

## **Level of Awareness on Breast Cancer and Practice of Breast Self-Examination among Market Women in Ido Community, Ido-Ekiti, Ekiti State, Nigeria**

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### **Authors' contributions**

*This work was carried out in collaboration between both authors. Author DMA designed the study, performed the statistical analysis, wrote the protocol, and wrote the first draft of the manuscript. Authors DMA and DDF managed the analyses of the study. Author DDF managed the literature searches. Both authors read and approved the final manuscript.*

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### **ABSTRACT**

**Aim:** The study assessed the level of awareness on breast cancer and practice of breast self-examination among market women in Ido community, Ido-Ekiti, Ekiti State, Nigeria.

**Study Design:** It made use of a descriptive research design.

**Place of Study:** The study was conducted at the King's market arena, Ido-Ekiti, Ekiti State.

**Methodology:** A sample size of hundred market women was used using a purposive sampling technique. Hundred questionnaires were printed and distributed. The instrument for data collection used for this study was a self-designed questionnaire consisting of closed and open-ended questions both in English and Yoruba languages. In cases of market women who are illiterate, the questions were read out to them. All questionnaires were collected at the spot to avoid loss and a hundred percent of distributed questionnaires were retrieved. Data collected were analyzed using descriptive statistics i.e. the use of tables and representation in percentages, frequency count, bar chart, pie chart and histogram, thereby summarizing the data into more understandable forms. This was followed by interpretation of data.

**Results:** It was revealed that majority (60%) of the market women claimed to be aware of breast cancer with medical personnel (51%) being the highest source of awareness with a recorded low

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history (32%) of breast cancer. Meanwhile, majority are not aware of the causes and symptoms of breast cancer but declared it can endangered the self image of women with majority (42%) not knowing their risk of developing breast cancer. Majority (70%) has heard about breast self-examination but only few (40%) practices it regularly.

**Conclusion:** Despite several studies done on breast cancer in Nigeria, there is still need for urgent optimization and remodeling of practices towards the prevention of breast cancer. There should be continuous awareness program on breast cancer nationwide. Breast self-examination should also be encouraged for early detection.

*Keywords: Awareness; breast cancer; breast self-examination; market women; practice.*

## 1. INTRODUCTION

### 1.1 Background

Breast cancer is the leading cause of cancer associated death among women worldwide. It has been reported that each year, over 1.15 million women are diagnosed with breast cancer all over the world and more than half million die from this disease [1]. Despite centuries of scientific inquiry and theories, it remains one of the dreaded diseases and has become an issue of public health concern. In medical history, its origin is found in ancient Egypt in the form of engraving, painting, and hieroglyphics (using pictorial symbols to represent individual as a word) on stones in the first century A.D. The great physician Leon ideas is credited with the first recorded operative treatment for breast cancer [2].

The most common disease that shortens the life of ladies, women and that threatens the happiness and peace of most homes is breast cancer. Not only in the industrialized countries but in country like India, the incidence of breast cancer is increasing steadily since the past two decades [3]. It has become the focus of scientific research because of its high incidence and mortality. According to Dr. Yeole, an epidemiologist at the Indian cancer society, every year, more than 80,000 new cases of cancer are detected worldwide and the disease claimed more than 35,000 lives every year, up to 18% since 1990 [4].

Breast cancer is a threat to ladies and women because it affects the perception of body image and sexuality to a degree greater than any other carcinomas. It does not only damage the tissues of the body, it scars the mind and depletes the monitoring funds of the household. It causes 376,000 deaths a year worldwide and about 900,000 women are diagnosed every year with the disease and mortality rates from breast

cancer have increased during the past 60 years in every country [3]. Breast cancer incidences have shown an upward trend in young women. Statistics indicate that breast cancer accounts for most cancer related death in women all over the world. It is said to be the leading cause of death in women aged 35 to 51 years [5].

In Nigeria, breast cancer has overtaken cervical cancer as the leading female malignancy. It is also the commonest cancer among women in South Africa. The prevalence rate in Sokoto in 2011 was 10.4 per 100 000 women [6]. In addition to being the commonest female cancer, there are other features that justify increasing efforts for breast cancer control in the developing countries like Nigeria. Annually many women die of the disease in Nigeria with majority presenting in the late stages when very little or nothing can be done to stop the disease progression. These includes the obvious rise in the incidences rates, the higher frequencies of younger ages and advanced stages of the time of presentation and likely prevalence of more aggressive tumor forms resulting in greater fatality rates [3].

The main reason for this escalating mortality is lack of awareness and late diagnosis of the disease [3]. All urban, rural, literate and illiterate women of all ages need more information on breast cancer as the knowledge levels are low. There is no easy solution to curtail the gigantic cancer system. However, some of the predisposing factors could be avoided through education which would improve the lifestyle of women and add greatly to curtail cancer [7].

