KNOWLEDGE, ATTITUDE, AND PRACTICE OF BREAST SELF-EXAMINATION AMONG FEMALE LAW STUDENTS IN THE UNIVERSITY OF BENIN

BY

EMAKHU SHARON OSETOHANME

BMS1802524

THE DEPARTMENT OF NURSING SCIENCE

SCHOOL OF BASIC MEDICAL SCIENCES

UNIVERSITY OF BENIN, BENIN-CITY, EDO STATE.

APRIL, 2024

KNOWLEDGE, ATTITUDE, AND PRACTICE OF BREAST SELF-EXAMINATION AMONG FEMALE LAW STUDENTS IN THE UNIVERSITY OF BENIN

BY

EMAKHU SHARON OSETOHANME

BMS1802524

THE DEPARTMENT OF NURSING SCIENCE

SCHOOL OF BASIC MEDICAL SCIENCES

UNIVERSITY OF BENIN, BENIN-CITY, EDO STATE.

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS OF NURSING AND MIDWIFERY COUNCIL OF NIGERIA FOR THE AWARD OF "BACHELOR OF NURSING SCIENCE"

APRIL, 2024

DECLARATION

This is to declare that this research project titled KNOWLEDGE, ATTITUDE, AND PRACTICE OF BREAST SELF-EXAMINATION AMONG FEMALE LAW STUDENTS OF THE UNIVERSITY OF BENIN was carried out by EMAKHU SHARON OSETOHANME. It is solely the result of my work except where acknowledged as being derived from other person(s) or resources.

MATRICULATION NUMBER: BMS1802524

DEPARTMENT/SCHOOL: NURSING SCIENCE, SCHOOL OF BASIC MEDICAL SCIENCES, UNIVERSITY OF BENIN.

Signature: ……

Date: ……

CERTIFICATION

This is to certify that this research project by EMAKHU SHARON OSETOHANME with Matriculation Number BMS1802524 has been examined and approved for the award of Bachelor of Nursing Science in the Department of Nursing Science, School of Basic Medical Sciences, University of Benin, Benin City.

EMAKHU SHARON OSETOHANME _____

Student's name Sign & date

DR. (MRS.) C.A. ENUKU _____

Supervisor Sign & date

DR. (MRS.) R.E. ESEWE _____

Head of Department Sign & date

_____ _____

External Examiner

ABSTRACT

Breast cancer is the leading cause of cancer related death among women worldwide. The most effective means of decreasing mortality rate due to breast cancer is by early detection through breast self-examination. The main purpose of this study is to assess the knowledge, attitude, and practice of breast self-examination among female undergraduate law students of The University of Benin. A cross-sectional descriptive questionnaire based study was used and a convenience sampling technique was used to select two hundred and thirty seven female law students in The University of Benin. The data gathering tool was a modified and adapted questionnaire. Both descriptive and inferential statistics were applied to the data analysis. Simple frequency and the percentage was used to describe the data, while chi-square was used to test the hypotheses. The level of significance was set at $p<0.05$. The analysis was performed using the IBM Statistical Package for Social Sciences (SPSS) version 28.0 for windows. Result shows that It showed that 88(37.1%) had good knowledge of breast self-examination, 79(33.3%) poor knowledge and 70(29.5%) had fair knowledge. It showed that 154(65.0%) of the respondents had negative attitude toward breast self-examination while 83(35.0%) had positive attitude BSE. It showed that 94(39.7%) had poor level of practice, 115(48.5%) had fair practice level, while 28(11.8%) had good level of practice. The result showed that majority of respondents have a good knowledge of breast self-examination, negative attitude towards breast self-examination and a fair practice of breast self-examination. The study therefore recommends that there is the need to develop and implement targeted educational programs focusing on breast cancer awareness and the importance of breast self-examination, emphasizing the significance of early detection and preventive measures.

DEDICATION

This work is dedicated to GOD ALMIGHTY, for seeing me through these past years and my parents MR and MRS JOHN EMAKHU for always encouraging me and providing for every of my need.

ACKNOWLEDGEMENT

I wish to acknowledge and give my warmest appreciation to everyone who made my studies so far in the Department of Nursing Science, University of Benin a great success.

My special thanks goes to my Project Supervisor Dr. (Mrs.) C.A. Enuku Thank you so much Ma for your advice, patience, guidance, and supervision which has made this project work a smooth sailing. I am grateful Ma.

To all my lecturers in the Department of Nursing Science in particular and University of Benin in general, which may be too numerous to mention. However, I will not forget to recognize and appreciate Dr. (Mrs.) R. E. Esewe, Prof. F. U. Okafor, Dr. (Mrs.) J. A. Afemikhe, Dr. (Mrs.) C. E. Omorogbe, Dr. (Mrs.) J. N. Oko-ose, Rev. Sr. J. N. Chukwurah, Mrs N. Oyana, and Mrs C. Edo Osagie. You all are wonderful, I promise to put your lectures to proper use and I am eternally grateful to you all, thank you.

To my ever supportive and loving parents Mr & Mrs John Emakhu, brothers, uncles, and friends' thank you so much for making this journey a success.

Finally, to God Almighty who has kept me this far in good health, for His constant protection and provision upon my life, I have come back to say Thank you God. Thank you my Father.

TABLE OF CONTENTS

Title Page		i
Cover Page		ii
Declaration		iii
Certification		iv
Abstract		v
Dedication		vi
Acknowledgement		vii
Table of Contents		viii
List of Tables		xi
List of Figures		xii
CHAPTER ONE: INTRODUCTION		
1.1	Background of the Study	1
1.2	Statement of Problem	2
1.3	Purpose of the Study	3
1.4	Objectives of Study	3
1.5	Research Questions	4
1.6	Research Hypothesis	4
1.7	Significance of the Study	4
1.8	Scope of Study	5
1.9	Operational definition of Terms	5
CHAPTER TWO: LITERATURE REVIEW		
2.1	Conceptual Framework	6
2.1.1	Overview of Breast Self-Examination	6
2.1.2	Method of Breast Self-Examination	8

2.1.3 Seven P's of Breast Self-Examination 9

2.1.4 When to Perform Breast Self-Examination 10

2.2 Theoretical Review 10

2.2.1 The Health Belief Model 10

2.2.2 Application to the Study 12

2.3 Empirical Review 12

2.3.1 Knowledge of Breast Self-Examination 12

2.3.2 Practice of Breast Self-Examination 15

2.3.3 Factors Influencing the Practice of Breast Self-Examination 18

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction 21

3.2 Research Design 21

3.3 Research Setting 21

3.4 Target Population 22

3.5 Sample Size 22

3.6 Sampling Technique 23

3.7 Instruments for Data Collection 24

3.8 Exclusion Criteria 24

3.9 Validity of the Instrument 24

3.10 Reliability of the Instrument 24

3.11 Method of Data Collection 25

3.12 Method of Data Analysis 25

3.13 Ethical Consideration 25

CHAPTER FOUR: RESULTS

4.1 Results 27

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction 37

5.2 Discussion of Findings 37

5.3 Implication to Nursing Practice 39

5.4 Limitation of the Study 40

5.5 Conclusion 40

5.6 Summary 40

5.7 Recommendations 41

5.8 Suggestion for Further Studies 42

REFERENCE 43

APPENDICES 47

LIST OF TABLES

PAGES

Table 3.1: Distribution of Sample Size across all Levels 23

Table 4.1: Demographic Characteristics of Study Participants 27

Table 4.2: Knowledge towards Breast Self-Examination 28

Table 4.3: Showing the Attitude towards Breast Self-Examination 30

Table 4.4: Showing the Practice towards Breast Self-Examination 33

Table 4.5: Association between Knowledge and Attitude of Breast Self-Examination 35

Table 4.6: Association between Knowledge and the Practice of Breast Self-Examination 36

LIST OF FIGURES

PAGES

Figure 4.1: Showing the Level of Knowledge of Breast Self-Examination 29

Figure 4.2: Level of Attitude towards Breast Self-Examination 32

Figure 4.3: Showing the Level of Practice of Breast Self-Examination 35

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

In women, breast cancer is one of the most common malignancies and it is a major global health issue that is the leading cause of diseases and death among women (Ali et al., 2018). As at 2008 it was recorded that breast cancer made up about 10.9% of all cancers globally and as at 2019 it increased to about 23% (Johnson, 2019). In 2020, breast cancer was the most frequently diagnosed cancer in women globally recording about 2.3 million new cases and it was the fifth leading cause of death due to cancer recording about 685,000 (Adewale, 2023). As at 2019, 50% of breast cancer cases and 58% of death occurred in developing countries compared to the developed countries (Johnson, 2019). Overtime, there has been an increased burden of this disease regardless of the economic status of countries, but the prognosis and the rate of survival in developed countries is far better because of early detection and diagnosis of breast cancer at an early stage coupled with advanced treatment (Ali et al., 2018). In Nigeria breast cancer accounts for 22.7% of all new cancer cases among women (Fatiregun et al., 2021).

Breast self-examination (BSE) is seen as an essential screening tool that empowers women and increases their awareness about their breast tissues and also helps in detecting any deviation from the normal (Abo Al-Shiekh et al., 2021). BSE is also a way of promoting and increasing health awareness among women (Abo Al-Shiekh et al., 2021). Although there are other methods of breast examination such as clinical breast examination (CBE) and mammography which is a better method for breast cancer diagnosis which requires specialized equipment operated by experts but access to health care in most Sub Saharan African countries (SSA) which includes

Nigeria is a major challenge (Udoh et al., 2020). BSE is a non-invasive procedure that is very cheap, easy to perform, and requires just the sense of sight and touch. It involves the woman looking at her breast and palpating it by herself for lumps, observing the shape, texture, size, and contour. It is done once every month between the 7^{th} and 10^{th} day of the menstrual cycle (Johnson, 2019).

