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OriginalArticle

KNOWLEDGE, ATTITUDE, AND PRACTICES TOWARDS UTILIZATION OF BREAST CANCER SCREENING SERVICES AMONG WOMEN AGED 15-50 YEARS IN ADJUMANI HOSPITAL ADJUMANI DISTRICT; A CROSS-SECTIONAL STUDY.

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ABSTRACT.

Background:
This study aims to assess the knowledge, attitude, and practices towards breast cancer screening among women aged 15-50 years in Adjumani Hospital.

Methodology:
The study employed a cross-section study design and a simple random sampling technique to obtain a sample of 50 respondents' questionnaire was used to collect data. Data was analyzed manually using tally sheets and entered in a computer using Microsoft Excel computer program to generate tables, pie charts, and bar graphs.

Results:
Results from the study on knowledge reported that the majority of the respondents (70%) had ever heard about breast cancer, 52% of respondents obtained information about breast cancer from a hospital, 68% didn't know the risk factors that predispose to breast cancer, 58% reported increased age as the risk factor that predisposes to breast cancer, 80% didn't know the three methods of breast cancer screening, 60% were willing to go for breast cancer screening, 50% reported if it is free of charge, 70% had never done breast self-examination, 56% had little knowledge about the procedures as the reason as to why they had never done breast cancer screening, 50% they had ever done breast self-examination, 40% often do breast self-examination monthly, 52% were recommended by health workers to go for breast cancer screening services and 46% reported self-breast screenings the preventive measure for breast cancer.

Conclusion:
Even though women had had fairly good attitudes towards the utilization of breast cancer screening services, surprisingly were at risk of contracting breast cancer because they had insufficient knowledge of signs and symptoms, and few of them had ever done breast cancer screening with stumpy levels of breast cancer preventive practices.

Recommendation:
The management of Adjumani Hospital should increase breast cancer screening awareness through health education during antenatal care to all mothers.

Keywords: *Knowledge, Attitude, Practices, Breast Cancer Screening, Women, Adjumani Hospital*
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BACKGROUND OF THE STUDY.

Cancer was a major public health problem globally, with an estimated 2.3 million new cases in 2012 (International Agency for Research on Cancer, 2016). It now represents one in four of all cancers in women (Ferlay et al, 2020). Unlike most Sub-Saharan African countries, Uganda offers cancer treatment, including surgery, radiation, and chemotherapy, at no cost through the Ugandan Cancer Institute (UCI) and a collaborative arrangement with the Ugandan Ministry of Health, the US National Cancer Institute, and the Fred Hutchinson Cancer Research Center; nonetheless, late-stage presentation was a primary obstacle to improving breast cancer outcomes in Uganda, where > 77% of women were given a diagnosis of advanced-stage disease, including26%withmetastaticstageIVcancer at initial presentation. Therefore, this revealed low utilization of breast cancer screening services among women which was attributed to breast health messaging preferences related to socio-demographics, health care access, and prior breast cancer exposure factors (Galukande et al, 2015).

Despite increasing reports of growing awareness of Cancer in Uganda; Breast cancer screening was one way of reducing morbidity, and mortality and improving the survival rate to enable early detection and management of breast cancer following the Uganda Ministry of Health

clinical guidelines using a combination of daily Breast Self- Examination (BSE), regular Clinical Breast Examination (CBE), and a Mammography every two years but HSIM records available at Adjumani Hospital reveals that the participation of women in screening activities was very low at (10%) in 2015-2016, 45% diagnosed with breast cancer, 55% of breast cancer patients presented at advanced stages. Therefore, this gave an impression to conduct a study on knowledge, attitude, and practices towards breast cancer screening among women aged 15-50 years at Adjumani Hospital, Adjumani district.

METHODOLOGY.

Study design.

The study employed a cross-section design to address the specific objectives of the study. The design was preferred because it helped the researcher in quantifying the distribution of certain variables in the study population at one point in time.

Study Area.

Adjumani Hospital is located in Adjumani District in the Northern region of Uganda, a sub-region of West Nile approximately 210 meters away from Adjumani town. It is about 115.8 kilometers from Gulu Regional Referral Hospital. The hospital receives referrals from nearby health Centers such as Adjumani Mission Health Centre III, Pakele Health Centre III, Kochoa Health Centre III, and Robidire Health Centre III. Adjumani Hospital receives an average of 200 patients per day with several departments namely; OP, Inpatient, ART, dental, lab, pharmacy, antenatal care clinic, and pediatrics. The study was conducted from April-October 2023

Study population.

The study targeted women aged 15-50 years who were seeking medical services at the outpatient department in Adjumani Hospital.

Sample size determination.

The sample size was determined using the formula below;
QR/O (Burton, 1965)
Where;
Q=total number of days spent in data collection
R=Maximum time taken by the interviewer per day O= Maximum time taken by the interviewer.
Therefore,
R=5Respondents Q=5 days
O=1/2 Hours QR/O=5X5/1/2
25x2= 50Respondents
Therefore, the sample size the 50 respondents.

Study variables.

Dependent variable.

Breast cancer screening was a dependent variable

Independent variable.

Knowledge, attitude, and practices were independent variables.

Inclusion criteria.

This consisted of women aged 15- 50 years who were present during the time of data collection and ready to consent to be part of the study.

Sampling technique.

A simple random technique was used to select the study participants from the source population. This technique was preferred because it ensures freedom from human bias and each member of the target population had an equal and independent chance of being included.

Data collection tool.

A semi-structured questionnaire was designed and used to collect data from respondents. The questionnaires were designed according to the specific objectives of the study with open and closed questions, written in English language and later translated into the local language (Madi) for respondents who didn't understand English language. The questionnaire was preferred because it is best suited to collect data from a larger sample considering the nature of the study population.

Data collection procedure.

After approval of the research proposal; an introductory letter from the Kampala School of Health Sciences research committee to the study area was obtained. When permission was granted the researcher and the trained research assistants then administered the questionnaire to the respondents through interview in a local language (Madi). The purpose of the study was explained to the participants and data collection began with a signing for a consent form among women of reproductive age who were seeking medical services at OPD; numbers were written on a small piece of paper, rolled up then mixed appropriately and put in a box so that
Every respondent who picked an even number was given the questionnaire to fill out. The procedure was repeated each day until the sample size of 50 respondents was obtained.

Data analysis and presentation.

Data was analyzed manually using tally sheets and entered in a computer using Microsoft Excel computer program to generate tables, pie charts, and bar graphs for easy presentation of findings.

