

**KNOWLEDGE AND PRACTICES OF BREAST SELF  
EXAMINATION AMONG FEMALE UNDERGRADUATE  
STUDENTS OF THE UNIVERSITY OF BENIN**

**BY**

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**BENIN CITY**

**DECEMBER, 2014.**

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**A RESEARCH PROJECT PRESENTED TO THE  
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BENIN CITY**

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## CERTIFICATION

This is to certify that this research work was carried out by **Yusuff Nana-Fatima**, a student of the Department of Health Education, Faculty of Education, University of Benin, in partial fulfillment for the award of B.Sc (Ed) Health Education.



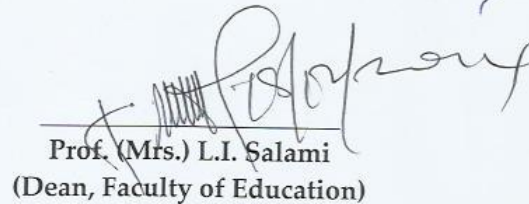
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## **DEDICATION**

This research project is dedicated to God Almighty, to  
God be the Glory

Also to my mum Mrs. R.A. Yusuff and my siblings for  
their love, care and prayers.

## **ACKNOWLEDGEMENT**

In the name of Allah, the most gracious and the most merciful, for his blessing and for giving me the strength to complete this research work. I would like to express my sincere gratitude to my dad, mum Mrs. R. A. Yusuff my siblings, Mrs. Becky Ofose, Engr. Suleman Yusuff, Dr. Nuhu Yusuff and Miss Aminat Yusuff. My Uncle and Aunties.

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## **ABSTRACT**

The main purpose of this study is to evaluate whether the female undergraduate students of the university of Benin are aware of the breast self Examination, if they practice it, how often and how effectively they practice breast self examination.

The research work began with a general background of the study, purpose, statement of the problem as well as the significant of the study.

Relevant literature by various scholars reviewed on the knowledge of the BSE, benefit, effect, methods of carrying out BSE and predisposing factors of breast cancer. It went further in discussing factor that influence the practice of self breast examination .It went further to discuss the description of the procedures used in gathering data that are related to the research questions. In this third chapter of the research work, the proportionate sampling techniques was used, the use of questionnaires as one of the instrument used in the collections of data was applied by the researcher and the data were later analyzed from the respondents response.

Lastly, conclusion and recommendation were made by the researcher where it was deemed fit to recommend and suggestion were also made as regard to breast self examination among female students.

# **CHAPTER ONE**

## **INTRODUCTION**

### **Background of the study**

Cancer is the subject of widespread fear and taboos. The disease is no respecter of age, colour, race, social class or persons. Society has a deep belief that cancer is necessarily a difficult and usually deadly disease; this is reflected in the systems chosen by society to compile cancer statistics. Cancer is regarded as a disease that must be fought to end the civil insurrection, a war on cancer has been declared. Military metaphors are particularly common in descriptions of cancer human effects and they emphasize both the parlous state of the affected individual's health and the need for the individual's health and the need for the individual to take immediate, decisive actions himself, rather than to delay, to ignore, or to rely entirely on others caring for him.

Cancer is a large group of disease which is characterized by uncontrolled growth of the cells in the human body and the ability of these cells to migrate from the original site and spread to distant sites. If the spread is not controlled, cancer can be classified in two ways, by the type of tissue in which the cancer originates and by the location in the body where the cancer first develops. Breast cancer is a type of cancer that originates from breast tissue. It is the second leading cause of cancer deaths among women worldwide (American Cancer society, 2007).

In Nigeria, the situation is not different as the cases of breast cancer are also reported to be very high and it is known to be one of the leading causes of death among women. Recent observations show that the frequency of breast cancer has risen over that of non-Hodgkin's lymphomas and cervical cancer in Nigeria.