In Africa, studies have shown low levels of awareness and the knowledge and practice of BSE which is very important in the early detection of breast cancer in patients hence the reason why patients are presented late to the hospital when little to nothing can be done in terms of treatment. It has also been reported that the first time a patient with breast cancer reports to the hospital is when it is at the advanced stages of III & IV (Johnson, 2019).

In Nigeria, BSE is the cheapest and easiest method of breast examination for detecting early any breast abnormalities because there is poor access to hospitals for clinical breast examination, mammography, and even in the number of specialist/experts available (Udoh et al., 2020).

According to World Health Organization, they would not recommend BSE as a screening tool but rather a good way of increasing health awareness among women (Abo Al-Shiekh et al., 2021). In contrast, developing countries face difficulty in assessing other methods of breast examination hence the knowledge of BSE is very important in order for them to carry it out routinely and detect on time any abnormality.

Therefore the aim of this study is to assess the knowledge, attitude, and practice of female law students towards BSE.

1.2 Statement of Problem

There is a pattern of poor health seeking behavior and late presentation of people with breast cancer at the latter stage of the disease among people living in developing countries including Nigeria which has contributed to an increase in the number of morbidity and mortality related to breast cancer globally as a result of late detection. Globally in 2018, 24.2% out of the 8.6 million new cases of cancer recorded was accounted for breast cancer and of which 8.1% occurred in the Sub Saharan African countries. Breast cancer also accounted for almost 15% of the 4.2 million death due to cancer globally with Sub Saharan African countries accounting for 11.8% (Udoh et al., 2020). Also, 2.3 million new cases were recorded and 685,000 deaths in the year 2020 with West Africa having a mortality rate of 22.3 per 100,000 women (Adewale, 2023).

The first step to achieving a decrease in the number of morbidity and mortality due to late detection of breast cancer is to perform a studies measuring the current state of awareness, knowledge, attitude, and practice of the population towards BSE.

Keeping in view that law students are non-medical students and might not be armed with the right knowledge and information about the importance of BSE and how it is done. Hence, this study will be conducted to assess the knowledge, attitude, and practice of BSE among female law students in the faculty of law in the University of Benin.

1.3 Purpose of the Study

The main purpose of the study is to assess the knowledge, attitude, and practice of BSE among female law students in the University of Benin.

1.4 Objectives of Study

The objectives are to;

1. Assess the knowledge of BSE among female law students.
2. Examine the practice of BSE among female law students.
3. Identify the factors that influence the practice of BSE among female law students.

1.5 Research Questions

1. What is the knowledge of BSE among female law students?
2. What is the attitude of female law students towards BSE?
3. What is the level of practice of BSE among female law students?
4. What are the factors that influence the practice of BSE among female law students?

1.6 Research Hypothesis

Null Hypothesis

1. There is no significant relationship between the knowledge and practice of BSE among female law students.
2. There is no significant relationship between the attitude towards BSE and its practice among female law students.

1.7 Significance of Study.

BSE is a crucial resource for educating women about their health including breast and notice early any deviation from the normal. The result of this study may help breast cancer foundations, non-governmental organizations, and governmental bodies to improve awareness among the population by including students in their awareness programs and outreaches. The result will enable nurses and doctors to increase students' knowledge about BSE by educating students and creating campaign strategies on BSE and its importance. The assessment of the knowledge,

attitude, and practice of female students will increase health workers knowledge of students' behavior thereby directing health education and care. All this will in turn lead to students understanding the importance of BSE in the early detection of breast cancer so that treatment can commence early which in turn will lead to a reduction in the morbidity and mortality rate in Nigeria, Africa and the world at large.

1.8 Scope of Study

The study will be carried out among female students in the faculty of law in the University of Benin on the assessment of the knowledge, attitude, and practice of BSE.

1.9 Operational Definition of Terms

Breast: it's an organ of the human body that produces milk in women after child birth.

Self: it's an action done by a woman on herself by herself.

Examination: it's the assessment or test done by an individual to detect any abnormalities

Breast Self-Examination: this is when a woman assesses her breast by herself by looking and pressing against it to detect any abnormality.

Cancer: it's a disease that causes morbidity and mortality.

Breast cancer: it's the presence of abnormal growth in the breast.

Knowledge: it's the amount of information an individual has about BSE.

Practice: it's how often an individual carry out BSE.

Attitude: it's the behavior of women towards BSE.

CHAPTER TWO

LITERATURE REVIEW

This chapter will review the contribution of other authors on this study, journals, books, prints, and media related to this study.

2.1 Conceptual Framework

2.1.1 Overview of Breast Self-Examination

BSE is considered the cornerstone method of testing for breast cancer (Ahmad et al., 2022). It is a quick, simple, cheap, non-invasive and regular examination or screening method done to detect lumps or other changes in the breast tissue which involves the woman herself looking at and feeling any changes in her breast that lead to early detection of breast cancer and a better survival rate. BSE is a key strategy to early detection of breast cancer and subsequently important for effective treatment and cure of the disease (Dadzi & Adam, 2019). Lack of knowledge and practice of BSE have been said to be the cause of high morbidity and mortality associated with breast cancer among women and adolescent in particular (Ibitoye & Thupayegale-Tshwenegae, 2021). Johnson, (2019), also referred to BSE as a process which involves the woman looking at her breast and palpating it by herself for presence of lumps, observing the shape, texture, size, symmetry, contour, dimpling of the skin, redness, unusual pain, and discharge.

The American Cancer Society recommends commencing BSE during high school years on a monthly basis, as it is a serious phase of every adult woman's personal health regime (Abo Al-Shiekh et al., 2021). The majority of women with breast cancer are over 35 years of age; those

who discover the disease later in life, in their 20s or 30s, have poorer prognoses. (Koc et al., 2019). Breast cancer cannot be prevented, but its risk can be reduced and treated if detected at an early and more treatable stage (Koc et al., 2019).

Several studies carried out in several countries showed a fair and good knowledge about BSE among tertiary institution students; however, few of the students perform BSE regularly (Abo Al-Shiekh et al., 2021). A study by Tewabe and Mekuria which included 222 female students at Bahir Dar University in North West Ethiopia showed 80.3% were aware but the practicing was poor. Another study conducted at the University of Riyadh, Saudi Arabia, showed that, among the participants, 52.2% of the respondents had adequate knowledge towards BSE and only 18% of all participants perform it (Abo Al-Shiekh et al., 2021).

The techniques recognized for offering early finding of breast lumps includes BSE, physical inspection by a doctor, as well as mammography which will increase survival rates. Of all this method BSE helps women to be aware of how their breast looks and feels normally and report any changes to the health provider immediately (Koc et al., 2019). Routine BSE is a cheap, simple test that is available to women. It's also a private, convenient, non-invasive examining technique that doesn't require any unique equipment and has been associated with a reduction in primary size tumor and, consequently, more conservative treatment (Koc et al., 2019).

However, some organizations such as American Cancer Society and World Health Organization do not approve BSE as an effective screening tool for the diagnosis of breast cancer (Ahmad et al., 2022). But in developing countries and resource-poor settings BSE is relevant in the early detection of breast cancer where clinical breast examination and mammography may not be feasible (Ossai et al., 2019).

There are reasons why women fail to perform BSE and this includes; lack of knowledge on how to carry it out, time constraints, the fear of not knowing how to apply the proper method and the anxiety of finding a bulk (Koc et al., 2019). However, people with close relatives diagnosed with breast cancer practice BSE in order to detect breast cancer early (Ossai, et al., 2019). Health education and encouragement from health professionals can increase the level of awareness and practice among women (Husna et al., 2019).

2.1.2 Method of Breast Self-Examination

A variety of methods and patterns are used in BSE. BSE involves visualizing and palpating the breast by oneself for lumps, shape, texture, contour, and size (Johnson, 2019). According to Asmare et al., 2022, BSE involves the woman looking out for distortions, discharges, or swellings in her breast with the sole purpose of detecting early and early initiation of treatment.

According to Mayo Clinic, start BSE by sitting or standing shirtless and braless in front of a mirror with the hands by the side. Inspect the breast visually by;

- Facing the mirror, look for puckering, dimpling, or changes in size, shape or symmetry.
- Check for inverted nipples.
- Inspect breast with hands on hips.
- Inspect breasts with hands above the head and the palms pressing against each other.
- Lift breasts to see if ridges are symmetrical at the bottom

Manual palpation involves lying down on a flat surface or standing in the shower. Using the pads of the finger and not the tip of the fingers, press against the breast following a particular direction. Using the clock-wise motion you press round the breast then to the nipple or palpate each

quadrant of the breast and then the armpit. Apply different pressure levels while palpating the breast.

2.1.3 Seven P's of breast self-examination

Various acronyms are used as teaching devices to help women remember the different steps in BSE. American Cancer Society (2017) has identified the seven P's of BSE as one of the acronyms, which are given the same initials: Positions, Perimeters, Palpation, Pressure, Pattern, Practice, and planning how to proceed if there is an alteration in discovered within the tissue of the breasts.

- **Position**: Examine the breast visually and feel them while placing your arms in different positions in the mirror. Next, conduct the inspection while lying down, initially placing a pillow beneath one shoulder, and then resting flat.
- **Perimeter**: Look at the breast as a whole, nipple included, the axillary tail that goes into the armpit, and any lymph nodes that are close by.
- **Palpation:** Using your finger pads, gently touch your breasts without lifting your fingertips.
- **Pressure:** Apply little pressure to your palpation at first, then moderate pressure, and eventually forceful pressure.
- **Pattern:** Every woman should utilize the examination pattern that feels best for her, as there are various designs to choose from. The fingers are moved up and down over the breast in the vertical strip pattern. Beginning at the nipple, the pie-wedge pattern extends outward. The finger is moved in a circular manner, outward from the nipples, in concentric circles. The axilla should be palpated too.