Data management.

After collecting data, the questionnaires were checked for completeness and accuracy. Those that were inaccurately or incompletely filled were completed before respondents left. Accurate and filled ones were locked in a cupboard to provide no access to other people and this maximized confidentiality.

Quality control.

The quality of the study was adhered to; by pretesting the research tool (questionnaire) at Adjumani Hospital among10 respondents to assess its relevancy, two research assistants with good communication skills, and knowledge were trained on how to interview and collect data, the right respondents were selected through the inclusion and exclusion criteria.

Ethical consideration.

Before the commencement of the study, ethical clearance was obtained from the Kampala School of Health Science research committee. Permission was sought from the hospital administration where the study was done before conducting the interview; once permission was granted, the researcher and his assistants introduced themselves to respondents, explained the purpose of the study, informed consent was sought and respondents were assured of their confidentiality. No names were written on the questionnaire.

RESULTS.

Demographic data

Table 1: Shows demographic data of respondents. (N=50)

Age	**Frequency**	**Percentage**
15-23	11	22
24-32	25	50
33-41	9	18
42-50	5	10
Total	**50**	**100**
Marital status		
Single	10	20
Married	30	60
Separated/Divorced	7	14
Widowed	3	6
Total	50	100
Occupation		
Teachers	8	16
Peasant farmers	29	58
Doctors	3	6
Midwives	10	20
Total	**50**	**100**
Religion		
Catholics	31	62
Muslims	5	10
Protestants	7	14
Born Again	7	14
Total	**50**	**100**
Education Level		
Never went to school	4	8
Primary	14	28
Secondary	27	54
Tertiary institution	5	10
Total	**50**	**100**
Never had a history in families	40	80
Had breast cancer history in families.	10	20
Total	**50**	**100**

From table 1, half of the respondents (50%) were within the age bracket of 23-32 years of age whereas the least (10%) were within the age of 42-50 years.
From Table 1, the majority of the respondents (60%) were married whereas the minorities (6%) were widowed.
From table 1, more than half of the respondents (58%) were peasant farmers whereas the least (6%) were unemployed.
From table 1, the majority of the respondents (62%) were Catholics by religion whereas the minorities (10%) were Muslims by religion.
From the table, half of the respondents (50%) had attained a secondary level of education whereas the least (8%) had attained college /university as their level of education.
From Table 1, nearly all respondents (80%) reported that they never had a breast cancer history in their families whereas (20%) reported that had a breast cancer history in their families.

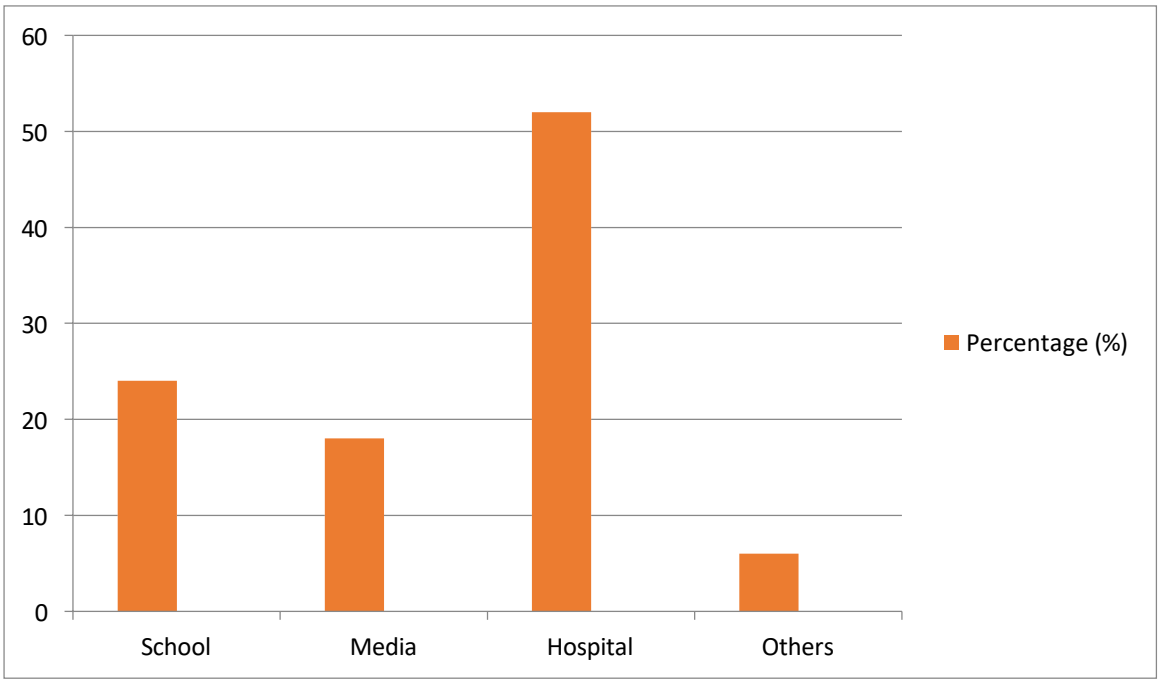
Knowledge of utilization of breast cancer screening services among women aged 15-50 years in Adjumani Hospital.

Table 2: Shows the distribution of respondents according to whether they had ever heard about breast cancer. (N=50)

Respondents	Frequency	Percentages (%)
Had ever heard	35	70
Had never heard	15	30
Total	50	100

From table 2, the majority of the respondents (70%) had ever heard about breast cancer whereas the minority (30%) had never heard about it.

