

# Knowledge, Attitude And Practice Towards Breast Cancer Screening Among Female Out-Patients Aged 18-65 Years Seeking Health Care Services At Jaramogi Oginga Odinga Teaching And Referral Hospital, Kisumu County

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**Abstract:-** Breast cancer is an abnormal growth of a tissue that starts in the cells of the breast. It is a major health burden in women both in developed and developing countries. Most women present with breast cancer at advanced stages when little treatment benefit can be derived. Kenyans aged 18 years and above are at risk of developing breast cancer. Seventy to eighty percent of cancer cases in the country are screened at later stages due to a lack of awareness, inadequate diagnostic facilities, lack of treatment facilities, high cost of treatment and high poverty index. Early detection and screening as cornerstones for breast cancer control play a pivotal role in reducing related mortalities. At Jaramogi Oginga Odinga Teaching and Referral Hospital (JOOTRH) in Kisumu, the number screened for breast cancer is actually low (averagely 4-5 patients on monthly basis). This cross sectional study assessed knowledge, attitude and practices of female outpatients on breast cancer screening hence will induce appropriate interventions e.g. education and correct practice. From the targeted population, systematic random sampling was used to select female outpatients aged 18 to 65 years seeking medical services at JOOTRH. Data was collected using structured questionnaires and then analyzed by SPSS. Seventy five point nine percent of the study population had knowledge on breast cancer screening but very few were seeking screening. Fear and preference of health care provider were at 37.9% and 23.5% respectively and this was observed to have affected attitude of study population towards (BCS). Other than BSE at 69.1%, the rest screening methods were poorly practiced due to lack of knowledge. Association between knowledge and attitude was determined by chi-square. This study found no association between knowledge and attitude among the respondents on breast cancer screening ( $p>0.05$ ). The study recommends that health care providers should employ provider initiated breast cancer screening, carry out mobile out reaches to sensitize and attend to more women, create awareness in the community on breast cancer screening and counselors to be trained on breast cancer screening so as to screen and provide psychological support to the presumed breast cancer cases.

**Index terms:** Breast Cancer Screening Kenya

**Objectives:** This study investigated knowledge, attitude and practices towards breast cancer screening among female out-patients seeking health care services.

**Method:** The study used Cross Sectional research design to randomly select 400 female out-patients who were seeking health care services in the facility.

**Results:** Three hundred and forty (85%) of the respondents completed the study; 32.1% of them were of age 28-37 years; 37.4% of the respondents had secondary education; 43.5% of them were unemployed; 58.5% of them were from Kisumu County. Two hundred and fifty eight (75.9%) of the respondents were aware of the breast cancer screening (BCS), while 37.6% didn't know what causes breast cancer. Smoking and family history was highly associated with breast cancer at 71.2% and 61.5% respectively; 55% of the respondents believed that in case changes are realized in the breast a doctor should be seen immediately. Breast self-examination at 69.1% and clinical breast examination at 45.0% were the most popular breast screening methods compared to FNAC, mammography and ultrasound.

**Conclusion:** Social demographic information indicated that majority of the respondents were of age below 40 years, thus implies that the population was made of youthful individuals. The study found out that seventy five point nine percent of the respondents were aware of the breast cancer screening though the uptake of services at the health facility has been very poor.

## I. INTRODUCTION

Breast cancer is abnormal growth of a tissue that starts in the cells of the breast. A malignant tumor is a group of cancer cells that can grow into (invade) surrounding tissues or spread (metastasize) to distant areas of the body. Cancer begins when healthy cells in the body change and grow uncontrollably, forming a mass or sheet of cells called tumor. A tumor can be cancerous or benign. A cancerous tumor is malignant, meaning it can grow and spread to the other parts of the body. A benign tumor means the tumor can grow and will not spread (American Cancer Society, 2015).

The assumption is that early detection will improve treatment outcomes. A number of screening tests have been employed, including clinical and self-breast exams, mammography, genetic screening, ultrasound, and magnetic resonance imaging. (Kösters; Gøtzsche, 2003). Mammography is the only breast cancer screening procedure for which empirical evidence exists to have significantly reduced breast carcinoma mortality by about 63% but mammography screening rate in a study revealed poor uptake of it despite having had of the screening method (Tabaret *al.*, 2001). Medical evidence, however, does not support its use in women with a typical risk for breast cancer. This could have been due to lack of knowledge or attitude. The goal of screening tests for breast cancer is to find it before it causes symptoms (like a lump that can be felt). Breast cancers found during screening are more likely to be smaller and still confined to the breast. The size of a breast cancer and how far it has spread are some of the most important factors in predicting the prognosis (outlook) of a woman with this disease (American Cancer Society, 2015).