Cancer research UK (2007) reported that breast cancer survival rates are better if the cancer is diagnosed earlier. Around 9 out of 10 women diagnosed with stage one breast cancer survive beyond five years. Survival rate drops to around one out of ten when diagnosed with stage five.

The earliest signs of breast cancer are usually observable on mammograms are no foolproof and totally not very effective for the use of young women, who the focus of the study. Despite the advent of these modern screening methods, cases of cancer of the breast are detected by women themselves.

One of the ways of recognizing breast cancer in a woman is to be breast aware, that is, understanding and knowing how you breast look and feel like under normal circumstances, so that women are able to seek early medical advice if they have any changes with their breast. According to Ringash and Canadian task force on preventive health care cited in Sakine,

Nevin and Fatima (2009) most breast cancer masses are detected by women themselves. Ali, Mariam, Iraj, Amir, Akram & Fatemeh (2008) stated that, unlike mammography and clinical breast examination, breast self examination (BSE) is simple, inexpensive and teaching is possible between health professionals and women. Most importantly, breast self examination raises awareness about breast cancer in women.

Breast self-examination (BSE) may sound strange to many of us, and therefore not well accepted by a majority of women. This is as a result of the societal and cultural taboos associated with the female body, because women are not expected to fondle their body parts, especially in this part of the world. Good habits are best established early in life. Self care is a habit nurtured early in life and habits once formed are difficult to break. Karayurt, Ozmen & Certinkaya (2008)

fostering positive health behavior can help empower young women to take control and responsibility over their health.

Breast self examination (BSE) is a regular, monthly palpation of the breast by the woman at the same time each month. Breast self examination was first promoted in the 1930s by activist because their exhortation do not delay seeking treatment for suspicious lumps was not affecting the death rate and the 1950s. it was promoted by Cushman Haagenson, a breast surgeon from the United States of American (also a film which was cosponsored by the American cancer society and national cancer institute which demonstrated breast self examination was shown to millions of American women in 1950s and 1960s.

Breast self examination (BSE) is the self practice of using the pads of the three middle fingers to feel for lumps or thickening around the breast. BSE education for young girls

and adherence to the practice will be a gateway to health promotion behaviours which in all probability will help check the incidence of breast cancer and further encourage them to go for clinical breast examination and mammography screening later in life (Rosenberg and Levy Schwartz 2003). The risk of young women having breast cancer is relatively low compared to older women. But we all know that the older women were once the young women of their generation. So it is important to cultivate and make the younger generation aware of their breast and how it feels, so that they can easily detect any changes.

However, due to lack of knowledge and awareness of breast cancer, many women fall prey to disease, which ordinarily could have been prevented if detected early. Some women believe that their destiny is different from their parents or siblings even when they have family history of breast cancer.

Others ignorantly believed that if peradventure they become victim of breast cancer, that traditional healers and witch doctors will be able to heal them, some also believe that disease afflicts a person as a result of one's sins. So when they become victims, they feel it is their punishment for committing sins.

Based on these premises therefore, there is need to find out how knowledgeable of BSE and breast cancer the young girls are and to determine their level of practice of BSE so that they do not become victims of breast cancer later in life. Because of the benefit of early detection of breast cancer, women are encouraged to perform BSE monthly as they would be able to recognized changes in their breast as they grow older. The American academy of Pediatrics suggested that girls should begin breast self examination, BSE at age 14 as this

would enable them imbibe the culture of routine performance of BSE (Cromer, Frankel, Hayes & Brown, 1992) while the American cancer society recommend age 20. Awareness is fundamental to health care and the key to survival in this present generation of diverse disease. Therefore, the knowledge and practice of breast self examination is very important as everyone needs to know that early detection saves lives.

### **Statement of the problem**

The incidence of breast cancer in Africa and in world is steadily increasing. The pattern observed in Nigeria is not different as it also suggests a steady rise. Ministry of health reported that breast cancer is the third most common cancer worldwide and is the most common cancer in women.