Figure 1: Shows the distribution of respondents according to where they obtained information about breast cancer. (N-50)



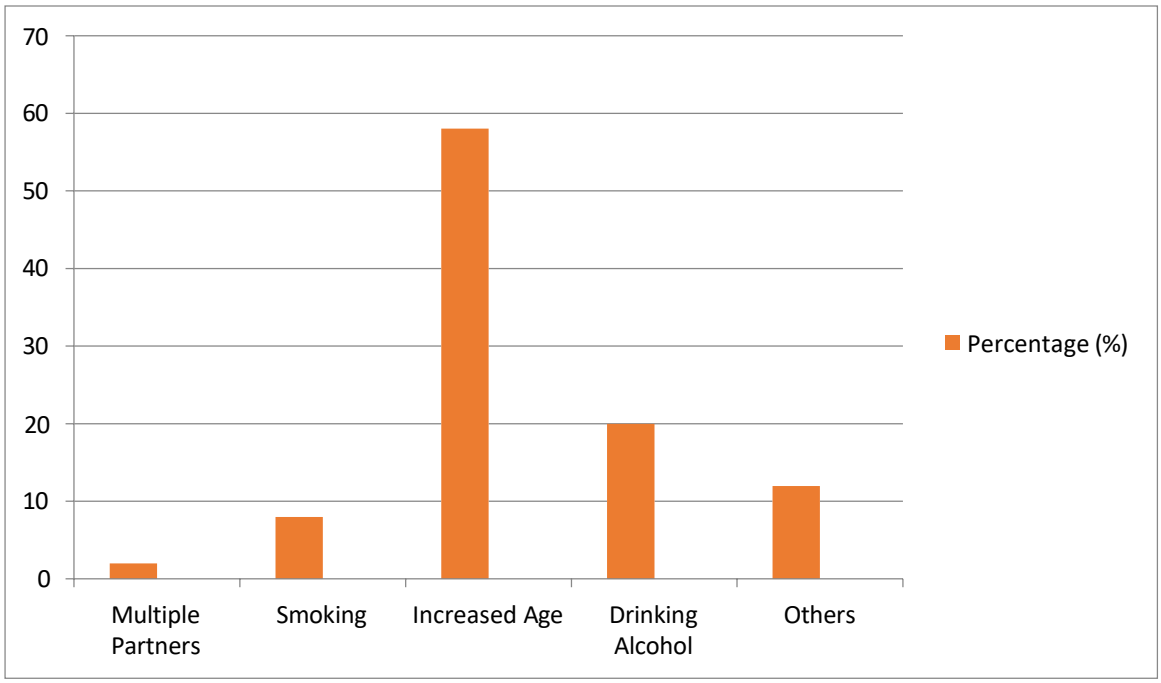
From figure 1, most of the respondents (52%) obtained information about breast cancer from a hospital whereas the least (6%) reported others (consisting of friends and relatives).

Table 3: Shows the distribution of respondents according to whether they knew the risk factors that predispose to breast cancer. (N=50)

Respondents	Frequency	Percentages (%)
Did not know the risk factors	34	68
New the factors	16	32
Total	50	100

From table 3, more than half of the respondents (68%) didn't know the risk factors that predispose to breast cancer whereas the least (32%) knew the risk factors that predispose to breast cancer.

Figure 2: shows the distribution of respondents according to the risk factors that predispose them to breast cancer. (N-50)



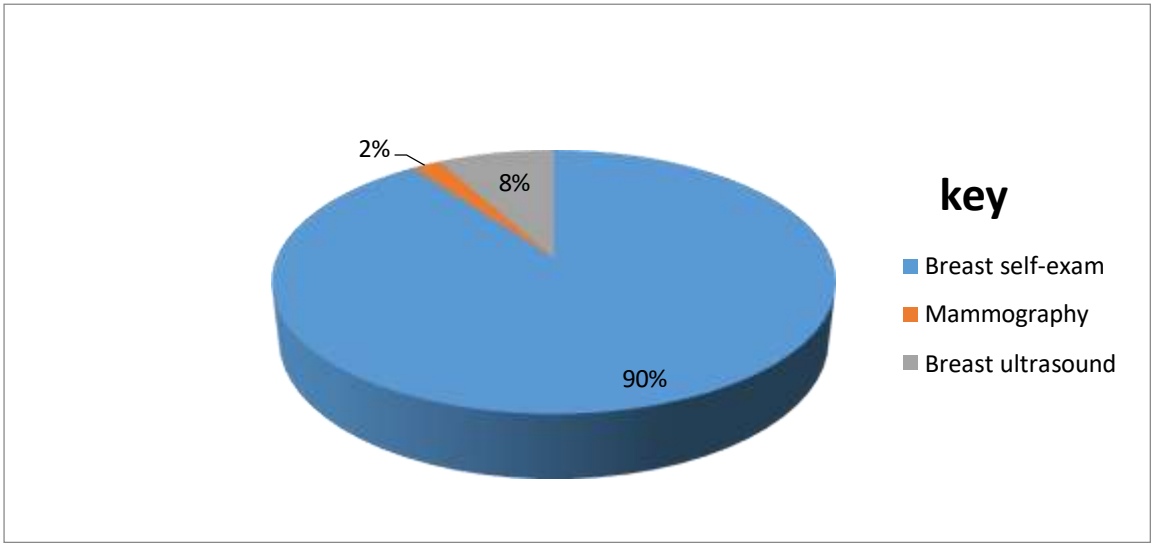
From figure 2, most of the respondents (58%) reported increased age as the risk factor that predisposes to breast cancer whereas the least (2%) reported multiple partners as the risk factor that predisposes to breast cancer.

Table 4: Shows the distribution of respondents according to whether they knew the three methods of cancer screening. (N=50)

Response	Frequency(f)	Percentage(%)
Yes	40	80
No	10	20
Total	50	100

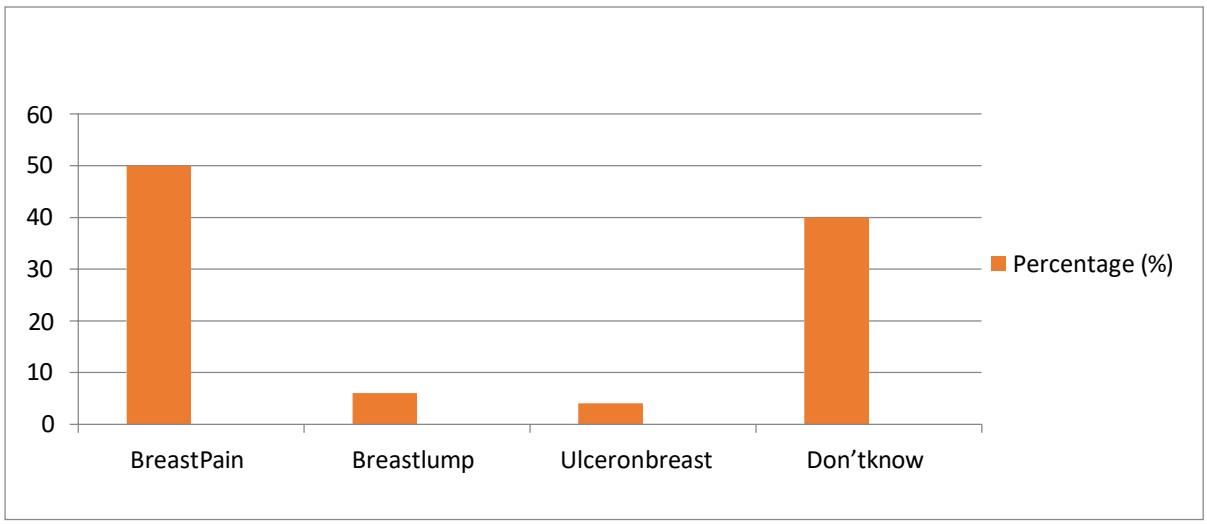
From table 4, the majority of the respondents (80%) reported that they didn't know the three methods of cancer screening whereas the minority (20%) knew the three methods of breast cancer screening.