.A study showed that knowledge and the practice of BSE is inadequate among young female medical students. The finding that some of them did not practice BSE suggests that there is a need for continuing education programs to change attitude and behavior towards BSE. It was suggested that BSE should be included in the curricula of both undergraduate and postgraduate medical schools (Saadeldin, 2013).

## II. METHOD

**Design:** The study used Cross Sectional survey targeting female out-patients seeking health care services.

**Study site:** The study was carried out at Jaramogi Oginga Odinga Teaching and Referral Hospital which is a major Referral Hospital in Western region of Kenya serving averagely 8700 female out-patient on monthly basis.

**Subjects:** The study population was made up of female aged 18 to 65 years who were seeking out- patient health services in all the departments.

**Data collection and analysis:** Quantitative data was collected from those who were willing to participate in the study through structured questionnaires divided into three sections that's knowledge, attitude and practice of breast cancer screening. The association between knowledge and attitude was measured using the Chi-square test.

### III. RESULTS

#### 1. Knowledge on breast cancer screening

Two hundred and fifty eight (75.9%) of the respondents were aware of the breast cancer screening (BCS); 78 (22.9%) were unaware while 4 (1.2%) of the respondents were undecided.

**Table 4.1: Knowledge on Breast Cancer Screening**

Response	Frequency	Percent (%)
Yes	258	75.9
No	78	22.9
Don't know	4	1.2
<b>Total</b>	<b>340</b>	<b>100.0</b>

#### 4.2.8: Awareness of methods used in breast cancer screening

Sixty nine point one percent of the respondents agreed that they are aware of the BSE used in BCS. Forty five percent of the respondents in addition agreed that they are aware of the CBE by doctor. Further, 19.1% of the respondents agreed that they are aware of mammography as a method used in BCS. Ultra sound scored 30.0% while FNAC was at 12.6% as a method used in BCS.

**Table 4.9: Awareness of methods used in breast cancer screening**

Method	Yes	No	Don't Know
Fine Niddle Aspiration Cytology(FNAC)	43 (12.6%)	63 (18.5%)	234 (68.8%)
Breast Self-Examination(BSE)	235 (69.1%)	21 (6.2%)	84 (24.7%)
Clinical Breast Examination by doctor	153 (45.0%)	27 (7.9%)	160 (47.1%)

Mammography	65 (19.1%)	49 (14.4%)	226 (66.5%)
Ultra sound	102 (30.0%)	43 (12.6%)	195 (57.4%)

**2. Attitude towards breast cancer screening**

**4.3.1 Respondents preferred healthcare provider during clinical breast examination**

Up to 80 (23.5%) of the respondents stated that they preferred health care provider during CBE, 259 (76.2%) of them did not have preferred health care provider during CBE while 1(.3%) of the respondents were undecided on the preferred health care provider during CBE.

**Table 4.15: Respondents preferred healthcare provider during Clinical Breast Examination**

Response	Frequency	Percent (%)
Yes	80	23.5
No	259	76.2
Don't know	1	.3
<b>Total</b>	<b>340</b>	<b>100.0</b>

**4.3.3: Fear of breast cancer screening.**

One hundred and twenty nine (37.9%) of the respondents feared Breast Cancer Screening while 211 (62.1%) of them did not.

**Table 4.17: Fear of Breast Cancer Screening**

Response	Frequency	Percent (%)
Yes	129	37.9
No	211	62.1
<b>Total</b>	<b>340</b>	<b>100.0</b>

**3. Practice towards breast cancer screening**

**4.4.1 Respondents ever done breast self-examination**

One hundred and eighty six(54.7%) of the respondents had ever done BSE while 152 (44.7%) of them haven't carried out BSE. Only 2 (0.6%) of the respondents did not know whether they had ever done BSE.

**Table 4.18: Respondents ever done breast self-examination**

Response	Frequency	Percent (%)
Yes	186	54.7

No	152	44.7
Don't know	2	.6
<b>Total</b>	<b>340</b>	<b>100.0</b>

#### 4.4.2 Respondents ever done mammography

Three hundred and fifteen 92.6% of the respondents had not done mammography while 23 (6.8%) had experience of mammography. Only 2 (.6%) of the respondents did not know whether they had ever done mammography.