### 1.2 Statement of Problem

Breast cancer is a universal issue that threatens lives of women regardless of progress in health sciences, rapid development & changes in diagnosis and treatment innovations, and the constant increase of social sensitivity towards the health risks. It is the most common type of

cancer seen in women worldwide; the second after lung cancer cases for men and women [8]. Since breast cancer is a global healthcare concern, several studies have been conducted worldwide to elicit women's knowledge and beliefs about breast cancer. Women have one in eight risk of having breast cancer during their lifetime and early detection through screening is the only way to reduce morbidity and mortality [9].

This study, therefore, will assess the level of awareness on breast cancer and practice of breast self-examination among market women in Ido-Ekiti, Ekiti State.

### 1.3 Research Questions

1. What is the level of awareness on breast cancer among market women in Ido-Ekiti, Ekiti State?
2. What is the perception of market women toward their risk of developing breast cancer?
3. What is the level of breast self-examination practices among market women in Ido-Ekiti, Ekiti State?

## 2. BRIEF LITERATURE REVIEW

Early breast cancer is usually symptomless but there are some symptoms that develop as the cancer advances. Breast lump or breast mass is the main symptom of breast cancer. Lump is usually painless, firm to hard and usually with irregular borders. Every lump is not cancerous; sometimes, some lumps or swelling in the breast tissue may be due to hormonal changes or benign (not harmful) in nature. Besides, there are some other symptoms that are important, like lump or mass in the armpit, a change in the size or shape of the breast, abnormal nipple discharges, etc [10].

Many of the known risk factors of breast cancer such as age, family, early menarche and late menopause are not modifiable. However, other factors associated with increased breast cancer risk include post-menopausal obesity, use of combined estrogen and progestin menopausal hormones, alcohol consumption, and physical inactivity. Some risk factors (early menarche, late menopause, obesity and hormone use) directly increase lifetime exposure of breast tissue to hormones whereas others such as higher socio-economic status are only correlates of reproductive behavior or other factor [11]. The desire to explain the cause of breast cancer has led to a wide range of proposed explanations that

target common explosives, including underwear brassiere and antiperspirants. At present, there is no occlusive scientific evidence that shows an association between these products and breast cancer. Likewise, no association has been found between breast implants and an increased risk of breast cancer. However, there is growing concern that women with implants may be at increased risk of a rare type of lymphoma. There are also persistent claims that women who have had an abortion are at an increased risk of developing breast cancer based on early studies that have since been deemed by the American College of Obstetricians and Gynecology to be methodologically flawed. Now, there exists a large body of solid scientific evidence that confirms there is no link between breast cancer and abortion (either spontaneous or induced) [12].

The aim of primary prevention is to eliminate or modify established risk factors for developing breast cancer. Some of these risk factors are genetically, environmental and behavioural. It is really impossible or difficult to alter or modify genetically and environmental risk factors like age, positive family history, race or ethnicity but there are some behavioural risk factors like using HRT (hormonal replacement therapy) and consumption of alcohol that can be altered. It is obvious that awareness about the breast cancer can have impact directly upon behavior leading to modify breast cancer risk [11].

Secondary prevention comprises the diagnosis and treatment of early cancer. It is proved that detection of breast cancer in an early stage has a potential value. Early detection could mean earlier diagnosis of symptomatic breast cancer, as well as the detection of occult breast cancer through the mammography screening in asymptomatic women [13].

## 3. METHODOLOGY

The study made use of a descriptive research design to assess the level of awareness on breast cancer and practice of breast self-examination among market women in Ido community of Ido-Ekiti, Ekiti State, Nigeria. The target population was women of both reproductive and menopausal age (15 years & above) who are into buying and selling of goods in Ido community, which were about five hundred. The sample size consisted of a hundred market women from the target population using a purposive sampling technique. The desired number of respondents was selected from the

two parts of the market: the upper part which is opposite the king's palace and the lower part which is directly beside the king's palace. The instrument used for this study was a self-designed questionnaire, both in English and Yoruba languages, consisting of structured closed and open-ended questions made up of sections to determine the socio-demographic profile of the respondents and their level of awareness on breast cancer and breast self-examination practices. In cases of market women who are illiterate, the questions were read out to them. The instrument used (questionnaire) was subjected to scrutiny to make sure there is face validity. The content of the instrument was compared with the objectives of the study, research questions and the literature to ensure content validity. A pre-test study on ten market women was done to determine the reliability. Ambiguities were corrected before the administration of the instrument. Hundred questionnaires were printed, distributed and collected at the spot to avoid loss and a hundred percent of distributed questionnaires were retrieved.