- **Practice:** Practice BSE and get used to feeling the breast structure so you can detect any alterations. A medical professional can offer advice on the approach used.
- **Plan:** Understand the things to do in case your breast tissue changes. Understand the breast cancer risk in your family. Plan to see the health practitioner or a doctor and have a mammography done.

2.1.4 When to perform breast self-examination

According to Johnson, 2019 it is done once every month between the 7th and 10th day of the menstrual cycle. For pre-menopausal women, BSE should be done at the same stage of their period every month to minimize changes due to the menstrual cycle. The recommended time is immediately after the end of the last period when the breasts are less likely to be swollen and tender. For older menopausal women, it should be done once a month, probably on the first or last day of the month. However, annual examination by a doctor together with BSE should be combined for better chances of detection and diagnosis.

2.2 Theoretical Review

2.2.1 The Health Belief Model

The health belief model was developed by Becker and modified by Irwin M. Rosenstock (Fatemeh et al., 2018). It was formulated originally to explain (preventive) health behavior. As defined by Cobb and Kasl, health behavior is “any activity undertaken by a person who believes himself to be healthy for the purpose of preventing disease or detecting disease in an asymptomatic stage.” This is in contrast to with health illness behavior, defined as “any activity undertaken by a person who feels ill, for the purpose of defining the state of his health and of discovering a suitable remedy,” and sick-role behavior, “the activity undertaken by those who

consider themselves ill for the purpose of getting well" (Rosenstock, 1974). It is beneficial in exploring the different factors influencing women's behaviors towards BSE (Fatemeh et al., 2018). The health belief model has six constructs;

Perceived Severity: It deals with an individual's belief about the seriousness or severity of a disease. While the perception is often based on knowledge or medical information, it can also come from beliefs of an individual about the difficulties a disease will create or its effect on his/her life in general.

Perceived Susceptibility: Personal risk or susceptibility is one of the most powerful perception in promoting people to adopt healthier behavior. The greater the perceived susceptibility, the greater the likelihood of engaging in behavior to decrease the risk (De Wit et al., 2005).

Perceived Benefit: Indicates a person's perception towards the positive health consequences of performing a specific health behavior. Individuals tend to adopt healthier behaviors when they believe the behavior will decrease their chances of developing a disease.

Perceived Barrier: Janz & Becker (1984) stated this as an individual's evaluation of the obstacles in the way of him/her adopting a new behavior. Perceived barriers are the most significant in determining behavioral changes.

Modifying Variables: The four major components of perceptions are modified by other variables such as culture, educational level, past experiences, skill and motivation. These are individual's characteristics that influence personal changes.

Cues to Action: According to Graham (2002), cues to actions are events, people, or things that move people to change their behaviors.

Self-Efficacy: Refers to a person's confidence in his/her ability to adopt a given health behavior (Didarloo et al., 2017).

2.2.2 Application to the study

Perceived severity: Female Law student who perceives breast cancer as a serious disease is more likely to perform BSE.

Perceived susceptibility: Female Law student who perceive that she is at risk and susceptible to breast cancer is more likely to perform BSE.

Perceived benefit: Students who believe that BSE is beneficial as a tool in early detection of breast cancer is more likely to practice it.

Perceived barriers: Students who perceives few barriers (such as forgetfulness, lack of time, lack of how to carry BSE, fear of detecting abnormalities) are more likely to perform it.

Modifying variables: Age, educational level, ethnicity.

Cues to action: Student's believe that BSE reduces breast cancer mortality and morbidity and also improves the chances of survival.

Self efficacy: Student's believe in their ability to perform BSE increases the practice of BSE.

2.3 Empirical Review

2.3.1 Knowledge of Breast Self-Examination

In a study carried out in Gondar town, Ethopia it had a total of 571 women, about 541 participants were involved in the study with a response rate of 94.7%. Of these, 56% had adequate knowledge (Asmare et al., 2022). In a similar study done by Amegbedzi et al., (2022)

74% of 506 respondents had a good knowledge of BSE. In a review of past study on BSE it was gathered that 22.7% in Vietnam, 63.8% in Turkey, 41.5% in Libya, 34% in Sudan, 78% in Cameroon, 25.6% in Addis Ababa, 34.2% in Arba Minch, 43.1% in Jima, and 55.5% in Adwa town had an adequate knowledge about BSE (Asmare et al., 2022).

Ossai et al., (2019) in his study on the predictors of practice of BSE among female undergraduates of Ebonyi State University, Abakaliki, Nigeria which revealed that majority of the respondents (76.4%) were aware of BSE and the major source of information on BSE for the respondents was health workers (37.0%) closely followed by television (27.9%). 81.1% of the respondents were also aware of the age at which BSE should begin. A large percentage of the respondents had good knowledge of what BSE is all about and the major source of information is from health workers which could be attributed to their educational status. In a similar study conducted among female secondary school students in Osogbo, Western Nigeria out of a total of 400 respondents, 235 (58.8%) respondents stated that they've heard of BSE. 15 (3.8%) respondents said that the procedure was time wasting while 82 (20.5%) respondents said the procedure was stressful. 199 (49.8%) strongly disagree that performing BSE may expose them to breast cancer (Usman et al., 2020).

Another study assessed the impact of education on knowledge, attitude and practice of BSE among adolescent girls at Fiwasaye Girls Grammar School in Akure, Ondo State, Nigeria, a total of 280 respondents took part in the study. Over 60% knew about BSE before education, and it increased to 91.7% after training. The pre-assessment attitude towards and practice of BSE were also poor but improved after training (Ibitoye et al., 2021).

A study on the knowledge and use of BSE and mammogram among women of reproductive age in Oyo State Secretariat, Ibadan, Oyo State, Nigeria revealed that 82.2% of the respondents had

adequate knowledge of BSE and mammogram but there was relatively lower level of utilization of these screening method (Ohaeri & Aderigbigbe, 2019).

A study which was conducted among 300 females attending outpatient clinic in Babcock University Teaching Hospital, Ilishan Remo, Ogun State, Nigeria revealed the level of knowledge about BSE practice. 101 (33.7%) respondents had a low level of knowledge on the practice, 117 (39.0%) respondents had moderate level of knowledge, and 82 (27.3%) respondents had high level of knowledge (Olajide et al., 2021).

According to a study conducted by Akpo et al., (2021) among female secondary students in Delta State, Nigeria. Out of 216 consenting female students 93 (43.1%) have heard of BSE. Thirty (13.9%) heard about it from school, thirty two (14.8%) from mom, and thirty-four (15.7%) from the internet. Only a small percentage of respondents—83, or 38.4%—knew what BSE was, and 47, or 21.8%, said they had received prior BSE training. Of the respondents, 92 (42.6%) did not know at what age BSE should start, and 182 (84.2%) were not aware that BSE is conducted on a monthly basis. Of the respondents, just 4 (17.1%) recognized that BSE could be done while standing in front of a mirror, and only 35 (16.4%) knew that it could be done while laying flat.

Nearly three-fourths of the learners (73.3%) were aware about BSE. However, just 50% of these learners had more knowledge regarding BSE. While a large majority (83.1%) of the students who were aware of BSE expressed the opinion that its purpose was the early detection of breast cancer, only half (55.1%) said that all menstruating women should practice BSE. When asked about the frequency with which they themselves practiced BSE, slightly over half (52.5%) said monthly. Half the students (50.9%) did not know when BSE should be performed, and 55.9% said that a physician should be consulted whenever a thickening or swelling was found during BSE. Even though the students were asked how BSE is performed, they either failed to fill in the

blank or answered that they did not know (Koc et al., 2019). In a similar study conducted by Dagne et al., (2019) out of 421 respondents majority of the respondents 70.3% (296) scored more than half of the knowledge question asked and 29.7% (125) scored less than half of the knowledge questions asked.

A research carried out in Modjo Public Health Facilities, Southwest Ethiopia among women attending family planning services. Out of 420 respondents 296 (70.5%) respondents have heard about BSE and 124 (29.5%) respondents have not heard about BSE. Their major source of information was mass media 178 (60.1%), 95 (32.1%) respondents heard from health professionals, and 23 (7.8%) respondents heard from friends/relatives/neighbors (Urga et al., 2021).

2.3.2 Practice of Breast Self-Examination

In a study conducted in Ghana's Volta region, in the district of Akatsi South on the topic assessment of knowledge and practice of BSE revealed that out of 385 women who partook in the study only 94 (37.6%) practiced BSE and over 50% of the respondents did not know how to carry out BSE (Dadzi, & Adam, 2019). Another study carried out in Ethiopia had 86 (20.5%) of the participant who had practiced BSE. Of this number 11 (12.8%) practiced regularly. The major reason for performing BSE was for early detection and treatment of breast cancer which is about 39 (45.3%) of the respondent and the major reason why others do not practice BSE was because of lack of knowledge on how to carry it out (Urga et al., 2021).

A study carried out in Turkey had a total of 161 respondents. Out of 73.3% of the respondents that have heard of BSE when asked about the frequency with which they themselves practiced, slightly above half (52.5%) practiced and 33.3% said they did so on a regular basis. 50.9% had

no idea of when the practice should be carried out. Of the students, 48.5% claimed they didn't know how to perform BSE, and 34.7% said they didn't need to because they didn't have any problems pertaining to their breasts. Only 13.3% of respondents said they frequently performed a BSE each month, compared to 55.5% who said they did it whenever they had it in mind (Koc et al., 2019).

The study BSE; knowledge and practice among female secondary school students in Delta State, Nigeria revealed 77% of those who took part practiced BSE wrongly. Only 27 (12.5%) of those who took part had ever done BSE, compared to 189 (87.5%) individuals who had never done so. 12 of the participants (5.6%) did breast self-examination (BSE) at any time, whereas 7 of the participants (3.2%) did so once a month. Moreover, just 8 (2.8%) of them carried out BSE following their menstrual flow (Akpo et al., 2021). In a similar research conducted in Gusau, Zamfara State, Nigeria had 58.22% respondents who do not practice BSE (Usman et al., 2021). Another study by Ibitoye et al., (2021) revealed the pre-assessment attitude towards practicing BSE was poor.

