Knowledge and Attitude of Undergraduate Female Students towards Breast Cancer Screening In the University Of Port Harcourt,Rivers State.

Grace C. Robinson-Bassey[1] and Festus Esther,C.[2]

[1&2]Department of Nursing, University of Port Harcourt, Rivers State.

Abstract: *This study was conducted using a descriptive cross sectional study design. The study aimed at determining the knowledge and attitude of undergraduate female students towards breast cancer screening in the University of Port Harcourt, Rivers State.A sample size of 150respondents was selected using a stratified random sampling technique. Data was collected using a self structured questionnaire administered by the researcher to the respondents. The reliability and validity of the instrument were ascertained. Data analysis was done using a descriptive statistics offrequency and percentages. The result showed that 69(49.3%) had good knowledge of breast cancer screening, 50(35.7%) had fair knowledge while 21 (15.0%) had poor knowledge of breast cancer screening. Result also showed that 95(67.9%) had positive attitude towards breast cancer screening while 45(32.1%) had negative attitude towards breast cancer screening. Finding showed that there is no significant relationship between the knowledge and attitude of the respondents' towards breast cancer screening, cal x2 = 0.185, tab x2 = 5.991, df = 2, p = 0.05. However, the number of respondents with good knowledge and positive attitude are not high enough, given that the population of study is undergraduate female students who are supposed to be more enlightened as compared to the general population. ft is therefore recommended that provisions should be made to sensitize undergraduate female students on the relevance of breast cancer screening.*

Key words: *knowledge,attitude,breast cancer, screening, students*

I.   Introduction

Breast cancer is the most common type of cancer in females and the leading cause of cancer morbidity and mortality world-wide. The incidence of breast cancer is rising rapidly as well as its mortality rate. It is a malignant tumour that develops from the breast cells. It usually starts from the inner lining of milk ducts or lobules that supply them with milk. Breast cancer incidence is rising rapidly, as a result, it has become one of the major focus of scientific research and its screening is now of great importance.

The incidence, prognosis and survival rate of breast cancer varies greatly around the world. The prognosis and survival rate depend on the stage of at diagnosis and the geographical location of the patient; in the Western world the survival rate is high but low in the developing countries,(National cancer institute, 2011;American cancer society,2003).

According to the National Cancer Institute,(2011), about 232,340 female breast cancer and 2,240 male breast cancer are reported in the USA each year, as well as about 39,620 deaths caused by the disease. It accounts for 16% of all female cancer and 22.9% of invasive cancers in women, and18.2% of all cancer deaths world-wide including both males and females are from breast cancer (Menson, 2014). The incidence of breast cancer has shown an upward trend in younger women. Globally, breast cancer is the most common malignant neoplasm among women.In Egypt, breast cancer accounts for 35.1% of the cases of cancer and is the most prevalent cancer among Egyptian women; the median age at diagnosis for breast cancer is ten years younger than in the United States and Europe (Abdulla, 2011). According to World Health Organization report there were about 519,000 women who die from breast cancer annually and more new cases are found, which is estimated to be one million of women develop breast cancer each year approximately (WHO, 2013;Afaf et al,2015).

It has been reported that more than 80,000 new cases of breast cancer are detected world-wide and the disease claims more than 35,000 lives every year, a rise of about 18% since 1990 (Menson, 2001).

The reason for this increasing incidence and mortality from breast cancer is lack of breast cancer screening and awareness leading to late detection and diagnosis of the disease, as this is evidenced by many of the breast cancer cases in developing countries being reported at advanced stage, resulting in poor treatment outcome; this is commonly observed in developing or low income countries, where breast cancer was characterized by late clinical presentation and in advance stage of the disease, when only chemotherapy and

palliative care could be offered, and therefore associated with high mortality,(Afolayan, Olaoye,Adesina&Saidu, 2012).

Breast cancer screening is pertinent and it is the regular examination of a woman's breast to detect breast cancer early (Chiarelli, 2014). It is the medical screening of asymptomatic, apparently healthy women for breast cancer in an attempt to achieve an earlier diagnosis.

Some of the screening tests are clinical and self breast examination, mammography genetic screening, Ultrasound and Magnetic Resonance imaging,(Yager,2006;Beral,2004). Nearly all university students are at a stage where it is significant that they at least carry out BSE on a regular basis to sense any changes early. (Afaf et al2015). In recent times, it has been observed that the overall female folks, particularly undergraduate students who are expected to be adequately knowledgeable about breast cancer, its symptoms, and risk factors and screening, have no knowledge on these (National Cancer Institute, 2011). It is based on this that this study on knowledge and attitude of female undergraduate students towards breast cancer screening in the University of Port Harcourt is carried out.

Specific objectives
The specific objectives of the study are to:
ii) Determine the level of knowledge of female undergraduates on breast cancer screening.
iii) Determine the attitude of female undergraduates towards breast cancer screening.

Hypothesis
There is no significant relationship between knowledge and attitude of female undergraduates towards breast cancer screening.