### 3.1 Data Analysis

Data collected were analyzed using descriptive statistics i.e. the use of tables and representation in percentages, frequency count, bar chart, pie chart and histogram, thereby summarizing the data into more understandable forms. These were followed by interpretation of the data.

### 3.2 Ethical Consideration

Approval was obtained from the head of the market in order to conduct the study. Permissions were obtained from each market woman that participated in the study after explaining to them the importance and objectives of the study. The right to refuse or withdraw from the survey was also explained to each separately before administering the questionnaire. The confidentiality of their responses was also explained to them.

## 4. RESULTS

### 4.1 Demographic Data of Respondents

This revealed the age (in years), marital status, religion, ethnicity and the level of education of market women.

**Table 1. Most of the respondents are adults and married. Majority are from Yoruba tribe with few practising African traditional religion. Many attained one level of formal education or the other**

Variables	Frequencies	Percentages (%)
<b>Age (in years)</b>		
15 – 19	3	3
20 – 24	18	18
25 – 29	10	10
30 – 34	20	20
35 – 39	25	25
40 – above	24	24
Total	100	100
<b>Marital status</b>		
Single	21	21
Married	39	39
Divorced	25	25
Widow	15	15
Total	100	100
<b>Religion</b>		
Christianity	48	48
Islam	45	45
African traditional religion	7	7
Total	100	100
<b>Level of education</b>		
No formal education	25	25
Primary education	22	22
Secondary education	33	33
Tertiary education	20	20
Total	100	100
<b>Ethnicity</b>		
Yoruba	79	79
Igbo	18	18
Hausa	3	3
Total	100	100

### 4.2 Awareness of Breast Cancer among Market Women

This revealed the level of awareness of market women regarding breast cancer and their source of awareness.

### 4.3 Perception of Market Women towards Their Risk of Developing Breast Cancer

This revealed how the risk of developing breast cancer by the market women is being perceived by them.

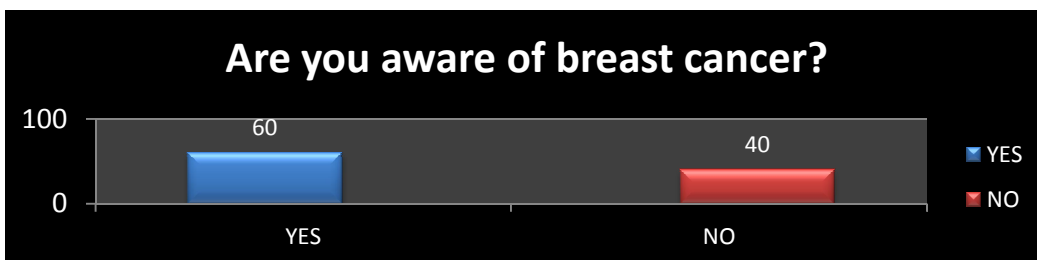


Fig. 1. Majority of the market women claimed to be aware of breast cancer

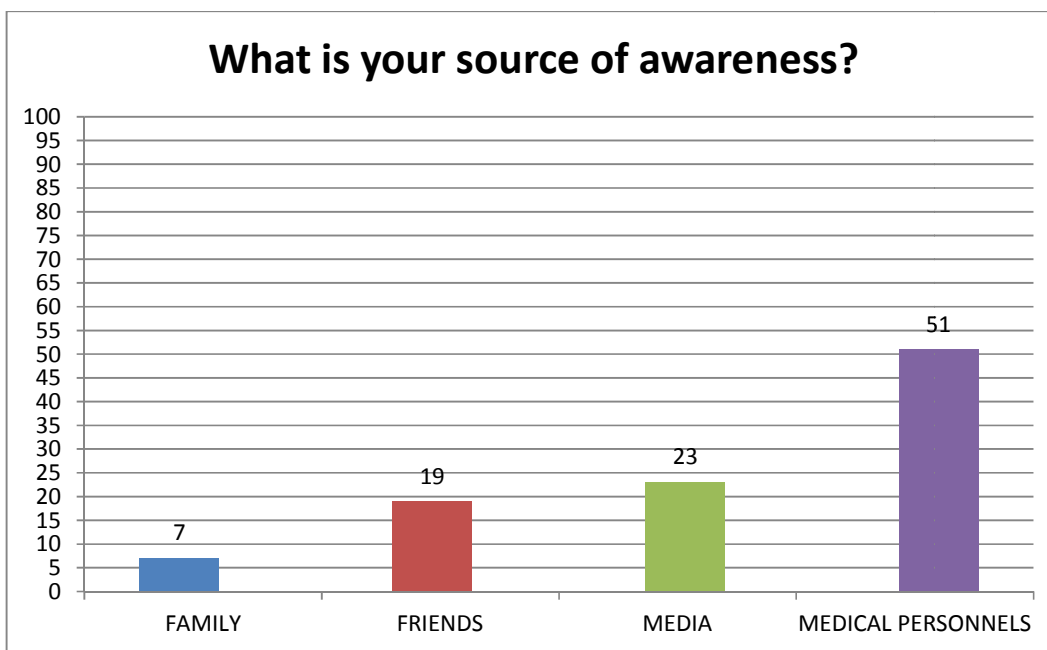


Fig. 2. Medical personnel were highly reported to be the source of awareness about breast cancer