A study on the relationship between knowledge and practice of BSE among female workers in Sokoto, Nigeria by Muhammad & Labaran, (2018) had 400 educated participant. Majority (89.8%) of the participants had information about the practice of BSE and majority 46.6% of the participants received their information from health workers and only 2.0% received information from internet. Moreover, approximately 65.3% of the participant practiced BSE. Meanwhile among 65.3% of the participant that practiced BSE, only 52.7% practiced BSE monthly which represented only 34.4% of the total participants. The percentage of the participants that did not practice BSE gave reasons for not performing BSE as follows; they had no idea on how to

perform it, had never heard any information about it, had no time to perform it and finally they thought it was unnecessary to perform BSE.

In a similar study carried out Abakaliki, Nigeria by Ossai et al., (2019) revealed that majority, 63.6% of the respondents have ever done BSE. Of this proportion, 25% of the respondents performed BSE every month. A minor proportion, 24.6% respondents have had their breast examined by health worker while 10.3% have noticed abnormalities in their breasts. Majority, 67.2% respondent discussed the importance of BSE with their friends.

From a total of 571 women, about 541 participants were involved in a study with a response rate of 94.7%. 45.8% performed BSE respectively (Asmare et al., 2022). In another study the total sample study was 421 respondents, 32.5% of respondents had ever practiced BSE and only 64 (15.2%) of them practiced BSE regularly or monthly. The other 73 (17.3%) of participants had practiced BSE irregularly. Among the total respondents, 167 (39.7%) of them had self- efficacy in practicing BSE (Dagne et al., 2019).

According to a research, 56% of those who participated practiced BSE well. Of the people who participated, 79.4% had been practicing BSE at the time of the research, and two-thirds (73.1%) had ever done so. At the time of the study, less than fifty percent of those who participated (46.4%) who practice BSE now stated that the preceding month was the last time they had done so. Nonetheless, a large proportion of those who participated (65.0%) stated that they practiced BSE on a monthly basis. Furthermore, 32.1% of those who participated stated that they began BSE more than 20 years ago. Nearly half of those who participated (45.2%) said they have ever used BSE. Regarding the manual method, majority of those who participated (78.5%) said they liked pressing on the breast using the inside face of their middle fingers, while a small percentage (12.1%) said they preferred to press on their nipples to release secretions. During

BSE, the majority of those who participated (89.8%) said they were watching for a breast lump (Amegbedzi et al., 2022).

2.3.3 Factors Influencing the Practice of Breast Self-Examination

A study carried out in Ghana revealed that the elements that have a major impact on the practice of BSE were educational background, BSE awareness, and BSE judgment. Participants in 300L had 60.5% participants who practiced it and participants in 100L had 22.5% participants who practiced it. Participants with good knowledge of BSE had 51.1% participants who practiced it and participants with poor knowledge of BSE had 10.6% participants who practiced BSE. Also participants with good perceptions towards BSE had 46.2% participants who practiced it while participants with a poor perception of BSE had 7.1% who practiced it. The study also researched on students that studied health courses and non-health courses and it discovered that 59.3% of participants studying health courses practiced BSE and 14.1% of participants studying non-health courses practiced it (Amegbedzi et al., 2022).

In a research conducted in Ebonyi, Nigeria revealed that the respondents who had good knowledge of BSE and performed it were 80.9% and respondents with poor knowledge of BSE and performed it were 41.6%. Therefore respondents who had a good knowledge of BSE were six times more likely to have ever-practiced BSE compared to those with poor knowledge. Moreover, the respondents who have relatives diagnosed with breast cancer had 85.7% who performed BSE and respondents who do not have relatives diagnosed with breast cancer had 62.2% performed BSE. Therefore respondents with relatives diagnosed with breast cancer were

four times more likely to perform BSE compared with those without relatives with breast cancer (Ossai et al., 2019)

In another study conducted in Delta State, Nigeria gather that although the practice was subpar, the respondents provided justifications for using BSE. Out of 216 respondents 18 stated they were cognizant of the advantages, 22 stated they wanted to prevent obtaining a breast cancer diagnosis, 19 stated they met someone who had the disease, 19 stated they desired not to have their breasts cut, and 20 stated they had relatives with a diagnosis of the disease. The most often cited excuses for not participating in BSE given by 186 respondents were because 'I do not know how to do it', 14 claimed they had absolutely no information about BSE, 32 were forgetful, and 21 expressed a desire to avoid receiving a breast cancer diagnosis. Other justifications offered for not implementing BSE practice included; 'I am not at risk of breast cancer or breast problems, I am not up to the age of doing BSE, I do not feel comfortable touching my breast and it is time consuming' (Akpo et al., 2021).

Factors affecting knowledge of BSE were reported from different countries. These are age, marital status, level of education, information of BSE, medical background, access to internet, source of information, and level of income. However, only educational levels and medical background affected attitude towards BSE. Practice factors are almost similar to that of knowledge other than health education on breast cancer, knowing BSE techniques, occupation, and family history of breast cancer were related to women's knowledge, attitude and practice towards BSE (Asmare et al., 2021).

Factors found to be associated with BSE practice using bivariate analysis were marital status, husband's occupation, age of female workers, family income, year of experience, profession, knowledge of the respondents, attitude of the respondents, family history of breast cancer,

personal history of breast cancer, barriers of BSE, self-efficacy in practicing it and benefits of BSE. It was found that knowledge of BSE, family history of breast cancer, self-efficacy in practicing BSE, profession, and attitude towards BSE had statistically significant association with BSE practice (Dagne et al.,2019).

According to Koc et al., (2019) Numerous studies have revealed that although women have been made conscious of BSE, there are still obstacles that prevent them from performing it routinely or at all, including forgetfulness, lack of health awareness, fear of receiving confirmation of cancer, and are deficient of knowledge. Although 50% of the participants acknowledged carrying out BSE, just 33.3% said they did so on a routine basis. Of the students, 48.5% said they didn't practice BSE because they didn't know how to do it, and 34.7% said it wasn't essential because they didn't have any breast-related complaints. The percentage of BSE participants is not as high as it should be.

Another study revealed that age, employment status, educational status, family history of breast cancer, personal history of breast cancer, knowledge, attitude were factors that affected practice of BSE. People with positive attitude tend to practice BSE more often than people with negative attitude, people with good knowledge practiced more than people with poor knowledge. People who have family history of breast cancer practiced better than people without relatives who have had breast cancer, level of education also had an impact on their knowledge and practice of BSE (Urga et al., 2021).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

.

3.2 Research design

A cross-sectional descriptive questionnaire-based study was used to assess the knowledge, attitude, and practice of BSE among female law students attending The University of Benin, Benin-city, Edo state. Their scores in the fields of knowledge, attitude, and practice will be calculated.

3.3 Research setting

The research was carried out at the Faculty of Law, The University of Benin, Benin-city, Edo state. The University of Benin (UNIBEN) is a government owned tertiary institution, established on the 23rd of November, 1970. It is located in the Ugbowo area of Benin-city, Ovia North-East local government area of Edo state. The institution gives formal training to both undergraduate and post graduate students.

The faculty of law, University of Benin was established in the year 1981 in order to teach and train students who would be upright in the society and meet the society's legal needs. Undergraduate students undergo a 5 years program in order to acquire the LL.B certificate. The faculty is made up of four departments and has produced over 15 sets of graduates.

3.4 Target population

The target population for this study was estimated at a total of 577 female law students of The University of Benin, Benin city, Edo state. There are 100 female students in 100L, 189 female students in 200L, 105 female students in 300L, 112 female students in 400L, and 71 female students in 500L.

3.5 Sample size

To calculate the sample size required, the Taro Yamane's formula was used

n=N/ [1+ N (e)^2]

Where;

n= sample size

N= the number of female law students in the faculty of law as at 2022/2023 session which was 577 students

e= the level of precision is 0.05

Therefore the sample size n is calculated as;

n= 577/[1+577(0.05)^2]

n= 577/[1+1.44]

n=577/2.44

n=236.5

n=237

Therefore sample size is 237.

To calculate the sample size per level;

y= (X÷N) × n

y= Sample size per level

X= Total number of female law students per level

N= Total number of female law students as at 2022/2023

n= Sample size

ACADEMIC LEVEL	DETERMINATION OF SAMPLE SIZE IN EACH LEVEL	SAMPLE SIZE PER LEVEL (y)
100	(100÷577) × 237	41
200	(189÷577) × 237	78
300	(105÷577) × 237	43
400	(112÷577) × 237	46
500	(71÷577) × 237	29

Table 3.1: Distribution of sample size across all levels

3.6 Sampling Technique

The sampling technique for this study was a convenience sampling technique in which participants were selected based on their availability.

3.7 Instrument for data collection

The collection of data was carried out using an adapted instrument gotten from Rosmawati, (2010) which was modified to suit the purpose of this research. The questionnaire consisted of socio-demographic information including age, current level in the university, marital status, and religion which served as section A. The knowledge of respondents was assessed through 15 items covering on the signs of breast cancer and method of performing BSE and this served as section B. Meanwhile, section C was used to assess the attitude which was determined based on 11 items. Then regarding the practice 13 items were used which served as section D.

Categorical responses (True/False/Don't know) was applied for the knowledge items. For attitude items, 5 Likerts's scale (Strongly agree/Agree/Neutral/Disagree/Strongly disagree) was used (McDowell and Newell, 1987) and similar for the practice items.

3.8 Exclusion criteria

- Female law students that were not interested in participating in the study
- Female law students who were not present in the lecture theatre when the questionnaire was shared

3.9 Validity of the instrument

The instrument was validated by expert statistician, researcher's supervisor, and midwife. Ambiguous questions and modification were corrected and approved by the supervisor.