II.   Research Methodology
Research design
This is a cross-sectional descriptive study on the knowledge and attitude of female undergraduate students towards breast cancer screening in University of Port Harcourt, Rivers State.

Research setting
The study was conducted in the University of Port Harcourt, founded in the year 1975. It is located in Rivers State, one of the states in the South-South geopolitical zone of Nigeria; it is located in Choba in Obio/Akpor Local Government Area, Rivers State, Nigeria. The University is made up of four colleges which are: College of health Sciences, College of Engineering, College of Natural and Applied Sciences and College of graduate studies. Currently, there are about ten (10) faculties andseveral departments. The institution comprises three (3) campuses viz; Delta, Choba and Abuja. Goodluck Jonathan Hostel where the target population resides is situated at the Abuja Campus.Goodluck Jonathan Hostel consists of five (5) wings, A, B, C, D, E. Each wing has ten (10) rooms and each room is occupied by four (4) students, apart from wing A that has two (2) large rooms out of the ten (10) rooms. Each of these large rooms is occupied by eight (8) students. All the residents of this hostel are female undergraduates.

Target population
This was made up of all accessible female undergraduates residing in the five (5) wings of Goodluck Jonathan hostel, during the time of the study, irrespective of their age, department or level, who consented to being part of this research. During the period of this study, 240 students were living in the five (5) wings of the hostel.

Sample size
A sample size of 150 was drawn from the target population under study using the yaro Yamane formulae for sample size determination.

$$n = \frac{N}{1 + N(e)^2}$$

Sampling technique
A stratified random sampling technique was used to select 150 respondents for the study. This is a technique used when a population is made of different subset, and each of the subsets is different from the other and sample for investigation is drawn from each of the strata. Using this technique, 38 students were selected from wing A and 28 from wing B, C, D and E.

Instrument for data collection

A self structured questionnaire was used to collect data from respondents. The questionnaire consisted of four (4) sections. Section A contain five (5) items on socio- demographic characteristics of respondents; section B contains nine (9) items on knowledge of breast cancer screening; section C contained eight (8) items on attitude towards breast cancer screening.

Validity of the instrument

The instrument was submitted to experts in the study area, corrections were made wherenecessary, then the face and content validity of the instrument were ascertained.

Reliability of instrument

This was determined using the test- retest method. Fifteen copies of the questionnaire were administered to selected respondents from Danetete Hostel and after two weeks another set of the instrument was then administered to the same respondents. The scores of the data collected from the two questionnaire administration were computed using the person moment correlation coefficient test which yielded a result of 0.99.

Method of data collection

The researchers recruited six assistants who were briefed on the content and importance of the instrument. A total of 150 questionnaires were distributed to the respondents. However a total of 140 questionnaire appropriately completed by the respondents were collected on two consecutive days, reflecting a return rate of 93.33%.

Procedure for data analysis

The data was coded on a spread sheet. A descriptive statistics of frequency and percentages was used to analyze the data collected toanswer the research question. Hypothesis testing was done using inferential statistics of chi square test. The researchers used "YES" and "NO" responses on breast cancer screening using; Yes =1, No=0, and respondents' were scored based on their responses. The highest score for good knowledge is =9 while the lowest score is = 0 (which indicates poor knowledge). Those who scored from 0-3 have poor knowledge; 4-6 have fair knowledge while 7-9 have good knowledge. For attitude, a likert type scale was used and the total score is 32. For positively worded items, SA= 4, A= 3, D= 2, SD= 1. For negatively worded items, SA= 1, A=2, D=3, SD=4. Any score below 22 reflects a negative attitude and scores above 22 reflects a positive attitude.

Ethical consideration

Approval was duly obtained fromthe Hall Supervisor of Goodluck Jonathan Hostel. Formal consent was obtained from the students verbally before being involved in the study after explanation of the nature and purpose of study and those who accepted to participate in the study were included. The students were informed that they had the right to withdraw from participation, and the results would be confidential, and will be usedonly for the purpose of the study.

III.   Data Presentation

Table 1: Socio-demographic characteristics of Respondents (n=140)

Variable	Frequency	Percentage
Age		
15-20	75	53.6
21-26	61	43.62
27-32	4	2.9
33-38	Nil	Nil
Marital Status		
Single	137	97.9
Married	3	2.1
Divorced	Nil	Nil
Year of Study		
100	79	56.4
200	30	21.4
300	13	9.3
400	17	12.1
500	1	0.7
Religion		
Christianity	137	97.9
Muslim,	3	2.1

Table 1: shows the socio-demographic data of the respondents. Out of the
140 respondents, 75(53.6%) were aged 15-20 years, 6 1(43.6%) were 21-
26 years, 4(2.9%) were 27-32 years, while none of the respondents was
within 33 and above age bracket.As regards marital status, 137(97.9%) are singles while 3(2.1%) are married.By year of study, 79(56.4%) are in lOOlevel, 30(2 1.4°/ in 200level, 13(9.3%) in 300level, 17(21.1%) in 400level while 1(0.7%) is in 500level respectively.In terms of religion, 137(97.9%) are Christians and 3(2.1%) Muslim.