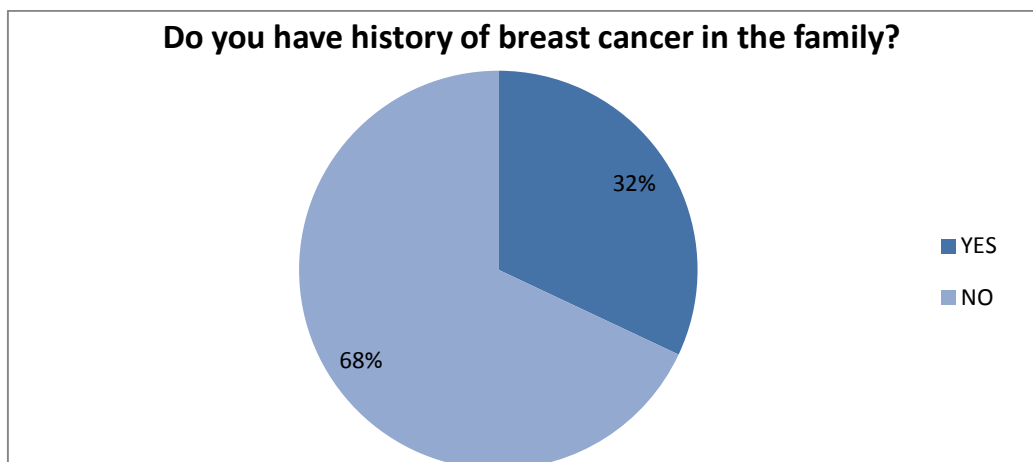


Fig. 3. Majority of the market women reported no history of breast cancer in the family

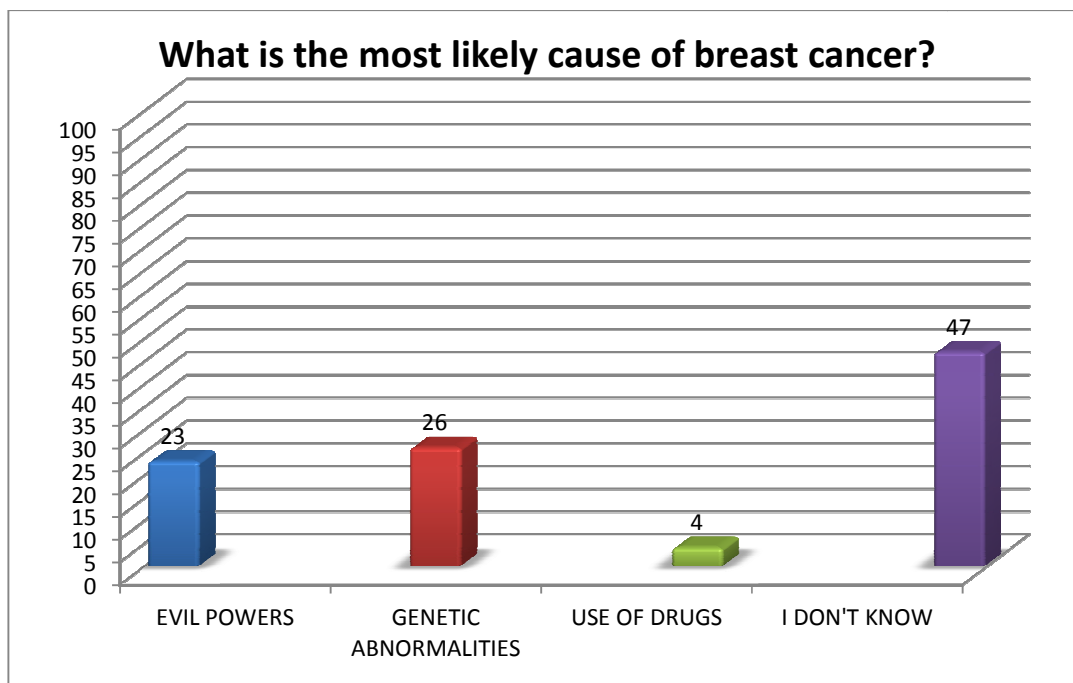


Fig. 4. Majority of the market women has no idea of the most likely cause of breast cancer