3.10 Reliability of the instrument

Reliability refers to the degree to which an assessment tool produces stable and consistent results. A reliable instrument is one that can produce the same results if the behavior is measured again by the same scale. The Cronbach's alpha reliability technique was employed in testing knowledge, attitude, and practices. The instrument was administered to 30 respondents in the Faculty of Law, University of Benin. A coefficient of 0.75 was obtained.

3.11 Method of data collection

Data was collected by giving copies of questionnaires to respondents through face to face contact. Data was collected by the researcher for a period of one week.

3.12 Method of data analysis

Descriptive methods was employed to analyze the data gathered from the completed questionnaires. A score of ≥50% was classified as indicative of a good understanding of BSE, while a score below 50% was classified as reflecting poor knowledge. The following scoring method that was used; for positive knowledge item, '1' mark for correct response, '0' mark for incorrect response. The scoring was reversed for the negative knowledge item. For a positive attitude item, scores of '4', '3', '2', '1' and '0' for 'strongly agree', 'agree', 'neutral', 'agree' and 'strongly disagree', respectively. This scoring was reversed for the negative attitude items. For a good practice item scores '0', '1', '2', '3' and '4' was given for 'never', 'seldom', 'neutral', 'frequently' and 'always', respectively. The scoring was reversed for negative practice item.

Subsequently, the collected data was carefully reviewed, organized, and inputted into a computer equipped with the Statistical Package for Social Sciences (SPSS) for further analysis.

3.13 Ethical consideration

The ethical clearance was obtained from the ethical committee of The University of Benin through a letter of permission and presentation of research proposal. Permission also sought from the Faculty of Law where students volunteered. A detailed explanation was provided to all eligible subjects before their participation. Informed consent for participants was obtained too. Participant were also informed of the purpose of the study and assured of no harm, confidentiality and rights to voluntary consent or decline to participate and to withdraw at any time. Name of the participant or any form of identity were not required in the questionnaire and information supplied by the participants were not traced back to them on the compiled data.

CHAPTER FOUR

RESULTS

Table 4.1: Sociodemographic characteristics of respondents

	Frequency	Percentage
Age		
16-20 years	148	62.4
20-24 years	84	35.4
25-30 years	5	2.1
30 years and above	0	0.0
Level		
100	5	2.1
200	93	39.2
300	94	39.7
400	35	14.8
500	10	4.2
Marital status		
Single	237	100.0
Married	0	0.0
Divorced	0	0.0
Widowed	0	0.0
Religion		
Christian	227	95.8
Muslim	10	4.2
Others	0	0.0

Table 4.1 shows the sociodemographic characteristics of the respondents. In terms of age, the majority (62.4%) were between 16-20 years old, with 35.4% aged 20-24 years. A small percentage (2.1%) fell into the 25-30 year age range, while no respondents were over 30 years old. Regarding educational level, nearly 40% were level 200 (39.2%) or 300 (39.7%) students. A smaller proportion were level 400 (14.8%) or 500 (4.2%) students, with only 2.1% at the level 100 stage. The entire sample (100.0%) reported being single and not married, divorced, or widowed at the time of the study. From a religious perspective, an overwhelming majority (95.8%) identified as Christian, with only 4.2% indicating they were Muslim. No other religious affiliations were reported.

Table 4.2: Knowledge of BSE

	Correct	**Wrong**
Breast self-examination should be done every 2 months	148 (62.4)	89 (37.6)
Breast self-examination should be done between day 7 until day 10 after menses	93 (39.2)	144 (60.8)
Breast self-examination should be done in front of the mirror	177 (74.7)	60 (25.3)
Undress until the waist when doing breast self-examination	158 (66.7)	79 (33.3)
Hands should be raised up alternately above the head when doing the breast self-examination in front of the mirror	157 (66.2)	80 (33.8)
Breast self-examination should be done from the front view only	99 (41.8)	138 (58.2)
Breast self-examination can be done in supine position	83 (35.0)	154 (65.0)
Palpate on the right breast while left sided lying when doing the breast self-examination	108 (45.6)	129 (54.4)
Use finger pulps to examine any lump or thickening of the skin	182 (76.8)	55 (23.2)
Breast self-examination can be done using vertical strip and circular technique	118 (49.8)	119 (50.2)
Need to press on the nipple to check any unusual discharge	168 (70.9)	69 (29.1)
Breast self-examination include armpit examination to check for any lump	168	69

	(70.9)	(29.1)
Need to observe for unusual change in shape and size of breast	197 (83.1)	40 (16.9)
Retraction of nipple is the warning signs that should be observed	128 (54.0)	109 (46.0)
Lump is the early sign for cancer	138 (58.2)	99 (41.8)

Table 4.2 shows the knowledge of breast self-examination (BSE) among the respondents. While the majority of respondents demonstrated knowledge of observing visual breast changes (83.1%), using finger pulps for palpation (76.8%), examining in front of a mirror (74.7%), checking armpits (70.9%), and inspecting nipples (70.9%), there were notable gaps in other key areas. Notably, only 35.0% knew that BSEs can be performed in a supine or lying position, in addition to standing. Timing for optimal examinations was also poorly understood, with just 39.2% aware that BSEs should occur between days 7-10 after menses. Moreover, fewer than half (41.8%) could correctly identify a lump as an early sign of breast cancer. Additional knowledge gaps included only 49.8% knowing the recommended vertical strip and circular palpation pattern, 58.2% incorrectly thinking examinations should only be done from the front, and 54.4% wrongly believing the right breast should be palpated while lying on the left side.

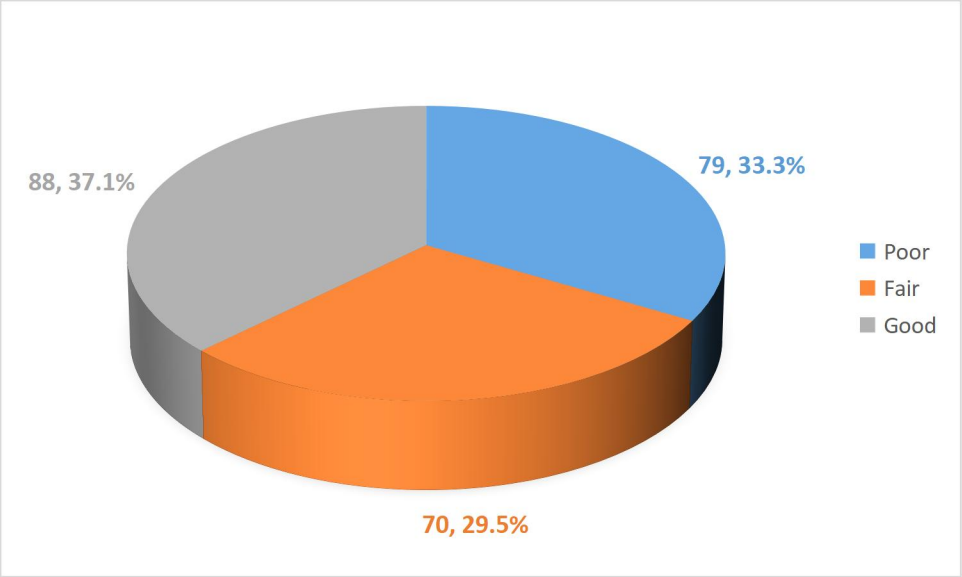

Figure 4.1: level of Knowledge of BSE

Figure 4.1 shows the level of knowledge of BSE. It shows that 79(33.3%) have poor level of knowledge, 70(29.5%) have fair level of knowledge, while 88(37.1%) have good level of knowledge of BSE.

Table 4.3: Attitude towards BSE

Variable	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard deviation	Remark
Doing breast self-examination makes me feel so funny	29 (12.2)	69 (29.1)	64 (27.0)	45 (19.0)	30 (12.7)	3.06	1.28	Neutral
Breast self-examination is embarrassin	69 (29.1)	93 (39.2)	35 (14.8)	25 (10.5)	15 (6.3)	2.49	1.22	Negative

g to me								
Doing breast self-examination is time wasting	104 (43.9)	93 (39.2)	15 (6.3)	10 (4.2)	15 (6.3)	2.03	1.20	Negative
Doing breast self-examination makes me feel unpleasant	99 (41.8)	93 (39.2)	15 (6.3)	15 (6.3)	15 (6.3)	2.11	1.24	Negative
If there is a lump, I prefer to go get treatment from traditional healer	103 (43.5)	65 (27.4)	25 (10.5)	19 (8.0)	25 (10.5)	2.24	1.42	Negative
I feel all women should do breast self-examination	15 (6.3)	0 (0.0)	15 (6.3)	64 (27.0)	143 (60.3)	4.35	1.03	Positive
I am not afraid to think about breast cancer	54 (22.8)	54 (22.8)	40 (16.9)	44 (18.6)	45 (19.0)	2.96	1.47	Negative
I avoid doing breast self-examination because I'm worried about having breast cancer	64 (27.0)	55 (23.2)	45 (19.0)	24 (10.1)	49 (20.7)	2.88	1.50	Negative
I am interested in doing breast self-examination	15 (6.3)	15 (6.3)	35 (14.8)	79 (33.3)	93 (39.2)	3.93	1.15	Positive
I always search for	10 (4.2)	25 (10.5)	85 (35.9)	39 (16.5)	78 (32.9)	3.63	1.15	Positive

information regarding breast self-examination from the internet, magazine and newspaper								
I discuss with my friends about breast self-examination	25 (10.5)	45 (19.0)	84 (35.4)	35 (14.8)	48 (20.3)	3.26	1.23	Positive
Grand mean						**3.09**	**1.23**	**Neutral**

Table 4.3 shows the attitude of respondents towards BSE. The majority of participants indicated either disagreement or neutrality towards the statement "Doing breast self-examination makes me feel so funny," with only 12.7% strongly agreeing. Regarding the perception that BSE is embarrassing, a substantial proportion of participants (68.3%) expressed disagreement or neutrality. However, a significant percentage (39.2%) agreed or strongly agreed that BSE is embarrassing. Regarding the belief that BSE is time-wasting, the majority (83.1%) disagreed or were neutral, while 10.5% agreed or strongly agreed. Similarly, a substantial portion (82.5%) disagreed or were neutral about BSE making them feel unpleasant. Interestingly, a considerable percentage (43.5%) indicated a preference for traditional healing if a lump were found, whereas the majority (70.3%) agreed or strongly agreed that all women should perform BSE. Concerning fear associated with breast cancer, opinions were divided, with approximately 45.8% expressing agreement or strong agreement that they are not afraid to think about breast cancer. Regarding the avoidance of BSE due to fear of breast cancer, a significant portion (47.7%) agreed or strongly agreed, while 30.1% disagreed or were neutral. Regarding interest in performing BSE, a

majority (72.5%) expressed agreement or strong agreement, indicating a positive inclination towards BSE. Finally, regarding seeking information about BSE, the majority (68.3%) indicated agreement or strong agreement, showing a proactive approach towards acquiring knowledge about BSE. Overall, the mean scores for each attitude statement ranged from 2.03 to 4.35, with standard deviations ranging from 1.03 to 1.50, indicating varying degrees of consensus among participants on these attitudes towards BSE.