**Table 4.19: Respondents ever done mammography**

Response	Frequency	Percent (%)
Yes	23	6.8
No	315	92.6
Don't know	2	.6
<b>Total</b>	<b>340</b>	<b>100.0</b>

#### 4.4.3 Respondents ever done clinical breast examination

Eighty four (24.7%) of the respondents had done clinical breast examination while 254 (74.7%) of them had not. Only 2 (.6%) of the respondents did not know whether they had ever done Clinical Breast Examination.

**Table 4.20: Respondents ever done clinical breast examination**

Response	Frequency	Percent (%)
Yes	84	24.7
No	254	74.7

Don't know	2	.6
<b>Total</b>	<b>340</b>	<b>100.0</b>

**4.5: Association between the knowledge and attitude on breast cancer screening among the respondents.**

Chi-square test done on the association between the knowledge and attitude on breast cancer screening among the respondents. The Chi-Square test result was 8.085 with a p-value of 0.089. There was no association between knowledge and attitude.

**Table 4.21: Association between the knowledge and attitude on breast cancer screening among the respondents.**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.085	4	.089
Likelihood Ratio	8.813	4	.066
Linear-by-Linear Association	3.689	1	.055
N of Valid Cases	340		

IV. DISCUSSION

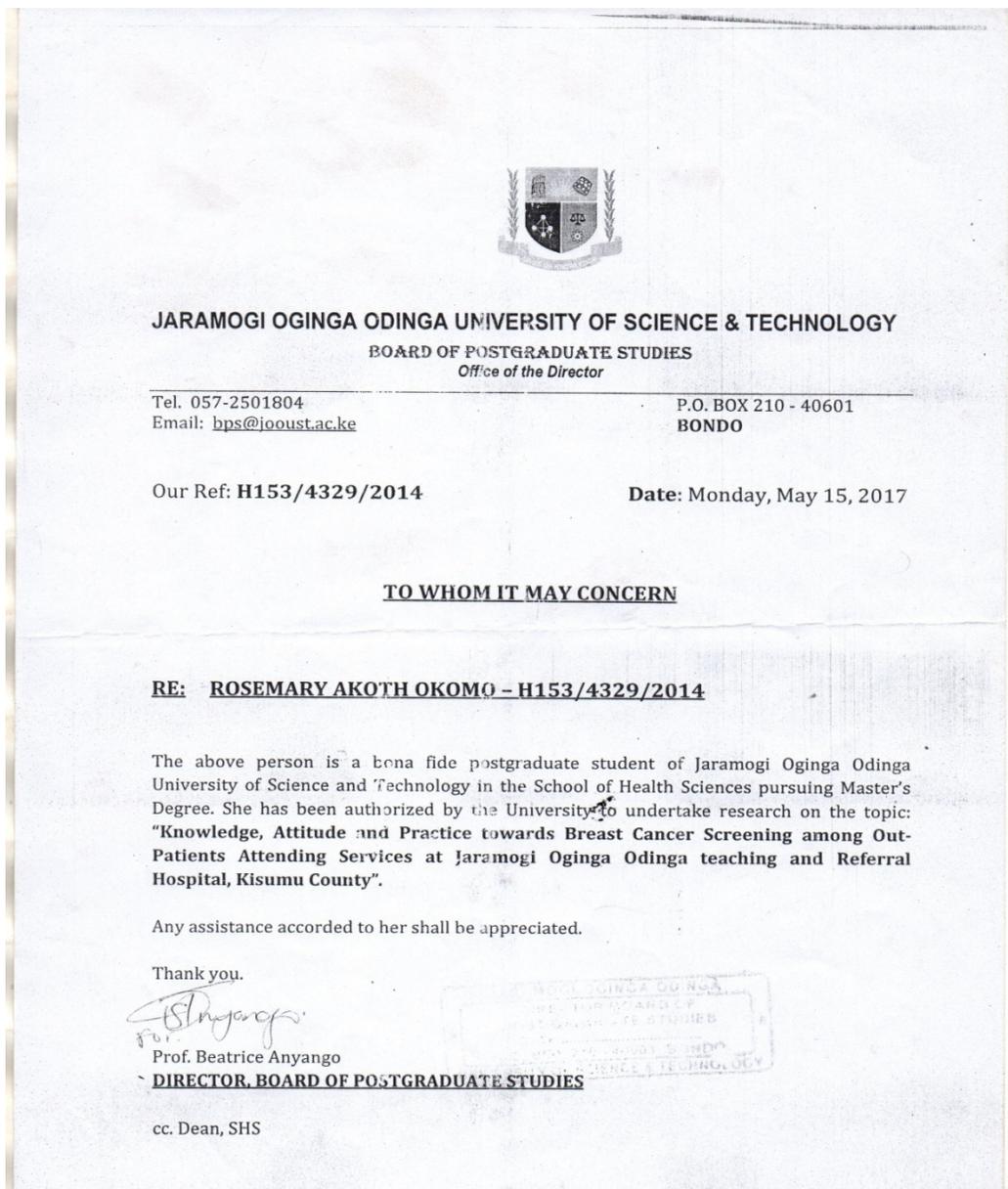
Social demographic information indicated that majority of the respondents were of age below 40 years, thus implies that the population was made of youthful individuals. Most of the respondents were literate enough to handle the questions in the research tool without or with little support from the researcher and this is because 64.1 % had attained secondary and above level of education which was useful in answering the questions related to knowledge, attitude and practice on breast cancer screening. The finding of the study concurred with Janz, (2002) who highlighted that formal education provided an advantage in understanding various health issues and that people with less education have significantly less knowledge of breast cancer screening.