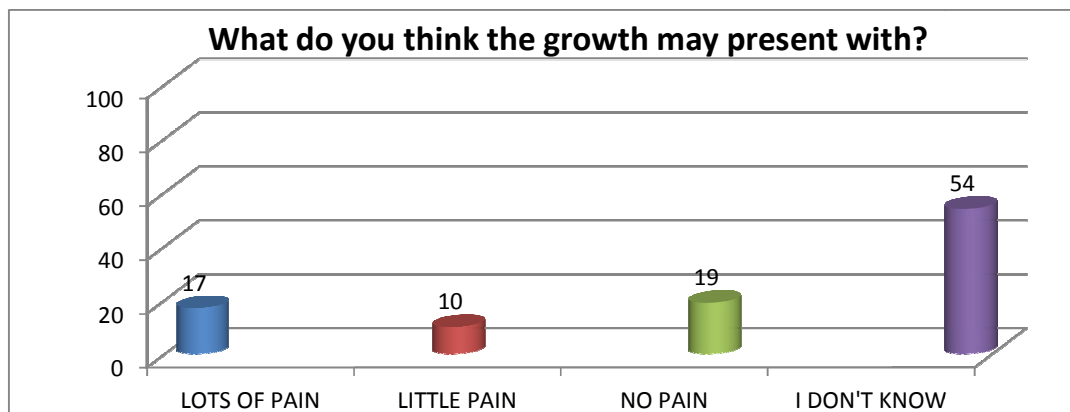


Fig. 5. Majority also does not know the presenting symptoms of breast cancer

Table 2. Majority of the market women doesn't know their risk of developing breast cancer

Are you at risk of developing breast cancer?	Frequency	Percentage (%)
Not at risk	18	18
Lower risk	21	21
Higher risk	19	19
I don't know	42	42
<b>Total</b>	<b>100</b>	<b>100</b>

#### 4.4 Level of Breast Self-examination Practices of Market Women

This revealed the awareness of market women on breast self-examination and the frequency of its practice.

#### 5. DISCUSSION

It was revealed that majority of the market women claimed to be aware of breast cancer with medical personnel being the highest source of awareness with a reported low history of

breast cancer. Meanwhile, majority are not aware of the causes and symptoms of breast cancer but declared it can endangered the self image of women. Majority knew the right action to take when breast cancer develops. Findings also revealed that majority of the market women don't know their risk of developing breast cancer. According to a study [14] conducted among one

thousand community-dwelling women from a semi-urban neighbourhood in Nigeria, the respondents had poor awareness on breast cancer. In another study [15] conducted on rural women of Ibadan, Nigeria, it was found that 73.7% of the respondents claimed that they do not know any warning signs about breast cancer.