Many female students in the University of Benin have little or no knowledge about breast cancer, its symptoms and

risk factors. Most of the female student have no knowledge of breast self examination, and those that do, do not practice it regularly and most do not practice it at all.

Due to lack of knowledge of breast self examination, the benefit of it is not known by most female students in university of Benin.

Those who are aware of breast self examination and practices it, have increased chances of presenting early for treatment while the converse is the case for those with poor knowledge and practice in cases of changes with their breast.

### **Research questions**

This study was guided by the following research questions

1. What is the level of knowledge of breast self-examination among undergraduate students of university of Benin?

2. How frequently do female undergraduate students of university of Benin practice breast self-examination?
3. What are the reason for not performing breast self examination among female undergraduate students of university of Benin?
4. Is there any relationship between knowledge of BSE, parental educational background, family history of breast cancer, age, level of education and course of study among the female undergraduate students of university of Benin?

### **Purpose of the study**

The major purpose of this research is to:

1. Assess the level of knowledge of breast self examination among female undergraduate students of university of Benin?
2. Examine the factors that influences students to practice breast self examination?

3. Show how frequently female students of University of Benin practices it.
4. Know the reason for not performing breast self examination among female undergraduate students of university of Benin?

### **Significance of the study**

Findings from this research provide data about the level of knowledge and practice of breast self examination among female university students. If the results find that the respondents have poor level of knowledge and poor practices, further implementation could be done to instill knowledge to improve it. If the result of level of knowledge and practice of breast self examination is good, health education still need to be done as learning is a continuous process. Any new update of information regarding breast self examination shall be informed to students. In addition, this study assess for any

gap of knowledge and practices of breast self examination among female university students.

Furthermore, as recommended by American cancer society (2007) breast self examination should be started as early as 20s. Young adults at this age should find out more information about breast self examination because it is one of the screening methods for breast cancer. They should practice breast self examination before they reach the age of common occurrence of the disease. It is important to emphasize to them that practicing breast self examination regularly enable them to detect any changes with their breasts and seek medical advice earlier.

The results of this study are of great importance as it may assist health professionals in planning health education for female university students. Also, from this research findings, health screening which include breast self

examination education could be included as one of the annual activities in university of Benin (UNIBEN) calendar. The purpose of this health education is to convey knowledge about the importance of breast self examination and its relation with breast cancer.

### **Delimitation/Scope of study**

Knowledge and practice of breast self examination among female undergraduate students of university is a national health problem. But this study will be limited to the University of Benin, Benin City.

The researcher will take into account the statistics of female undergraduate students of the university.

This will involve getting some information from the admission office's record.

## **Limitation of the study**

In order to assess the knowledge and practice of self breast examination among female undergraduate students, it is necessary to point out that this is not an extensive study, because there was the constraint of time due to other school works that was carried out during the research. There was also financial constraint and there was also problem of collecting relevant materials for the review of literature. There was difficulty in collecting data the administration of question because most respondents were reluctant to fill the questions and some who collected the questionnaire did not return the form.

## **Definition of terms**

Knowledge: this is a familiarity, awareness or understanding of something such as facts, information,

description or skills, which is acquired through experience or education by perceiving discovery or learning.

Practice: the actual application or use of an idea, belief, or method as opposed to theories about such application or use. It is also the repeated exercise in or performance of an activity or skill regularly.

BSE performance: the act of using the pads of the three fingers by the woman to feel for lumps around the breast same time every month.

Pre-contemplation: TMC stage of behavioural change in which women were not seriously considering performing BSE at any time within the next 6months.

Contemplation: TMC stage of behavioural change in which women were seriously considering performing BSE within the next six month.

Preparation: TMC stage of behavioural change in which women were intending to perform BSE as early as next month or in the next 30 days.

Action: TMC stage of behavioural change in which women have performed BSE for less than 6 months.

Maintenance: TMC stage in which women have performed BSe for at least 6 months.