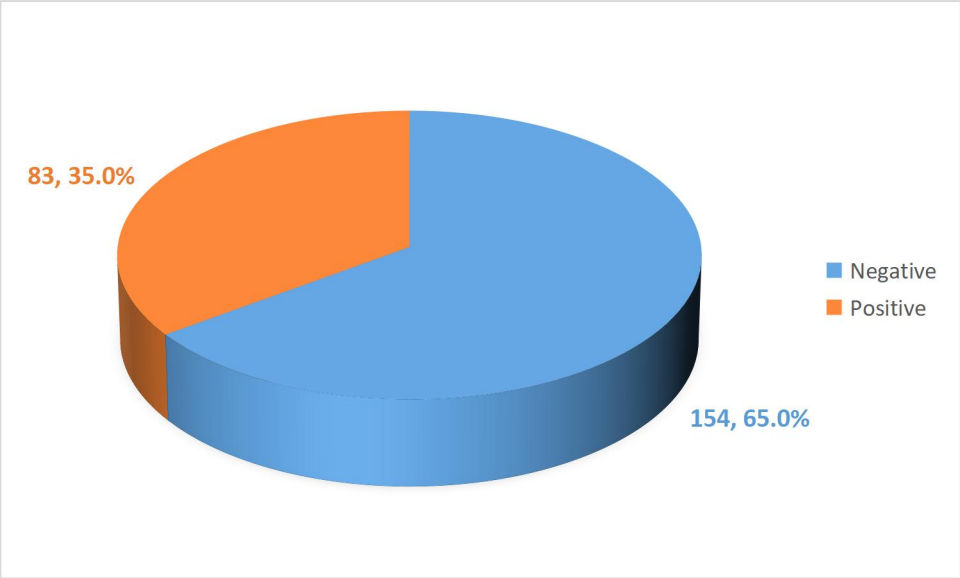

Figure 4.2: Level of attitude towards BSE

Figure 4.2 shows the level of attitude towards BSE. It shows that 154(65.0%) have negative attitude, while the remaining 83(35.0%) have positive attitude.

Table 4.4: Practice towards BSE

Variable	Never	Seldom	Neutral	Frequent	Always	Row Mean	Row SD
	n (%)	n (%)	n (%)	n (%)	n (%)		
Do breast self-examination once a month	40 (16.9)	40 (16.9)	59 (24.9)	70 (29.5)	28 (11.8)	3.12	1.31
Do breast self-examination between day 7 to day 10 after menses	45 (19.0)	30 (12.7)	105 (44.3)	49 (20.7)	8 (3.4)	2.87	1.11

Do breast self-examination in front of the mirror	40 (16.9)	30 (12.7)	59 (24.9)	60 (25.3)	48 (20.3)	3.30	1.39
Raise hands up alternately above the head when doing breast self-examination in front mirror	45 (19.0)	35 (14.8)	64 (27.0)	60 (25.3)	33 (13.9)	3.10	1.35
Perform breast self-examination only from the front view	49 (20.7)	20 (8.4)	95 (40.1)	50 (21.1)	23 (9.7)	2.99	1.24
Perform breast self-examination in supine position	79 (33.3)	20 (8.4)	75 (31.6)	50 (21.1)	13 (5.5)	2.58	1.31
Do use finger pulps to examine any lump or thickening of the skin	39 (16.5)	20 (8.4)	50 (21.1)	75 (31.6)	53 (22.4)	3.45	1.39
Do breast self-examination using vertical strip and circular technique	43 (18.1)	15 (6.3)	95 (40.1)	60 (25.3)	24 (10.1)	3.05	1.20
Do press on the nipple to check for any unusual discharge	45 (19.0)	25 (10.5)	55 (23.2)	64 (27.0)	48 (20.3)	3.29	1.40
Do breast self-examination including armpit examination to check for any lump	54 (22.8)	20 (8.4)	45 (19.0)	55 (23.2)	63 (26.6)	3.32	1.53
Do observe for unusual changes in the shape and size of breast	45 (19.0)	20 (8.4)	24 (10.1)	80 (33.8)	68 (28.7)	3.55	1.47
Do breast scan once a month	50 (21.1)	40 (16.9)	64 (27.0)	60 (25.3)	23 (9.7)	2.95	1.35
Do breast scan after monthly menstrual period	55 (23.2)	45 (19.0)	59 (24.9)	49 (20.7)	29 (12.2)	2.88	1.39

The data in Table 4.4 reveal varied practices related to proper BSE technique among the respondents. From the frequencies, substantial proportions reported never or seldomly engaging in recommended practices like monthly exams (33.8%), exams between days 7-10 after menses (31.7%), exams in the supine position (41.7%), and using the vertical strip/circular palpation pattern (24.4%). However, more positive practices were also observed, such as frequently/always using finger pulps for palpation (54.0%), checking nipples for discharge (47.3%), examining armpits (49.8%), and observing for visual breast changes (62.5%).

Performing exams in front of a mirror was also relatively common, with 45.6% reporting they did so frequently or always. Lower means around 2.5-3.0 for items like timely exams, supine positioning, and palpation patterns suggest suboptimal adherence to technique guidelines in those areas. Conversely, higher means from 3.29-3.55 for practices like nipple/armpit checks, visual observation, and using finger pulps indicate relatively stronger implementation.

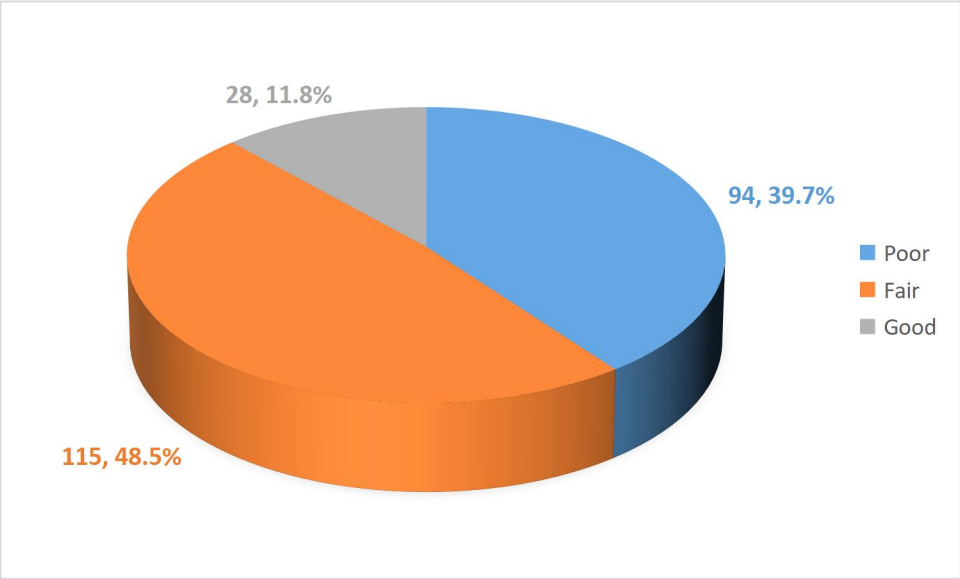

Figure 4.3: Level of Practice of BSE

Figure 4.3 shows the level of Practice of BSE. It shows that 94(39.7%) have poor level of practice, 115(48.5%) have fair practice level, while 28(11.8%) have good level of practice.

Hypotheses Testing

Table 4.5: Association between level of practice and level of knowledge

	Poor	Fair	Good	χ^2	p
Level of Knowledge					
Poor	49 (62.0%)	30 (38.0%)	0 (0.0%)	37.340	0.000
Fair	15 (21.4%)	45 (64.3%)	10 (14.3%)		
Good	30 (34.1%)	40 (45.5%)	18 (20.5%)		

Table 4.5 shows that there is a significant association between level of knowledge and level of practice. The proportion of respondents with good level of practice increases with increasing level of knowledge. We therefore reject the null hypothesis.

Table 4.6: Association between level of practice and level of attitude

	Poor	Fair	Good	χ^2	p
Level of Attitude					
Negative	65 (42.2%)	70 (45.5%)	19 (12.3%)	1.674	0.433
Positive	29 (34.9%)	45 (54.2%)	9 (10.8%)		

Table 4.6 shows that there is no significant association between level of attitude and level of practice. We therefore accept the null hypothesis.

CHAPTER FIVE

DISCUSSION OF RESULTS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents discussion of the major findings, implications of the findings, limitations of the study, suggestions for further studies, summary, conclusion and recommendations of the study.