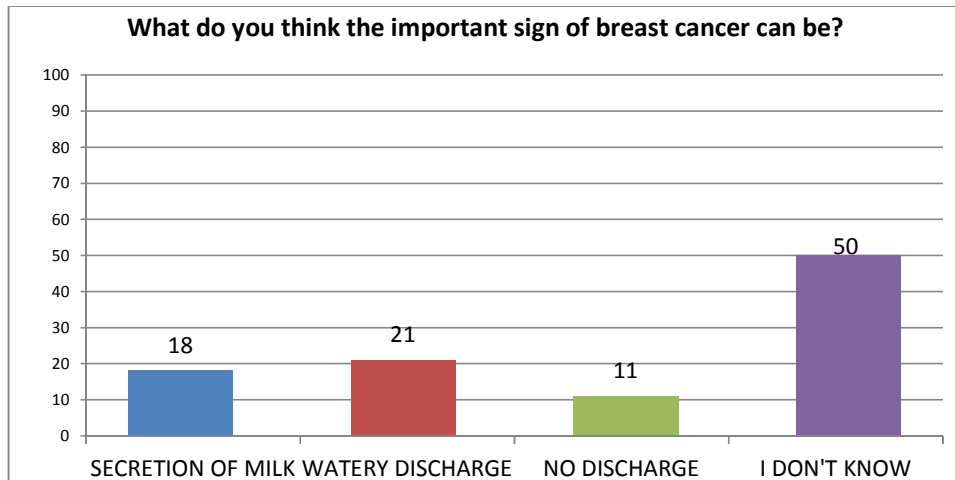


Fig. 6. Majority also does not know the important sign of breast cancer

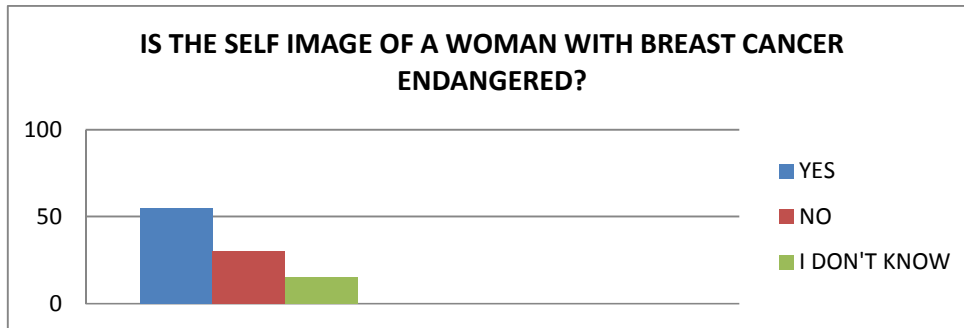


Fig. 7. Majority of the market women stated that the self image of a woman with breast cancer is endangered

Table 3. Majority believed breast cancer can be cured and claimed to have also heard about breast self-examination in preventing it, though, minority practice it regularly. Majority have never had a mammography done

Variable	Yes		No	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Is breast cancer curable?	70	70	30	30
Have you heard about breast self-examination?	70	70	30	30
Do you practice it regularly?	40	40	60	60
Have you ever had a mammography done?	24	24	76	76

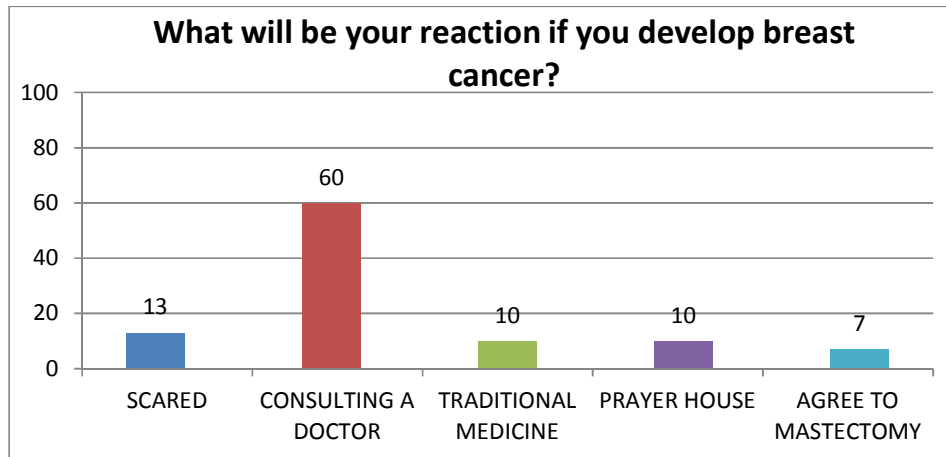


Fig. 8. Consulting a doctor is the major reaction of the market women to the development of breast cancer

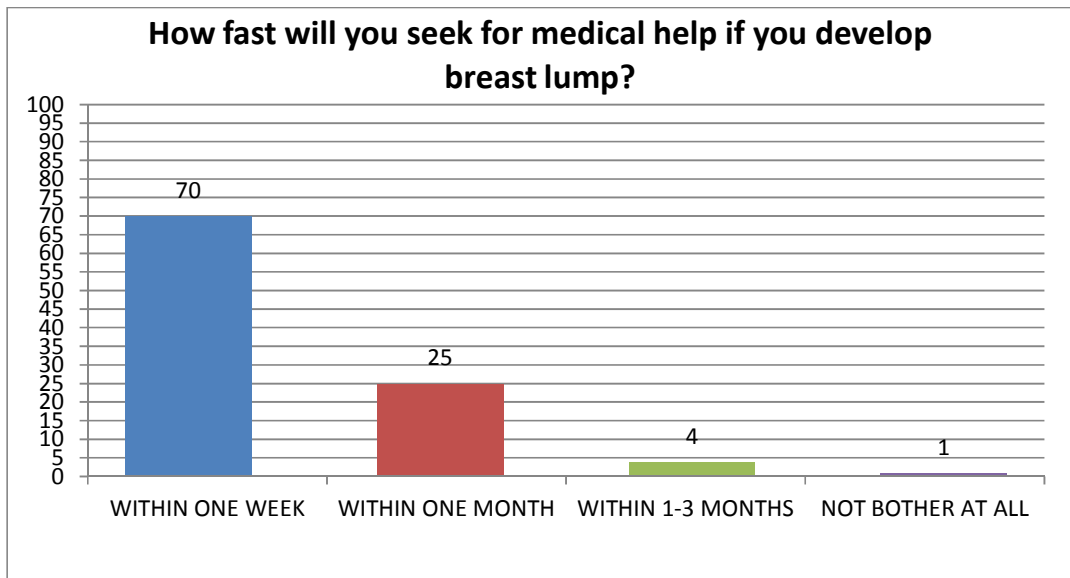


Fig. 9. Medical help will be sought for within one week of breast lump development