Figure 3: Shows the distribution of respondents according to the three methods of breast cancer screening, they knew.



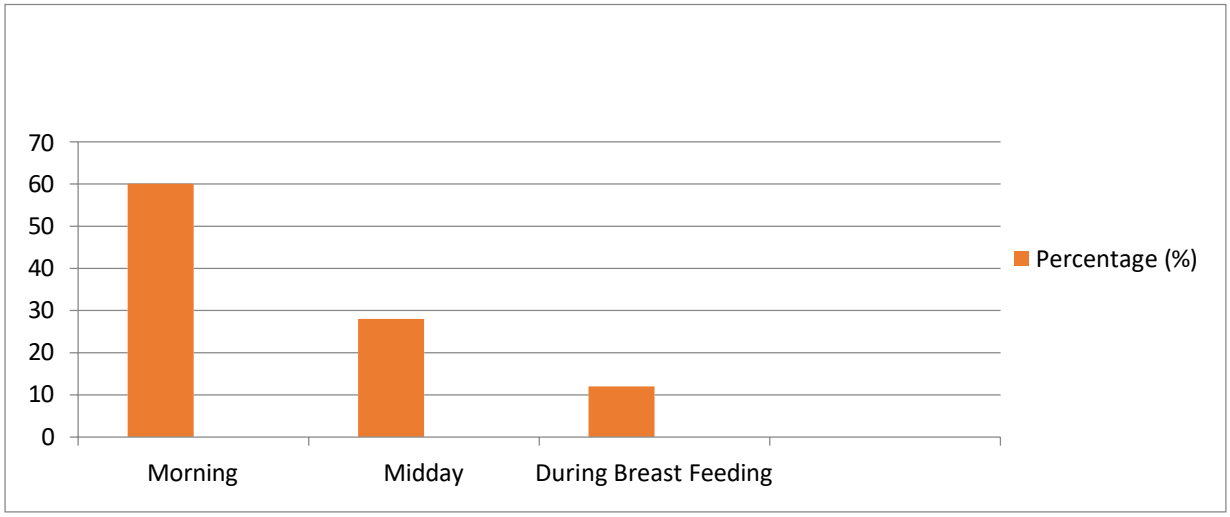
From figure 3, nearly all respondents (90%) reported breast self-examination as a method of breast cancer screening they knew whereas the least (2%) reported mammography.

Figure 4: Shows the distribution of respondents according to the symptoms of breast cancer they knew. (N=50)



From figure 4, half of the respondents (50%) reported breast pain as the symptom of breast cancer they knew whereas the least (4%) reported ulcer on the breast as a symptom of breast cancer they knew

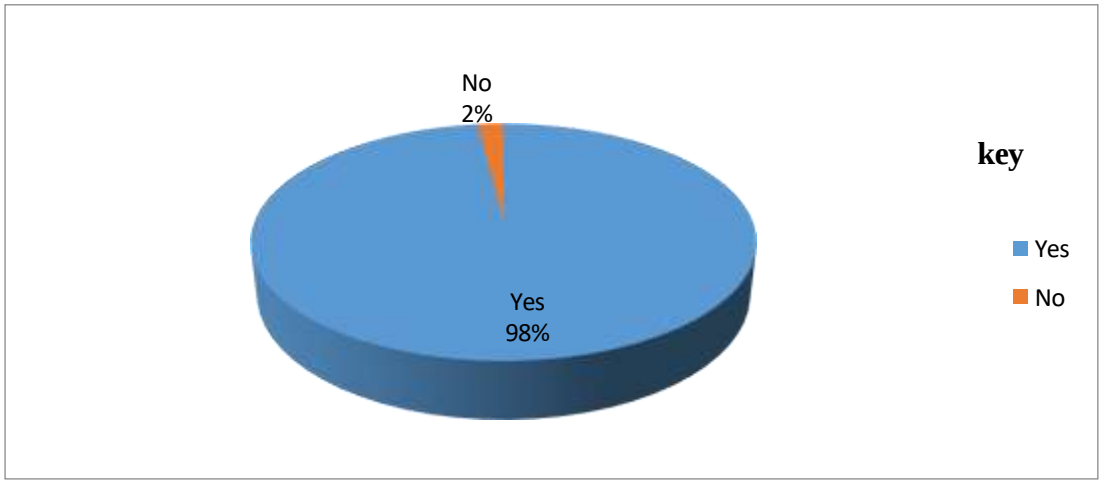
Figure 5: Shows the distribution of respondents according to the best time to do breast self-examination. (N-50)



From figure 5, less than half of the respondents (60%) reported morning as the best time for breast self-examination whereas the least (12%) reported during breastfeeding.

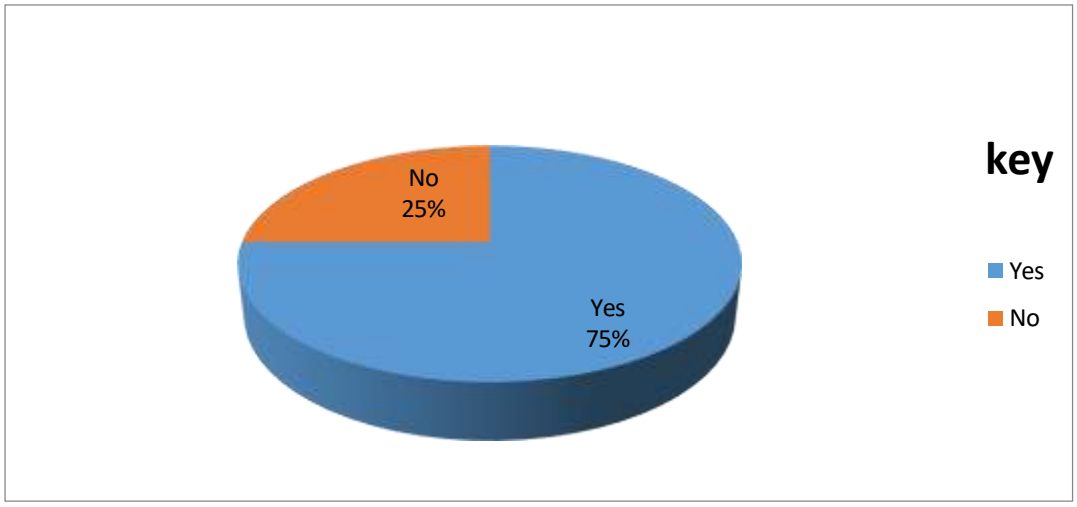
Attitude toward utilization of breast cancer screening services among women aged 15- 40 years.