Termination: TMC stage in which women have performed BSE for over 1 year.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

For the purpose of this study, a review of related literature is presented in this chapter under the following:

- Concept of breast self examination
- Benefit of breast self examination
- Methods of breast self examination
- Sources of information on BSE
- Practice of BSE
- Barriers of breast self examination
- Risk factors of breast cancer
- Signs to look out for in the breast
- Prevention of breast cancer
- Treatment of breast cancer
- Summary

### **Concept of breast self examination**

Breast cancer is distinct from other types of cancer as it occurs in a visible organ and can be detected and treated at an early stage (Tasci & Usta, 2010). Late detection as well as inadequate diagnosis and treatment facilities has been attributed to the low survival rate in less developed countries.

(Doshi, Reddy, Kulkani & Karunakar, 2012). According to Adebamowo & Ajayi, 2002, Adesunkanmi, Lawal, Adelusola & Durosini (2006), breast cancer is known to be a major health problem globally and the major cause of death among women. In 2008, breast cancer caused 458,503 deaths worldwide (World Cancer Report, 2008).

In 2009, over 211,731 women in the United States were diagnosed with breast cancer and 40,676 women died from the disease (National Cancer Institute, 2013). Subsequent years did not fare any better as there were reports of a rise in the incidence of breast cancer that has assumed even more alarming proportions as it was reported that one in eight women was afflicted by the ailment. (Constanza, Stoddard, Gaw & Zapka, 2004). According to the popular radio jingles, Cherry and Weiss, (2006), every woman is at risk of breast cancer.

The peak age incidence of breast cancer in Nigeria is reported to be between 45-50 years in contrast to Europe and America where it was reported to be 65-75 years, (Bassey, Irhurhe, Olowoyeye, Adeyomoye & Onajode, 2011). Breast cancer at diagnosis has an impact on the survival rates from the disease as women whose breast cancer was diagnosed at a more advanced stage had a lower 5 year survival rate. (American cancer society, 1999). The 5-year survival rate of breast cancer in Nigeria is less than 10% when compared with over 70% in western Europe and North America. (Okobia & Osime, 2001). Although mortality from breast cancer could be reduced through early detection, studies show that only 20-25% of women routinely examine their breasts (Miller & Miller, 1992), and there is evidence that screening for breast cancer has a favourable effect on mortality from the disease. (Harvey, Miller, Baines & Corey, 1997). According to the American

cancer society, the 5-year survival rate for early localized breast cancer approaches 100%, however, if the cancer has spread, the survival rate is only 60% (American Cancer society, 2009).

The three screening method currently recommended by the American Cancer society (2010) for early detection of breast cancer are clinical breast examination(CBE), mammography and breast self examination (BSE). BSE is a relatively simple, convenient, non-invasive, minimal risk, and inexpensive method of early detection recommended for women. Women should begin this routine in their 20s to learn the look and feel of their healthy breast so that they may report any changes in their breast to a health expert immediately (Janz, Becker, Anderson, & Marcoux, (1989).

The widespread use of screening mammography has decreased the percent of breast cancer found by the patient

herself from about 80% a quarter-century ago, to about 35% today (Lannin & Ponn, 2005). Because women younger than 35 years of age are not routinely invited for mammography screening and are only encouraged to have a CBE once every three years, it is less likely that breast cancer in younger women will be detected using these screening techniques. Thus, BSE is typically the only means of discovering tumors at a stage where treatment and clinical cure are possible for younger women (Fry & Prentice Dunn, 2006). Also, though the risk of breast cancer below the age of 35 is rather low, women who do develop the disease in their 20s and 30s have a much poorer prognosis than women diagnosed at an older age (Umeh & Rogan-Gibson, 2001). Younger women tend to have a reduced survival rate compared to older women due to their cancer being at advanced stages or having lymph node involvement at diagnosis (Fry & Prentice-Dunn, 2006).

Accordingly, it is important to promote regular BSE in young women.