Table 2: Knowledge of breast cancer screening (n = 140)

VARIABLE	CHARACTERISTIC	FREQUENCY	PERCENTAGE
Knowledge of breast cancer screening	Good knowledge	69	49.3
	Fair Knowledge	50	35.7
	Poor Knowledge	21	15

Table 2 shows that, 69(49.3%) have good knowledge of breast cancer screening, 50(35.7%) have fair knowledge while 21(15%) have poor knowledge of breast cancer screening.

Table 3: Respondents' attitude towards breast cancer screening (n 140)

VARIABLE	CHARACTERISTICS	FREQUENCY	PERCENTAGE
Respondents attitude towards breast cancer screening	Positive attitude	95	67.9
	Negative attitude	45	32.1
	Total	140	100%

Table 3 shows that 95(67.9%4 have positive attitude towards breast cancer screening while 45 (32.1%) have negative attitude towards breast cancer screening

Test of hypothesis

Table 4: Relationship between knowledge and Attitude towards breast cancer screening (n = 140)

KNOWLEDGE	ATTITUDE		TOTAL	X^2calc	X^2	DECISION
	Positive	Negative				
Good	48	21	69			**Accept Null Hypothesis**
Fair	33	17	50	0.185	5.991	
Poor	14	7	21			
Total	95	45	140			

Cal x2= 0.185, tab x2 =5.991, df=2 p = 0.05

Table 4 shows that there is no significant relationship between knowledge and attitude of the respondents' towards breast cancer screening, since the calculated chi-square is less than the tabulated chi-square.

IV. Discussion

The result showed that 69(49.3%) had good knowledge of breast cancer screening, 50(35.7%) had fair knowledge while 21(15.0%) had poor knowledge of breast cancer screening. This is in contrast with other findings which reported poor knowledge of breast cancer and the screening methods; Afaf et al,2015; Beydağ&Yürügen,2010 ;Adenika& Omuemu,2002. It is such a disappointing finding that more than half of the young females in their 20s and having college education have no knowledge about BSE, which is the most important diagnostic tool for the early diagnosis of breast cancer. They observed that the knowledgelevel increased to 78.8% post program, which indicates the effectiveness of the education program on their knowledge, which fed them with right and satisfactory information,(Afaf et al,2015;Beydağ&Yürügen,2010).

From the result, 9 5(67.9%) had positive attitude towards breast cancer screening while 45(32.1%) had negative attitude towards breast cancer screening. It shows that majority of the respondents have positive attitude towards breast cancer screening. This is contrary to other findings: Afaf et al,2015 in their study observed that level of practice of breast self- examination among nurse students is unacceptably low; their performance level at pre program was 5.3%,also in another study by Aghamolaei,et al., (2011),they reported that prior to the intervention in Iran, just about 7% of participant performed breast self examination regularly, which is much lower than what was reported by developed countries. Breast self examination being the simplest and easiest screening method should be well practiced, this will show the attitude of the women towards other screening.There is no significant relationship between knowledge and attitude of female undergraduate students towards breast cancer screening.

The null hypothesis was tested using inferential statistics of chi-square test (p=O.05, df=2). Findings show (x^2cal =0.185, x^2 tab = 5.991). Basedon the above, we accept the null hypothesis that "there is no significant relationship between knowledge and attitude of undergraduate female students towards breast cancer

screening"; and reject the alternate hypothesis that "there is significant relationship between knowledge and attitude of undergraduate female students towards breast cancer screening ".

Implication for nursing
Nurse practitioners should sensitize women about the significance of breast cancer and screening.
Nurses should improve their skills in performing clinical breast examination.
Nurse practitioners should continue reminding and updating women about breast cancer.
There should be collaboration between nurses and other health practitioners in establishing a free breast cancer screening center,
Nurses should be updated with information on knowledge of breast cancer and screening.

Summary
This study was carried out to test the knowledge and attitude towards breast cancer screening among female undergraduate students.Literature was reviewed based on the study's objectives. The research design was a cross sectional descriptive survey with a sample size of 150 respondents.Questionnaires were distributed to the respondents to obtain data for the study. The data was then pretested to ensure clarity and reliability of the study instrument. The research results were interpreted, discussed and relevant recommendations were made based on the findings.

V.   Conclusion
Breast cancer screening is an important measure used in the prevention and early detection of breast cancer, preventing the advance stages of the disease among women. Despite the fact that the respondents were educated and were aware of breast cancer screening it did not translate into a very high percentage of respondents' with positive attitude as expected given that the population of respondents' where educated and learned.

Recommendation
The following recommendations were made based of the findings that.
➢ Breast cancer education should be embedded into educational institutions' general study programs.
➢ There should be mass sensitization programs on breast cancer screening and the need for early detection and treatment.
➢ Self breast examination should be thought in schools to all female undergraduate students.
➢ Free breast cancer screening centers should be instituted in all health facilities.
➢ Treatment should be subsidized or free to all female undergraduate students.

Suggestions for further studies
➢   The prevalence of breast cancer screening among older and younger females can be done.

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