Figure 6: Shows the distribution of respondents according to whether they think it is important to go for breast cancer screening. (N-50)



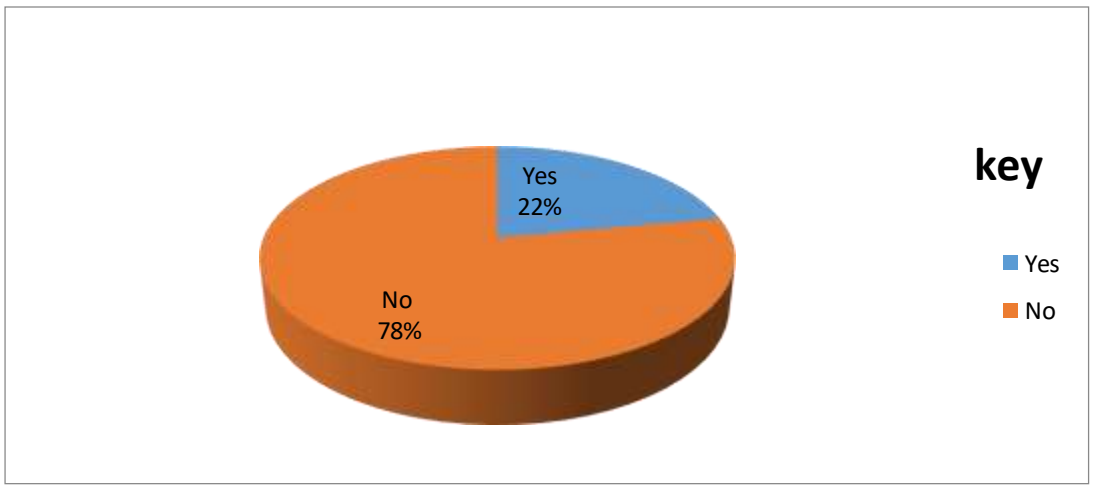
From figure 6, the respondents (98%) agreed that it is important to go for breast cancer screening whereas the minority (2%) disagreed.

Figure 7: Shows the distribution of respondents according to whether they think that early detection improves the treatment of breast cancer.



From figure 7, the majority of the respondents (70%) agreed that early detection improves the treatment of breast cancer whereas the least (30%) disagreed.

Figure 8: Shows the distribution of respondents according to whether they think that they are at risk of getting breast cancer. (N-50)



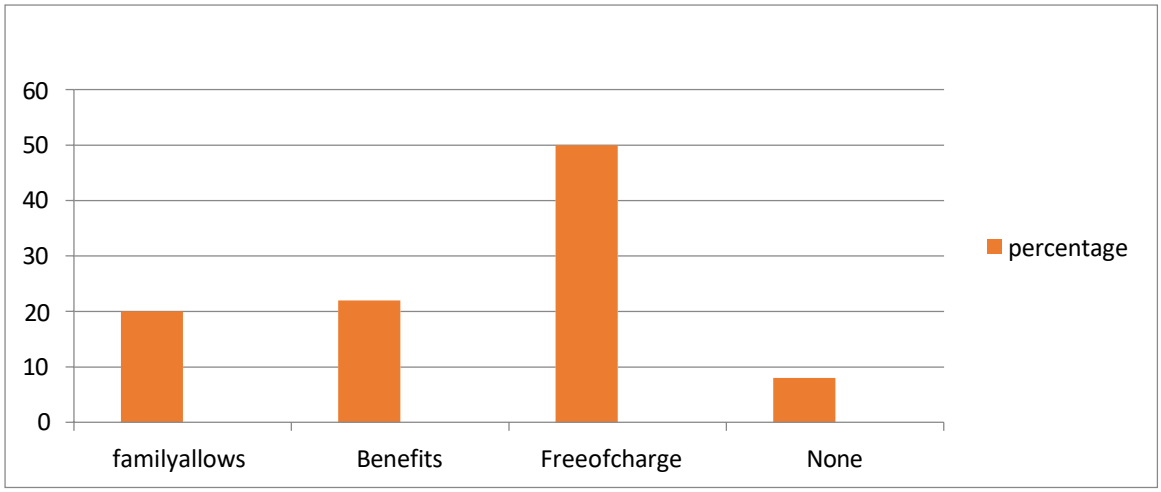
From figure 8, the majority of the respondents (78%) reported that they were not at risk of getting breast cancer whereas the minority (22%) reported that they were at risk of getting breast cancer.

Table 5: Shows the distribution of respondents according to whether they were willing to go for breast cancer screening. (N=50)

Response	Frequency(f)	Percentage (%)
Yes	30	60
No	20	40
Total	50	100

From table 5, most of the respondents (60%) were willing to go for breast cancer screening whereas the least (40%) were not willing.

Figure 9: Shows the distribution of respondents according to the conditions that warrant them to go for breast cancer screening. (N-50)



From figure 9, half of the respondents (50%) reported if it is free of charge as the condition warrants them to go for breast cancer screening whereas the least (8%) didn't mention any condition that warrants them to go for breast cancer screening.