Life style was highly associated with breast cancer at twenty seven point one percent. Family history, smoking, alcohol consumption, high fat diet and aging were highly associated with breast cancer and women were believed to be most at risk of developing breast cancer compared to men. Ulceration of breast, lump and pain in the breast were believed to be the major signs of breast cancer. The finding of the study was in line with Milaat, (2000) findings who established that beliefs and misconceptions among the population vary with several factors, such as ethnicity, age, education and socio-economic status.

Generally the respondents were not knowledgeable about the methods used in screening breast cancer though sixty nine point one and forty five percent new about breast self-examination and clinical breast examination as screening method respectively. Fine needle aspiration and mammography were not as popular. There is need for the population to be made aware of all the available screening methods through education by the health care providers. About whether breast cancer is treatable or not, the findings implied that majority of the respondents agreed that breast cancer is treatable and this gives hope that with breast cancer one can live.

#### APPENDIX

Appendix III: Authorization by board of postgraduates' studies



Appendix iv: Research approval and authorization from JOOTRH



### MINISTRY OF HEALTH

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*When replying please quote*

JARAMOGI OGINGA ODINGA TEACHING &  
REFERRAL HOSPITAL  
P.O. BOX 849  
KISUMU

2<sup>nd</sup> October, 2017

ERC.1B/VOL.I/386

Date .....

Ref: .....

Rosemary Akoth Okomo,  
**JOOUST.**

Dear Rosemary,

**RE: REQUEST FOR ETHICAL APPROVAL TO UNDERTAKE A STUDY ENTITLED:  
"KNOWLEDGE, ATTITUDE AND PRACTICE TOWARDS BREAST CANCER  
SCREENING AMONG FEMALE OUT-PATIENTS AGED 18-65 YEARS ATTENDING  
SERVICES AT JARAMOGI OGINGA ODINGA TEACHING AND REFERRAL  
HOSPITAL, KISUMU COBNTY."**

The JOOTRH ERC reviewed your protocol in a meeting held on 31<sup>st</sup> August, 2017. Issues were raised by reviewers which you satisfactorily addressed. You are therefore, permitted to commence your study immediately. Note that this approval is granted for a period of one year (2<sup>nd</sup> October, 2017 to 1<sup>st</sup> October, 2018). If it is necessary to proceed with this research beyond the approved period, you will be required to apply for further extension to the committee.

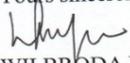
Also note that you will be required to notify the committee of any protocol amendment(s), serious or unexpected outcomes related to the conduct of the study or termination for any reason.

In case the study site is JOOTRH, kindly report to the Chief Executive Officer before commencement of data collection.

Finally, note that you will also be required to share the findings of the study in both hard and soft copies upon completion.

The JOOTRH ERC takes this opportunity to thank you for choosing the institution and wishes you the best in your endeavours.

Yours sincerely,

  
WILBRODA N. MAKUNDA,  
SECRETARY – ERC,  
**JOOTRH.**

JOOTRH ETHICS & REVIEW  
COMMITTEE  
P. O. Box 849 - 40100  
KISUMU

DATE: 2/10/2017  
P.O. BOX 849-40100, KISUMU  
REFERRAL HOSPITAL (JOOTRH)  
JARAMOGI OGINGA ODINGA TEACHING &

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