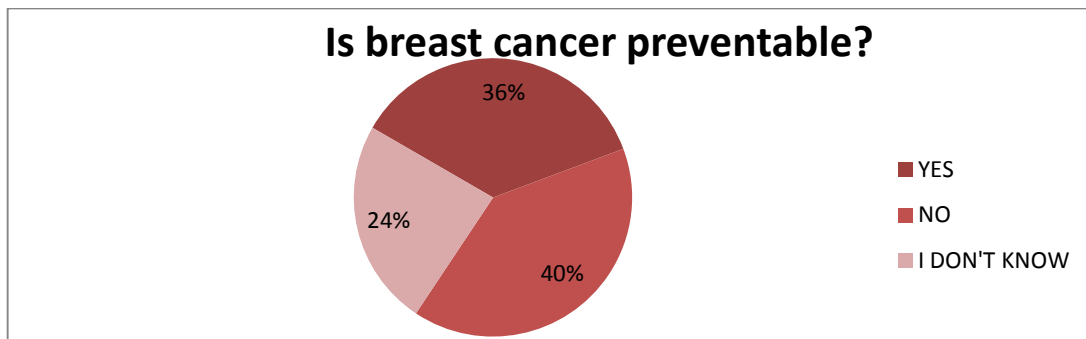
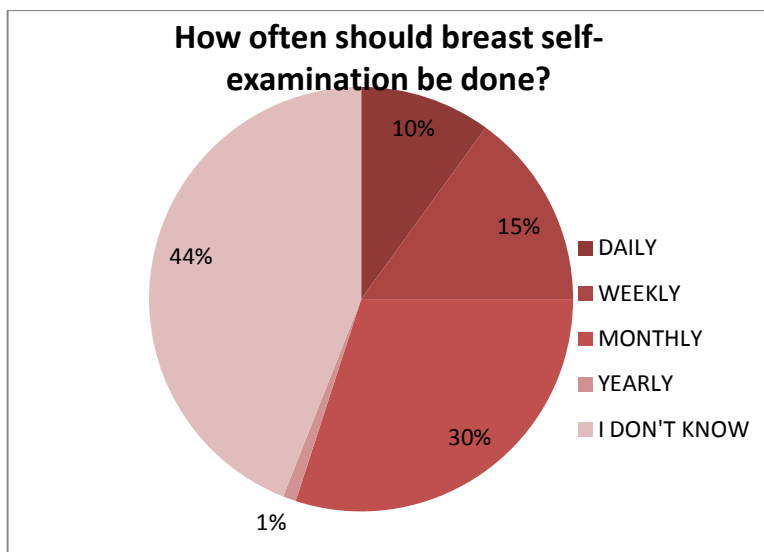
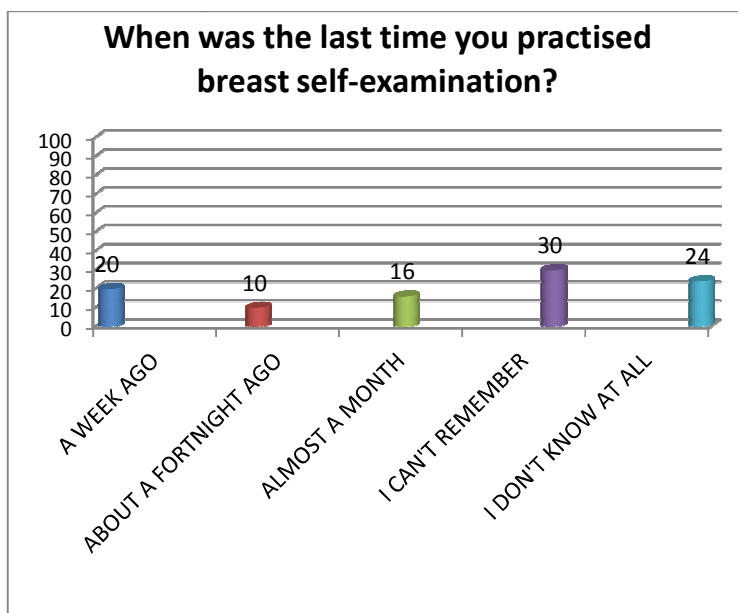


Fig. 10. Majority of the market women are of the view that breast cancer is not preventable





**Fig. 11. Majority of the market women do not know the frequency at which breast self-examination should be done**



**Fig. 12. Many do not know when last they practised breast self-examination**

It was also revealed that majority have heard about breast self-examination but only few practices it regularly with majority not knowing how to do it or how often it should be done. Also, only few have ever had a mammography done due to fear. Nevertheless, majority believed breast cancer is curable. In a cross sectional survey [16] conducted among nurses in general hospital in Lagos, majority (78.4%) of the respondents agreed that breast cancer is a curable disease if diagnosed and treated early.