5.2 Discussion of Findings

Demographic Variables

Findings shows most of majority of participants fall within the age range of 16-20 years (62.4%), followed by 20-24 years (35.4%). A smaller proportion falls within the age groups of 23-30 years (2.1%). Interestingly, there were no participants in the 30 years and above age group. When it comes to their level, majority are 200 and 300 level with (39.2%) and (39.7%) respectively, followed by 400 level (14.8%), 500 (4.2%), and 100 level, (2.1%). All the participants are single (100%). No participants reported being divorced or widowed. The majority of participants identified as Christian (95.8%), with a smaller percentage identifying as Muslim (4.2%).

Knowledge of breast self-examination

Finding from our study shows that majority of the participant have a good level of knowledge on BSE. It shows that 88(37.1%) had good knowledge of BSE, 79(33.3%) poor knowledge and 70(29.5%) had fair knowledge. This finding of poor knowledge of BSE is in line with the findings of a study conducted among 300 females attending outpatient clinic in Babcock University Teaching Hospital, Ilishan Remo, Ogun State, Nigeria revealed the level of knowledge about BSE. 101 (33.7%) respondents had a low level of knowledge on the practice,

117 (39.0%) respondents had moderate level of knowledge, and 82 (27.3%) respondents had high level of knowledge (Olajide et al., 2021).

This finding is in contrast with the findings of Ossai et al., (2019) in his study on the predictors of practice of BSE among female undergraduates of Ebonyi State University, Abakaliki, Nigeria which revealed that majority of the respondents (76.4%) were aware of BSE with a larger percentage of the respondents having good knowledge of what BSE is all about.

Attitude toward breast self-examination

Findings from our study shows that the attitude towards BSE among female undergraduate is negative. It shows that 154 (65.0%) of the respondents have negative attitude toward breast self-examination, while 83(35.0%) have positive attitude towards breast self-examination. This confirms a study carried out in Turkey that had a total of 161 respondents. Out of the respondents that have heard of BSE when asked about the frequency with which they themselves practiced, only 33.3% reported doing so at regular intervals. Ignorance of how BSE should be done was indicated as the reason for not doing it by 48.5% of the students, and 34.7% considered it unnecessary because they had no breast-related complaints. While 55.5% indicated that they performed BSE whenever they thought of it, only 13.3% reported doing it regularly every month (Koc et al., 2019).

Another study on the relationship between knowledge and practice of BSE among female workers in Sokoto, Nigeria by Muhammad & Labaran, (2018) had 400 educated participant. Of the 65.3% participant that practiced BSE, only 52.7% practiced BSE monthly which represented only 34.4% of the total participants. The percentage of the participants that did not practice BSE gave reasons for not performing BSE as follows; had no time to perform it and they also thought it was unnecessary to perform BSE. This is in contrast to a study done by Rizvi et al (2023) on

the awareness, knowledge, and attitude towards breast self-examination, breast screening and early detection techniques among women in Pakistan. The participants were asked about their attitude towards BSE and its early detection techniques. More than half of the women (59.5%) believed that undergoing breast screening was good for early detection and fear of having the disease was found to be a common reason for undergoing a screening.

Practice of Breast self-examination

Findings from this study show that level of practice of BSE among female undergraduate was fair. It shows that 94(39.7%) have poor level of practice, 115(48.5%) have fair practice level, while 28(11.8%) have good level of practice. This indicates that very few respondents have good practice of BSE. This finding is similar to the findings gotten from a study by Dagne et al., 2019 where only 32.5% of respondents had ever practiced BSE and only 64 (15.2%) of them had good practice and practiced BSE regularly or monthly. This is in contrast to a study that found that 56% of the respondents had good practice of BSE. Two-thirds of respondents (73.1%) have ever practiced BSE, out of which 79.4% practiced BSE at the time of the study. Less than half of the respondents (46.4%) who currently practice BSE reported the previous month to have been the last time they practiced BSE at the time of the study. However, the majority of the respondents (65.0%) reported practicing BSE every month (Amegbedzi et al., 2022).

5.3 Implication of Findings to Nursing

In view of the findings from this study it is evident that the incidence of morbidity and mortality that occur as a result of breast cancer in developing countries would be reduced by improving the knowledge and practice of BSE. With the knowledge from this study, nurses will be informed on the need to encourage young female to practice BSE effectively by health education and campaigns. It will help nurses to know the level of knowledge, attitude and practice of BSE

among female students in this university and help identify the best method in helping individuals, families and communities to get screened and treated early. With the right attitude, knowledge, proper education and practice, the lives of women would be in safer hands.

5.4 Limitation of the Study

The limitations of the study include:

1. Unwillingness of respondents to give relevant information.

2. Method of research design was not fully able to capture respondents experience.

3. The research is not generalizable because it was only done in a single faculty in the University of Benin.

5.5 Conclusion

This study revealed that the knowledge of BSE among female law students in University of Benin was poor although majority (39.1%) had good knowledge. Majority of the respondents have negative attitude towards BSE and this could have resulted from lack of adequate knowledge about it. Lastly, the practice of BSE was fair. Also there was a significant relationship between the level of knowledge of BSE and it's practice.

5.6 Summary

The main purpose of the study is to assess the knowledge, attitude, and practice of BSE among female law students in the University of Benin the objectives was to assess the knowledge of BSE among female law students, to examine the practice of BSE and to identifying the factors influencing the practice of BSE among female law students. A descriptive questionnaire-based study was used to assess the knowledge, attitude, and practice of BSE among female law students attending The University of Benin, Benin-city, Edo state. The research was carried out

at the Faculty of Law, The University of Benin, Benin-city, Edo state. The target population for this study was estimated at a total of 577 female law students of The University of Benin, Benin-city, Edo state. There are 100 female students in 100L, 189 female students in 200L, 105 female students in 300L, 112 female students in 400L, and 71 female students in 500L. The sample size used was 237. The sampling technique for this study was a convenience sampling technique. The collection of data was carried out using an adapted instrument gotten from Rosmawati, 2010. Data was collected by giving copies of questionnaires to respondents through face to face contact. Descriptive methods was employed to analyze the data gathered from the completed questionnaires. Result shows that It shows that 88(37.1%) had good knowledge of BSE, 79(33.3%) poor knowledge and 70(29.5%) had fair knowledge. It shows that 154(65.0%) of the respondents have negative attitude toward BSE while 83(35.0%) have positive attitude BSE. Its shows that 94(39.7%) had poor practice of BSE, 115(48.5%) had fair practice, and 28(11.8%) had good practice of BSE. This indicate that they had fair practice of breast self-examination

5.7 Recommendations

Based on the finding from the study, the following recommendations are made to improve the students' knowledge, attitude, and practice of BSE:

1. Investment by State Ministry of health, National primary health care development agency in training and retraining of female in BSE and its screening services available, in order to promote their knowledge especially in the practice of BSE as it will definitely reduce number of deaths from BSE which is the biggest cause of mortality worldwide.
2. Create policy support for the routine practice of BSE.
3. Promote community and facility-based commitment for routine availability of BSE services.

4. Partner with regional task forces, civil society, and professional associations to promote local commitment.
5. Include BSE and its screening in appropriate pre-service and in-service curricula and trainings and provide support for training.
6. Carry out training, follow-up, monitoring, and supervision.

5.8 Suggestions for further studies

The study was limited to only knowledge, attitude and practice of BSE among female undergraduate students in the selected department in University of Benin. It is therefore recommended that this study should be replicated in other states or geopolitical zones, private and state universities so that generalization of findings may be possible.

A qualitative method of research design like an interview method should also be adopted in subsequent research as this will help the researcher to get a proper knowledge of their understanding about the topic.

Research studies on Barriers to the utilization of BSE should also be done.

REFERENCES

Abo Al-Shiekh, S. S., Ibrahim, M. A., & Alajerami, Y. S. (2021). Breast cancer knowledge and practice of breast self-examination among female university students, Gaza. *The Scientific World Journal*, *2021*, 1–7. https://doi.org/10.1155/2021/664032

Adewale, A. P. (2023). Epidemiology of breast cancer in Sub-Saharan Africa. *Breast Cancer Updates [Working Title]*. https://doi.org/10.5772/intechopen.109361

Ahmad, S., Alloubani, A., Abu-Sa'da, R., & Qutaiba, Y. (2022). Breast self-examination: knowledge, practice, and beliefs among females in Jordan. *Sage Open Nursing*, *8*, 237796082211245. https://doi.org/10.1177/23779608221124517

Akpo, M. O. (2021). Breast self-examination: knowledge and practice among female secondary school students in Delta state, Nigeria. *Texila International Journal of Public Health*, *9*(1), 105–112. https://doi.org/10.21522/tijph.2013.09.01.art011

Ali, A., Jameel, N., Baig, N., Naqvi, S., Jafry, S., & Younus, M. (2020). Assessment of knowledge, attitude and practice regarding breast self-examination among females in Karachi. *Journal of the Pakistan Medical Association*, *0*, 1. https://doi.org/10.5455/jpma.25836

Amegbedzi, R. A., Komesuor, J., Amu, H., & Tarkang, E. E. (2022). Factors influencing the practice of breast self-examination among female tertiary students in Ho, Ghana. *Advances in Public Health*, *2022*, 1–9. https://doi.org/10.1155/2022/7724050

Asmare, K., Birhanu, Y., & Wako, Z. (2022). Knowledge, attitude, practice towards breast self-examination and associated factors among women in Gondar town, Northwest Ethiopia, 2021: a community-based study. *BMC Women's Health*, *22*(1). https://doi.org/10.1186/s12905-022-01764-4

Dadzi, R., & Adam, A. (2019). Assessment of knowledge and practice of breast self-examination among reproductive age women in Akatsi South district of Volta region of Ghana. *Plos One*, *14*(12), e0226925. https://doi.org/10.1371/journal.pone.0226925