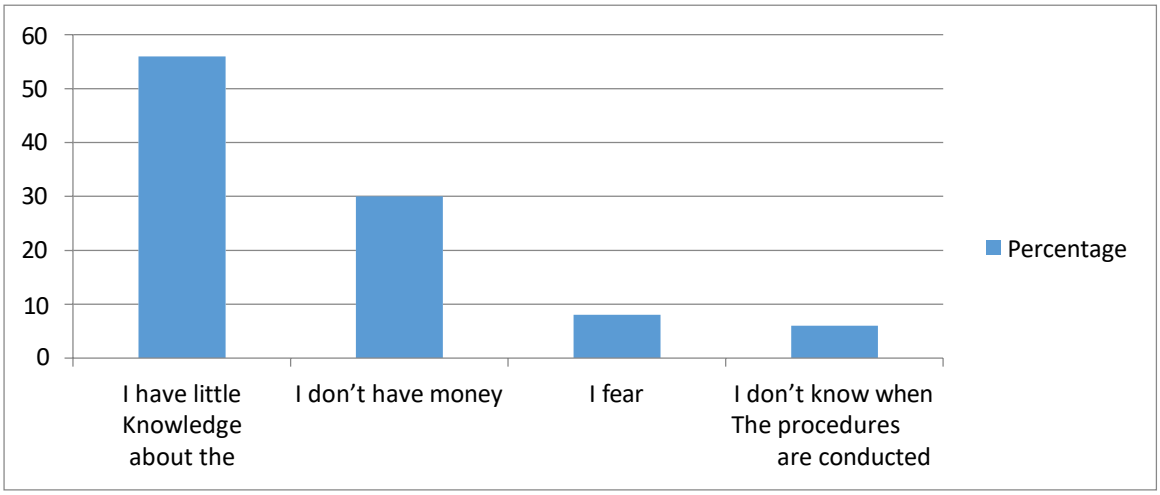
Practices towards utilization of breast cancer screening services among women aged 15- 50 years in Adjumani Hospital.

Table 6: Shows the distribution of respondents according to whether they had ever done breast self-examination/ been screened for breast cancer. (N=50)

Response	Frequency(f)	Percentage (%)
Yes	15	30
No	35	70
Total	50	100

From table 6, most of the respondents (70%) reported that they had ever done breast self-examination / been screened for breast cancer whereas the least (30%) of respondents had never done breast self-examination/ been screened for breast cancer screening.

Figure 10: Shows the distribution of respondents according to the reason as t they had never done breast cancer screening. (N-50)



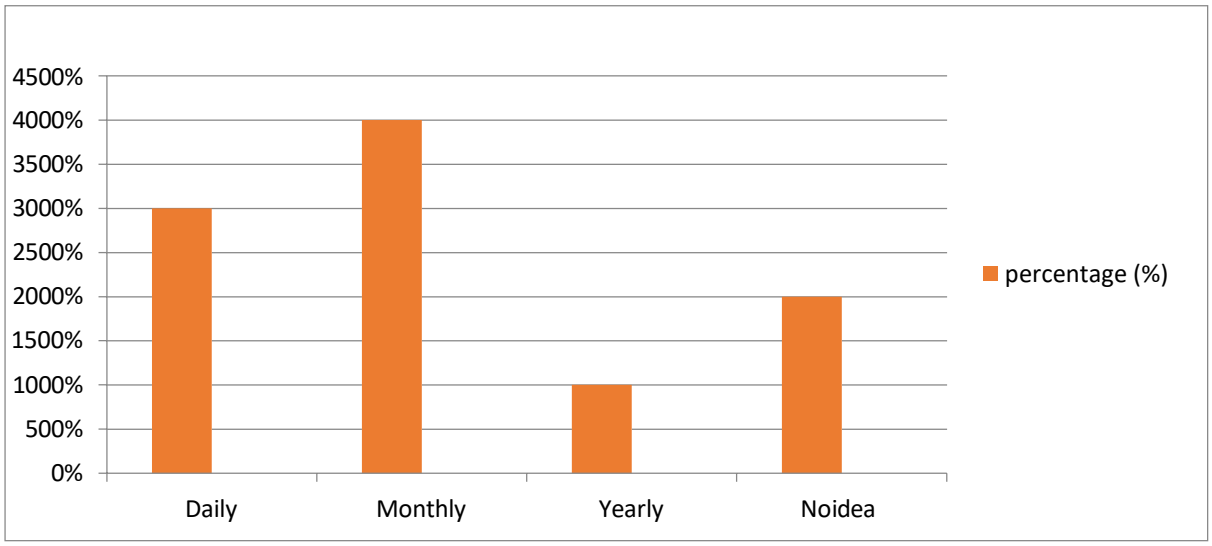
From figure 10, more than half of the respondents (56%) reported that they have little knowledge about the procedures as the reason as to why they have never done breast cancer screening whereas the least (6%) reported that they didn't when the procedures were conducted.

Table 7: Shows the distribution of respondents according to the breast cancer screening method they had ever done. (N=50)

Response	Frequency (f)	Percentage (%)
Breast self-examination	25	50
Clinical breast examination	24	48
Mammography	1	2
Total	50	100

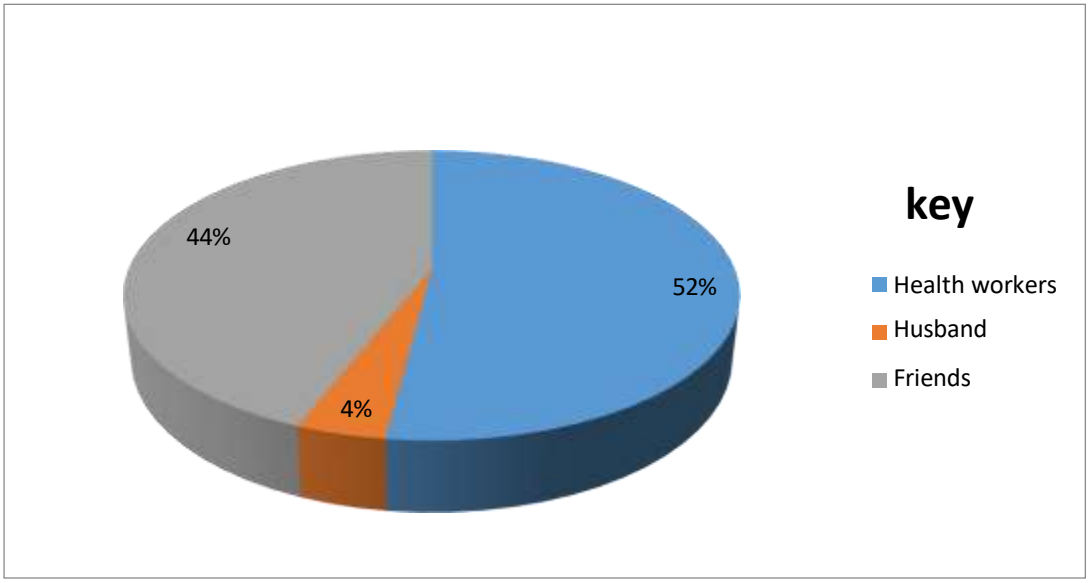
From table 7, half of the respondents (50%) reported breast self-examination as the breast cancer screening method they had ever done whereas the least (2%) reported mammography.