Also in this study [14], only 34.9% practice breast self-examination and in another study [17], the most common reasons for not practicing breast self-examination were busyness, forgetfulness and seeing it as not necessary.

As shown in Fig. 2, majority of the respondents obtained their information from medical personnel. This reveals the need for continuous awareness program on the newspaper, magazine, radio and medical personnel should

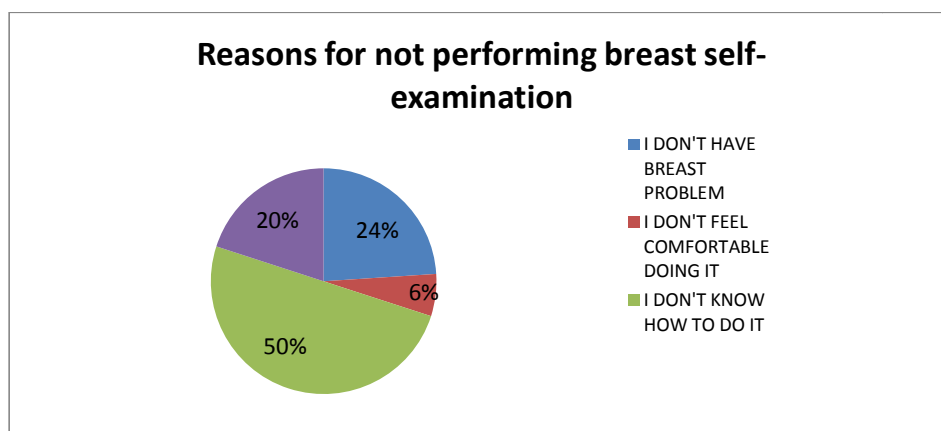


Fig. 13. Majority claimed not to know how to perform breast self-examination

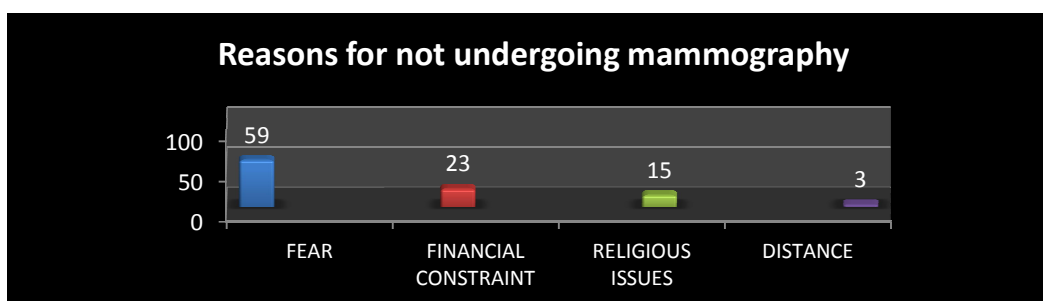


Fig. 14. Fear was mostly stated as the reason for not undergoing mammography

not relent in making more people in the hospital and in their environment to be aware of the causes, signs and symptoms, and the preventive practices of breast cancer. Majority of the respondents who do not know which measure to use in preventing breast cancer denotes that medical personnel should find a means of enlightening the public on the importance of breast cancer screening.

As revealed by this study, the market women has some level of awareness on breast cancer but the poor practice of breast self-examination, in which just 40% of the respondents practices it regularly calls for urgent intervention. Nursing practice has been undergoing many evolutions in the recent past and the expanded role of professional nurses emphasizes the activities which promote health and preventive destructive behaviours among the people. Nurses can motivate their clients to participate in the awareness campaigns, help them to get to know the newer screening procedure to lessen their anxiety and the promotion of health in the high risk by emphasizing on the importance of healthy

diet, regular exercise, prevention of long use of contraceptive pills, exclusive breastfeeding and avoiding radiation. Nurses should also organize periodic health education for market women to minimise their misconceptions about breast cancer.

## 6. CONCLUSION

The result of this study shows that the market women of Ido community, Ido-Ekiti have some level of awareness about breast cancer. However, the practice of breast self-examination is poor and calls for urgent intervention. Despite several studies done on breast cancer in Nigeria, there is still need for urgent optimization and remodeling of practices towards the prevention of breast cancer.

## CONSENT

The author declares that a written informed consent was obtained from the market women and other approved parties in the process of data collection.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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