Dagne, A. H., Ayele, A. D., & Assefa, E. M. (2019). Assessment of breast self- examination practice and associated factors among female workers in Debre Tabor Town public health facilities, North West Ethiopia, 2018: Cross- sectional study. *Plos One*, *14*(8), e0221356. https://doi.org/10.1371/journal.pone.0221356

Dewit, J., Vet, R., Schutten, M., & Vansteenbergen, J. (2005). Social-cognitive determinants of vaccination behavior against hepatitis B: an assessment among men who have sex with men. *Preventive Medicine*, *40*(6), 795–802. https://doi.org/10.1016/j.ypmed.2004.09.026

Didarloo, A., Nabilou, B., & Khalkhali, H. R. (2017). Psychosocial predictors of breast self-examination behavior among female students: an application of the health belief model using logistic regression. *BMC Public Health*, *17*(1). https://doi.org/10.1186/s12889-017-4880-9

Ossai, E. N., Azuogu, B. N., Ogaranya, I. O., Ogenyi, A., Enemor, D. O., & Nwafor, M. (2019). Predictors of practice of breast self-examination: A study among female undergraduates of Ebonyi State University, Abakaliki, Nigeria. *Nigerian Journal of Clinical Practice*, *22*(3), 361. https://doi.org/10.4103/njcp.njcp_482_18

Fatemeh, M., Parisa, S., & Sam, H. (2018). Health beliefs as predictors of breast self-examination behavior. *International Journal of Women's Health and Wellness*, *4*(2). https://doi.org/10.23937/2474-1353/1510077

Fatiregun, O. A., Oluokun, T., Lasebikan, N. N., Nwachukwu, E., Ibraheem, A. A., & Olopade, O. (2021). Breast cancer research to support evidence-based medicine in Nigeria: a review of the literature. *JCO Global Oncology*, *7*, 384–390. https://doi.org/10.1200/go.20.00541

Husna, P. H., Marni, Nurtanti, S., Handayani, S., Ratnasari, N. Y., Ambarwati, R., & Susanto, T. (2019). Breast self-examination education for skill and behavior. *Education for Health (Abingdon, England)*, *32*(2), 101–102. https://doi.org/10.4103/efh.EfH_226_18

Ibitoye, O. F., & Thupayegale-Tshwenegae, G. (2019). The Impact of education on knowledge attitude and practice of breast self-examination among adolescents girls at the Fiwasaye Girls Grammar School Akure, Nigeria. *Journal of Cancer Education*. https://doi.org/10.1007/s13187-019-01595-2

Janz, N. K., & Becker, M. H. (1984). The health belief model: a decade later. *Health Education Quarterly*, *11*(1), 1–47. https://doi.org/10.1177/109019818401100101

Johnson, O. (2019). Awareness and practice of breast self-examination among women in different African countries: a 10-year review of literature. *Nigerian Medical Journal*, *60*(5), 219. https://doi.org/10.4103/nmj.nmj_84_19

Koc, G., Gulen-Savas, H., Ergol, S., Yildirim-Cetinkaya, M., & Aydin, N. (2019). Female university students' knowledge and practice of breast self-examination in Turkey. *Plos One*, *14*(8), e0221356. https://doi.org/10.4103/njcp.njcp_341_18

Mayo Clinic. (2018). Breast self-exam for breast awareness - mayo clinic. *Mayoclinic.org*. https://www.mayoclinic.org/tests-procedures/breast-exam/about/pac-20393237

Muhammad, S. A., & Labaran, Y. S. (2018). Relationship between knowledge and practice of breast self-examination among female workers in Sokoto, Nigeria. *Obstetrics & Gynecology International Journal*, *9*(3). https://doi.org/10.15406/ogij.2018.09.00323

Ohaeri, B., & Aderigbigbe, M. (2019). Knowledge and use of breast self-examination and mammogram among women of reproductive age in Oyo State secretariat, Ibadan, Oyo State, Nigeria. *European Journal of Midwifery*, *3*(April). https://doi.org/10.18332/ejm/105858

Olajide, E., Amiewalam, E., Abimbola, Wennie, J., Sa', Leslie, amp;, & Amere, T. (2021). Assessment of knowledge, attitude and perception on breast self-examination practice among females attending out-patient clinic in Babcock University Teaching Hospital,

Ilishan-Remo, Ogun State, Nigeria. *LAUTECH Journal of Nursing*, *9*. https://lautechjournalofnursing.com/wp-content/uploads/2021/08/Olajide-Tayo-Emmanuel-Vol-9-1.pdf

Rosenstock, I. M. (1974). The health belief model and preventive health behavior. *Health Education Monographs*, *2*(4), 354–386. https://doi.org/10.1177/109019817400200405

Rosmawati, N. H. N. (2010). Knowledge, attitudes and practice of breast self-examination among women in a suburban area in Terengganu, Malaysia. *Asian Pacific Journal of Cancer Prevention: APJCP*, *11*(6), 1503–1508. https://pubmed.ncbi.nlm.nih.gov/21338188

Udoh, R. H., Tahiru, M., Ansu-Mensah, M., Bawontuo, V., Danquah, F. I., & Kuupiel, D. (2020). Women's knowledge, attitude, and practice of breast self- examination in Sub-Saharan Africa: a scoping review. *Archives of Public Health*, *78*(1). https://doi.org/10.1186/s13690-020-00452-9

Urga, W. M., Alem, L. E., & Asmare, A. G. (2021). Breast self-examination practice and associated factors among women attending family planning service in Modjo Public Health Facilities Southwest Ethiopia. *Breast Cancer: Targets and Therapy*, *Volume 13*, 459–469. https://doi.org/10.2147/bctt.s322525

Usman, I. N., Olanrewaju, S. O., & Usman, S. O. (2020). Breast self-examination practice among female secondary school students in Osogbo, Western Nigeria. *European Journal of Medical and Health Sciences*, *2*(2). https://doi.org/10.24018/ejmed.2020.2.2.173

Usman, M. B., Kanwa, G., Lawali, Y., & Chika, O. (2020). Relationshp between the age and educational level and practice of breast self-examination among women attending antenatal clinics. *Global Academic Journal of Medical Sciences*, *2*(2), 8–12. https://doi.org/10.36348/gajms.2020.v02i02.001

APPENDIX

DEPARTMENT OF NURSING SCIENCE

SCHOOL OF BASIC MEDICAL SCIENCES

UNIVERSITY OF BENIN, BENIN CITY, EDO STATE

Dear Respondent,

QUESTIONNAIRE

I am Emakhu Sharon Osetohanme; a 500L student in the above named institution. I am carrying out a research study on the topic: **"Assessing the knowledge, attitude, and practice of breast self-examination among female law students in the University of Benin, Benin-city, Edo state".** As your contribution to the research, the questions are meant to generate reliable information. Your honest answers will be appreciated and treated with utmost confidentiality.

Thank You.

Yours faithfully,

Emakhu Sharon Osetohanme.

Tick the appropriate box

SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS

1. Age

16-20 years	20-24 years	25-30 years	30 years and above
[ ]	[ ]	[ ]	[ ]

2. Level

100	200	300	400	500
[ ]	[ ]	[ ]	[ ]	[ ]

3. Marital status

Single	Married	Divorced	Widowed
[ ]	[ ]	[ ]	[ ]

4. Religion

Christian	Muslim	Others
[ ]	[ ]	[ ]

SECTION B: KNOWLEDGE TOWARDS BREAST SELF-EXAMINATION

S/N	QUESTION	TRUE	FALSE	DON'T KNOW
1	Breast self-examination should be done every 2 months			
2	Breast self-examination should be done between day 7 until day 10 after menses			
3	Breast self-examination should be done in front of the mirror			
4	Undress until the waist when doing breast self-examination			
5	Hands should be raised up alternately above the head when doing the breast self-examination in front of the mirror			
6	Breast self-examination should be done from the front view only			
7	Breast self-examination can be done in supine position			
8	Palpate on the right breast while left sided lying when doing the breast self-examination			
9	Use finger pulps to examine any lump or thickening of the skin			
10	Breast self-examination can be done using vertical strip and circular technique			
11	Need to press on the nipple to check any unusual discharge			
12	Breast self-examination include armpit examination to check for any lump			
13	Need to observe for unusual change in shape and size of breast			
14	Retraction of nipple is the warning signs that should be observed			
15	Lump is the early sign for cancer			

SECTION C: ATTITUDE TOWARDS BREAST SELF-EXAMINATION

S/N	QUESTIONS	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
1	Doing breast self-examination makes me feel so funny					
2	Breast self-examination is embarrassing to me					

3	Doing breast self-examination is time wasting					
4	Doing breast self-examination makes me feel unpleasant					
5	If there is a lump, I prefer to go get treatment from traditional healer					
6	I feel all women should do breast self-examination					
7	I am not afraid to think about breast cancer					
8	I avoid doing breast self-examination because I'm worried about having breast cancer					
9	I am interested in doing breast self-examination					
10	I always search for information regarding breast self-examination from the internet, magazine, and newspaper					
11	I discuss with my friends about breast self-examination					

SECTION D: PRACTICE TOWARDS BREAST SELF-EXAMINATION

S/N		NEVER	SELDOM	NEUTRAL	FREQUENT	ALWAYS
1	Do breast self-examination once a month					
2	Do breast self-					

	examination between day 7 to day 10 after menses					
3	Do breast self-examination in front of the mirror					
4	Raise hands up alternately above the head when doing breast self-examination in front mirror					
5	Perform breast self-examination only from the front view					
6	Perform breast self-examination in supine position					
7	Do use finger pulps to examine any lump or thickening of the skin					
8	Do breast self-examination using vertical strip and circular technique					
9	Do press on the nipple to check for any unusual discharge					
10	Do breast self-examination including armpit examination to check for any lump					
11	Do observe for unusual changes in the shape and size of breast					
12	Do breast scan once a month					
13	Do breast scan after monthly menstrual period					