diagnostic period. This similarity might be attributed to the similarity in the study setting and design used in both studies. The finding of this study differs from that of Karimollah and Sahar (2015), whose study on Awareness, Attitude, and Practice of Breast Cancer Screening among Women in Northern Iran showed that women's practice with BSE was significantly associated with age (P = 0.005). This difference might be attributed to the difference in the study location. The previous study was carried out in Iran, whereas the present one was carried out in Nigeria. This study's finding is at variance with Gail (2015), which revealed age as a predictor of breast cancer. This study's finding varies from that of Geetha, Menaka & Padmavath (2017), whose report from a study on Breast Self-

Examination (BSE) as a preventive behaviour showed that breast self-examination was significantly associated with socio-demographic characteristics like age. The study location variations, sample size, and sampling technique in the different studies might be implicated for the variations found between the present study and the previous ones.

Educational level and preventive behaviour towards breast cancer among women

The result shows that good preventive behaviour towards breast cancer was found more among respondents who had primary education ($X = 3.04\pm1.01$), followed by those who had secondary education ($X = 3.03\pm.99$), tertiary education ($X = 3.01\pm.99$), and those who had no formal education ($X = 2.97\pm1.03$). Thus, based on education, those with primary education have better preventive behaviour towards breast cancer than those of other educational levels. This study's finding is similar to that of Lokossou & Ogoudjobi (2018), which shows that level of education is an indicator of breast cancer prevention, with their level of education not exceeding the primary school in 42% of cases. However, this finding is not in agreement with Karimollah and Sahar's (2015) on Awareness, Attitude, and Practice of Breast Cancer Screening among Women in Northern Iran that women with BSE practise was associated with higher educational level. The finding of this study also differs from that of Olorunfemi & Emmanuel (2015), whose report from a study on the predictors of breast self-examination as cancer prevention practice among women of reproductive age-group in a rural town of Ogun State Nigeria showed that one of the predictor of practice of breast self-examination was tertiary level of education [odds ratio (OR) = 1.43]. The study location variations, sample size, and sampling technique in the different studies might be implicated for the variations found between the present study and the previous ones.

The tested hypothesis on this shows a significant relationship between educational level and preventive behaviour towards breast cancer ($p<0.05$). This study's findings are similar to that of Geetha, Menaka & Padmavath (2017), whose report from a study on Breast Self-Examination (BSE) as a preventive behaviour showed BSE practice was significantly associated with socio-demographic characteristics like education. This similarity found might be due to the similarity in the study design and the study population. This study's findings give credence to Ameneh & Khadijah (2014) on effects of educational intervention in improving breast cancer preventive behavior among female medical staff of Zehedan University of medical sciences which revealed the use of educational intervention had positive effect breast cancer preventive behaviour among participants. This study's finding is also in support of that of Azubuike (2017). On breast cancer awareness, attitude and practices toward early detection demonstrated that educational level predicts cancer since women were yet to translate their knowledge into practice. The study respondents' homogeneity might be implicated for the similarity found between the previous studies and the present one.

Marital status and preventive behaviour towards breast cancer among women

The result shows that good preventive behaviour towards breast cancer was found more among respondents who were divorced ($X = 3.07\pm1.01$), followed by those who were single ($X = 3.06\pm1.00$) and those who were married ($X = 3.00\pm.99$). Based on marital status, those who were divorced had better preventive behaviour towards breast cancer than those of other marital status. The result shows a non-significant low positive relationship between marital status and preventive behaviour towards breast cancer ($r = 0.020$; $p>0.05$). The finding of this study is different from the report from other studies. This study's finding is not in keeping with that of

Geetha, Menaka & Padmavath (2017), whose study on Breast Self-Examination (BSE) as a preventive behaviour showed that the practice was significantly associated with socio-demographic characteristics like marital status. The finding of this study is not also in keeping with that of Olorunfemi and Emmanuel (2015), whose study on predictors of breast self-examination as cancer prevention practice among women of reproductive age-group in a rural town of Ogun State Nigeria showed that the predictor of the practice of breast self-examination was marital status. The finding of this study is different from that of Kiguli-Malwadde, Mubuuke & Businge (2010), whose finding on a study on Current knowledge, attitudes and practices of women on breast cancer and mammography at Mulago Hospital showed that, regarding seeking for mammography; marital status was significant on bivariate analysis. The study location variations, sample size, and sampling technique in the different studies might be implicated for the variations found between the present study and the previous ones.

CONCLUSION

Based on the findings of the study, it was concluded that preventive behaviour towards breast cancer which was significantly related to their educational level among women in Rivers East Senatorial District

RECOMMENDATIONS

Based on the findings of the study, the following recommendations were made:

1. The government, ministries of health and other relevant health agencies should embark on health education and awareness campaign on the dangers and prevention of breast cancer.

2. The government, religious organisations, school authorities and stakeholders should put in place special programmes targeting young women and men, including children on how to prevent behaviours that put them at risk of poor knowledge and awareness of the risk factors of breast cancer.

3. Government, ministries of health and non-governmental organisations should mount more intensive enlightenment campaigns through public talk, seminars, conferences, and workshops to create more awareness of the need for improvement in knowledge and awareness of breast cancer risk factors.

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