BSE allows women to perform an examination independently (i.e. without relying on a health care professional). It also and often the only screening method available for women without access to professional health care services, such as those that lack adequate health insurance (Erblich, Bovbjerg, & Valdimarsdottir, (2000).

Despite controversy concerning BSE's effectiveness in discovering tumors at an early stage, it is generally accepted as an important adjunct to other detection methods, especially among young women where other screening methods are not routinely used (American Cancer Society, 2010). Although,, BSE has been recommended for many years, research indicates that less than 36% with some estimates as low as 17% of women complete this procedure monthly (Champion &

Miller, 1992, 1997). These low rates are not attributable to a lack of awareness of the recommendations, the American Cancer society (1987) estimated that 95% of women are aware of recommendations to perform a monthly BSE (Miller, 1997). Even among women who routinely conduct BSEs, adherence to specific recommendations is low. Only 20% of women examining their breast carry out more than half of the recommended steps (Luszczynska, 2004). Furthermore, though some lumps are found during a planned BSE and some are found accidentally research shows that completing monthly BSE is significantly more effective than accidental discovery in detecting the disease at an early stage (Kaplan, Weinberg, Small & Herndon, 1991). The one third of breast cancers found by the patient herself still account for close to 70,000 cancers each year in the United States (Lannin & Ponn, 2005).

In addition to detecting breast cancer in early stages, conducting BSE in young women has other benefits. Young women who perform BSEs will familiarize themselves with their health breasts, which will assist them in identifying any abnormalities or differences that may become more likely to occur later in their lives. Establishing health practices that can help when one moves into the age group at risk for breast cancer (45 years and older) is ideal (Budden, 1995).

The evidence regarding the effectiveness of BSE is equivocal. A recent study conducted by Thomas and colleagues (2002) in Shanghai, China tested the effectiveness of an education campaign among 266,000 women in improving breast cancer outcomes. In this study, half of the women were provided instruction about the importance of BSE and its appropriate practice and received frequent reminders, reinforcement and medical supervision for 10-11 years. At the

conclusion of the study, the breast cancer mortality rates were statistically similar to a no – treatment control group. Rates of detected cancer were similar in the control and instruction group and survival time from diagnosis and staging of the disease did not differ significantly by group. Researchers reported that the teaching of BSE did not cause breast cancer to be detected at a sufficiently earlier stage to affect the course of the disease, suggesting that BSE might not play as significant a role in decreasing breast cancer mortality rates as previously thought (Thomas, Gao, Ray, Wang ,Allison, Chen & Burname, 2002).BSE increases number of biopsies or surgery performed on women, and thus revenue for the breast cancer industry and also it increases a woman’s level of depression, worrying and anxiety about breast cancer because it could lead a woman to believe that a lump felt in her breast was cancerous when it was not.BSE could erroneously reassure a

woman who did not feel a lump in her breast that there was no need for further screening.

Kegeles, (1985), Grady,(1992), and Collins (2005) however, concluded that the potential negative aspects to performing BSE were outweighed by the life saving benefit gained from regular BSE performance. Therefore, BSE as pointed by Collins (2005), appeared to have no significantly harmful side effects it is on the basis of this that the American Cancer Society (2000), continued to encourage women to perform monthly BSE as one component of a three part strategy for breast health that included clinical breast examination (CBE) and mammography screening. The key strategy therefore, for reducing breast cancer mortality is increasing the proportion of cases that are detected early through BSE as the woman performs the act herself, and at her convenience (Philip, Harris, Flaherty & Joslin, 1986). Other methods, such as

clinical breast examination and mammography require hospital visitation, specialized equipment and expertise (Vorobiorf, 2001).

According to the Department of Defense health team, (2003). While the incidence of breast cancer diagnosis rises each year, the 5-year survival rate have improved they also indicated that during the past 25years in the United States. A striking change in the presentation of breast cancer occurred more women are finding lumps themselves and the size of the lumps when discovered is getting smaller, all these is as a result of the women being conscious of their breast and how it feels.