Figure 11: Shows the distribution of respondents according to how often they did breast self-examination. (N-50)



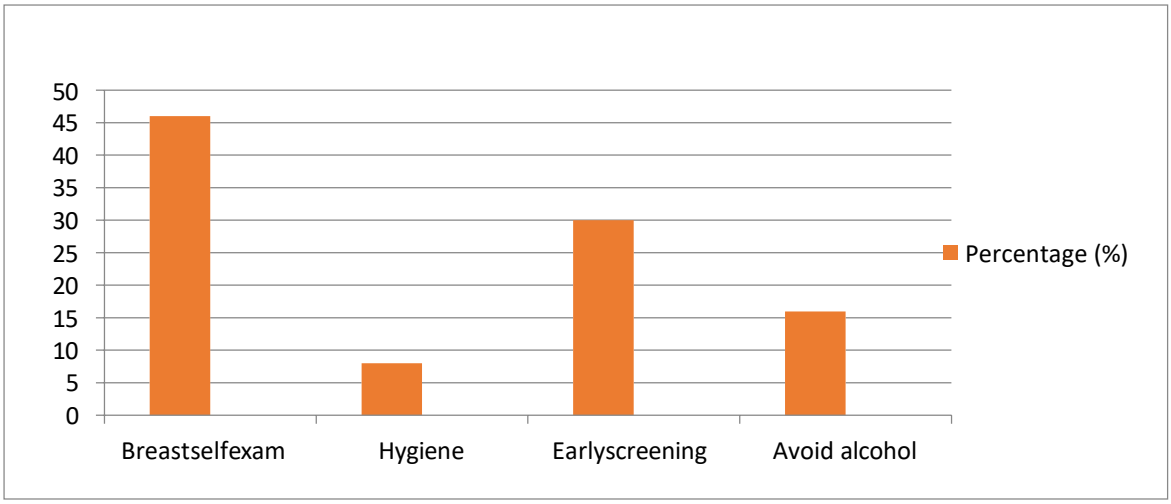
From figure 11, less than half of the respondents (40%) often do breast self-examination monthly while 10% of respondents do breast self-examination yearly.

Figure 12: Shows the distribution of respondents according to who recommended them to go for breast cancer screening.



From figure 12, most of the respondents (52%) were recommended by health workers whereas the least (4%) were recommended by their husbands.

Figure 13: Shows the distribution of respondents according to how they prevent themselves from contracting breast cancer. (N-50)



From figure 13, most of the respondents (46%) prevent themselves from contracting breast cancer through breast self-examination whereas the least (8%) through avoiding taking alcohol.

DISCUSSION

Knowledge towards utilization of breast cancer screening services among women aged 15-50 years.

From the study findings, the majority of the respondents (70%) had ever heard about breast cancer. This implies that women were aware of the existence of breast cancer. This is in line with a study that was conducted at Kirkuk University, Iraq by Nada et al (2020), where results showed that (69%) of the respondents had already heard about breast cancer and its screening whereas (31%) had never heard about it.

In regards to sources of information, most of the respondents (52%) obtained information about breast cancer from hospitals. This could be attributed to the health-seeking behaviors of women and perhaps they got a chance to obtain information about breast cancer from the health workers and the study results were inconsistent with a study which was conducted in a Tertiary Health Institution in Northern Nigeria by Oche et al (2017), results concerning the sources of information about cancer of the breast, revealed that 70%oftherespondents read it in textbooks.

The results from this study showed that more than half of the respondents (68%) didn't know the risk factors that predispose to breast cancer. This could be probably due to low levels of education since women with high levels of education tend to have better information-seeking behaviors than women with low education even though they could be informed of the existence of a certain disease.

Regarding the risk factors for breast cancer, most of the respondents (58%) reported increased age as the risk factor that predisposes to breast cancer. This indicates a significant relationship between the levels of women's educational backgrounds and awareness towards breast cancer

since breast cancer is not predisposed by age but by major risk factors such as alcoholism, obesity, smoking, multi-parity, early menarche, and late menopause and the study results were in disagreement with a study that was conducted by Manas et al (2014), results on risk factors that predispose to breast cancer showed that majority of the sample group (74.2%)were aware of that a positive family history of breast cancer was a risk factor for developing breast cancer, followed by increased age(61.8%), use of oral contraceptives (58.1%), use of hormone therapy(58.1%) and drinking alcohol (52.1%).

The current study findings showed that the majority of the respondents (80%) reported that they didn't know the three methods of breast cancer screening. This is a clear indication that women had low levels of knowledge regarding the three methods of breast cancer. The study results were not in line with a study conducted by Seife et al (2017), a total of 62.9% of participants were aware of all three methods of screening. Among those who knew the three methods of breast cancer screening, nearly all respondents (90%) reported breast self-examination as a method of breast cancer screening, they knew probably this could be attributed to convenience purposes and simplicity of the method.

The current study findings showed that half of the respondents (50%) reported breast pain as a symptom of breast cancer they knew. Therefore, this reveals that even though women were aware of the existence of breast cancer they couldn't identify the signs and symptoms of breast cancer. This is not in line with a study that was conducted by Sara et al (2016), results on the knowledge of respondents towards signs and symptoms of breast cancer showed that (54.6%) of females answered to breast lump.

From the study findings, less than half of the respondents (42%) reported morning as the best time for breast cancer screening. This implies that women had fairly good knowledge about screening even though very many couldn't reveal the signs and symptoms. This was in disagreement with a study that was conducted by Tsu-Yin et al (2017), where only 20% of the women knew the appropriate time intervals to conduct breast self-exams as monthly

Attitudes towards utilization of breast cancer screening services among women aged 15-50 years.

The study showed that the majority of the respondents (98%) of the respondents agreed that it is important to go for breast cancer screening. This implies that women were willing to go for

breast cancer screening services and the study results were in agreement with a study which was done by Mohammed et al (2014), where results on women's attitudes towards whether it is important to go for breast cancer screening80% believed that it is important to go for breast cancer screening

Furthermore, the study results show that more than half of the respondents (70%) agreed that early detection improves the treatment of breast cancer and this showed that women had positive attitudes towards breast cancer screening. The study results were in line with a study that was conducted in Saudi Arabia by Amira (2015), where Six hundred fifty- seven (85%) of women admitted breast cancer screening usefulness in early detection of breast cancer.

In regards to women's attitudes towards whether they were at risk of getting breast cancer, the majority of the respondents (78%) reported that they were not at risk of getting breast cancer and therefore this could be identified from the overall conclusion of the study. This is not in line with a study which was conducted by Selamawit (2016), among all of the respondents 115 (32.2%) believed that they are at risk of breast cancer.

The study findings also showed that most of the respondents (60%) were willing to go for breast cancer screening. This could probably be because the majority of the respondents agreed that it is important to go for breast cancer screening that's why they were willing to go for breast cancer screening and the study results were consistent with a study which was conducted by Nitin et al (2015); where results revealed that most urban (95.4%) and rural (96.4%) women were ready to visit a doctor as soon as they felt a mass in their breasts and they were willing to perform breast self-examination at home if taught and were ready to participate in breast cancer

screening programs.
Meanwhile, half of the respondents (50%) reported if it is free of charge as the condition warrants them to go for breast cancer screening. Therefore, with such conditions most of the women were unemployed and very few could go for breast screening since they could not afford to utilize the breast cancer screening services in other private health centers where screening is obtained at a fee. The study findings were in agreement with a study that was conducted by Sarah et al (2016), and 56% of respondents could go for breast cancer screening at all it is free of charge.

Practices towards utilization of breast cancer screening services among women aged 15-50 years.

From the study results, most of the respondents (70%) reported that they had never done breast self-examination / been screened for breast cancer. Therefore, this showed poor practices towards utilization of breast cancer screening among the women since very few of the women had ever done breast self-examination/been screened for breast cancer. This was in agreement with a study that was conducted in North Iran by Hassan et al (2016), most of the respondents (80.6%) had never gone for breast cancer screening
Regarding the reasons why the majority of the women had never done breast self-examination/ been screened for breast cancer, more than half of the respondents (56%) reported that they had little knowledge about the procedures of breast cancer screening and this showed a significant relationship towards their knowledge in regards to signs and symptoms and their practices towards breast cancer screening. The results of the study were not in line with a study that was conducted by Seif &Aziz (2017), where results on women's practices towards breast cancer screening revealed that (80%) had never been screened and this was attributed to either lack of confidence in their examination (60%) or fear from detecting a lump in the breast (40%).
In regards to those who had ever done breast self-examination/ been screened for breast cancer, half of the respondents (50%) reported breast self-examination as the breast cancer screening method they had ever done. This could be attributed to the fact that most of these women knew self-breast examination and with such knowledge about it they had to practice it which gives a clear indication that they have ever done self-breast examination and the findings of the study were almost in line with another study that was conducted in Government hospitals of Addis Ababa by Seifie et al (2018), their findings revealed that majority of the respondents, 75.1% practiced BSE followed by CBE and mammography which was 15% and 10%.
Surprisingly, less than half of the respondents (40%) often do breast self-examination monthly. this reveals that women were very reluctant to do breast self-examination since this examination is supposed to be done daily, especially in the morning hours. The study results were inconsistent with a study that was conducted by Karimollah & Sahar (2015), where only 8.4% had a regular self-examination once a year, and overall, only 12.1% of samples had experienced mammography at least once in their life.
According to the study findings, most of the respondents (52%) were recommended by health workers to go for breast cancer screening services. this indicates that health workers sensitive women to go for breast cancer screening services. The results of the current study were in agreement with a study that was conducted in the United Arab Emirates by Yusra et al (2014), findings showed that 58%ofwomen reported having a history of CBE or mammography in the past few years with 80% of women who reported having a history of CBE and/or 83% mammography indicated that these screening techniques were recommended by their healthcare provider.
Finally, the study results in regards to how women prevent themselves from contracting breast cancer, most of the women (46%) reported self-breast examination. This shows fairly good practices in terms of preventive measures even though the percentage rates of women were very low. The study results were not in line with Hwang et al (2017), who reported that women who seek treatment in the early stages of breast cancer have better chances of survival detection at an early stage; therefore, for better prevention of breast cancer, women must practice regular screening of breast cancer.

CONCLUSION.

Regarding the knowledge of the respondents towards breast cancer screening, the study reported that (70%) of the women had ever heard about breast cancer screening from health workers (52%) but they had inadequate knowledge of breast cancer screening as most of them (62%) didn't know the risk factors that predispose to breast cancer, among those who knew (58%) reported increased age, (80%) didn't know the three methods of breast cancer screening and breast pain was major sign and symptom of breast cancer reported by (50%) of the women.
The general attitudes towards utilization of breast cancer screening services among women were fairly good as (98%) agreed it is important to go for breast cancer screening, (70%) agreed that early detection improves the treatment of breast cancer, (60%) were willing to go for breast cancer screening.
Interestingly the overall practices towards utilization of breast cancer screening services among women were poor since (70%) had ever been screened for breast cancer, (50%) reported to have done breast self-examination, among those who had never been screened (56%) had little knowledge about the procedure as the reason as to why they had never done breast cancer screening and few of the women (46%) reported to have prevented themselves from contracting breast cancer through breast self-examination.

RECOMMENDATIONS.

The majority of the study population had inadequate knowledge of breast cancer and its screening, the Ministry of Education should possibly incorporate breast cancer education into the school curriculum or carry out specific school education programs similar to those that address

HIV that have previously been undertaken in the country. This would at least ensure that young women are aware of basic knowledge of breast cancer and can identify the signs and symptoms of breast cancer from an early age.
Even though granted funds for carrying out nationwide breast cancer campaigns may not be available/enough, therefore health workers at Adjumani Hospital should take advantage of creating awareness and empower the few people they have access to who always come to seek health services because it is guaranteed to make a difference. For that reason, creating awareness and opportunities for behavioral change would increase both the uptake of breast screening and delayed diagnosis.
The cancer organizations in Uganda (National Cancer Institute) and NGOs should also attempt to focus on encouraging communication about breast cancer within communities in different areas of the country. There appeared to be a lack of knowledge towards the procedures which was the main reason as to why most of the women had never practiced any breast screening method.

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LIST OFABBREVIATIONS/ACRONYMS.

ASR: Age Standardized Rate
BC: Breast Cancer
BSE: Breast Self-Examination
CBE: Clinical Breast Examination
KSHS: Kampala School of Health Sciences
MOH: Ministry of Health
OPD: Outpatient Department
UAHEB: Uganda Allied Health Examination Board
WHO: World Health Organization

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CONFLICT OF INTEREST.

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