Thus encyclopedia Britannica, (2008) medical societies recommend a monthly breast self examination for all women especially those over 20. Also a breast exam by a health care

professional every three years for women 20-39 years old, a yearly mammogram for all women from 40 and above.

### **Benefits of Breast Self examination**

The issue of being breast aware for breast awareness as a whole has lead to the need of being aware of the benefits of breast self examination, because knowing what breast self examination is all about makes for adequate performance of breast self examination to derive or obtain the benefits of breast self examination by the various females.

According to Hill, (1997) he reported that there was good evidence of the benefits of encouraging women to practice breast self examination from the study. It was reported that women who carefully examine their breast could find little masses of breast cancer and their prognosis became better.

Philip (1997) conducted a study, information gotten was that 54.0% of 304 patient (females) with newly diagnosed breast cancer claimed to practice breast self examination. In the study those who performed breast self examination had their symptoms earlier than other subjects. In addition, it was concluded that early diagnosis of cancer possibly influence the rate of patients improvement. Alleviation of disease. It increases life quality and survival.

According to Kinsinger and Harris (2002) they pointed out that here is evidence that excellent physical examination whether clinical breast examination or breast self examination may indeed be effective and also case control evidence that breast self examination done correctly may reduce mortality. Over 80% of breast cancer cases can be treated and cured if cancer is diagnosed and treated in its early stage before the

cancer spread locally or metastasize (White, Urban & Taylor, (1993).

According to Hawkins (2001), BSE has reduced breast cancer mortality by 30-45%. Josefson (2002) stated that teaching women BSE is not cost effective also she implied that it does not lead to improvement in survival from breast cancer. Although, in a large 10 year randomized observational study conducted in Shanghai China, BSE did not lead to earlier detection of breast lesion and increased the number of biopsies of benign breast lumps.

According to Baxter (2001), although self detection was the most frequent method of detection (58.1%) in a group of women aged 40-49 years who were diagnosed with breast cancer less than half of the women found the cancer during BSE, it is well established that early detection of abnormalities is associated with better prognosis of breast cancer it has been

reported that the 5-year survival rate was reached by 85% of affected woman with early detection, whereas later detection decreases the survival rate the fact that some females do not have discriminating ability to correlate the seriousness of the disease with breast self examination practice, may be explained by the fact that it is usually difficult for women to imagine the seriousness of the breast cancer when they are asymptomatic and have little experience of the disease.

Systematic breast self-examination have been recommended for more than 70 years and promoted by the American cancer society and the national cancer institute. Also the American cancer society (ACS) and American medical association (2004) supports the teaching of breast self examination. The American cancer society continues to recommend that women practice breast self examination monthly beginning at the age of 20. They also recommend

breast self examination as a way to become familiar with one's own body and even though current evidence based on information shows that breast self examination does affect survival, it modify the type of invasive intervention that would be required if the tumor is picked up at a later date.

American society of clinical oncology, (2006), believed that until more definition earlier breast cancer detection techniques are developed and available to all women, the practice of monthly breast self examination in conjunction with regular clinical breast self examination and mammography should be encouraged.

### **Method of breast self examination**

Most method according to Baxter, (2001) includes: Visual inspection, Stand in front of a mirror with our upper body unclothed and press both hands behind your head.

Look for changes in the shape, colour and size of our breasts. Check for dimples of the skin or 'pulling in' of the nipples. Check for scaling or a rash on you nipples. Next, place your hands on your hips and tighten the chest muscles by pressing firmly inward while looking for any change from your breasts usual appearance. Perform this step while leaning slightly forward, then again while standing upright.

### **Physical examination**

This involves three methods the circular method, the wheel spokes method or the grid method.

During breast self-examination, be sure to use the flat pads of the fingertips of the 3 middle finger.

### **Circular method**

Use the hand opposite the breast you are examining. Beginning at the outer most top of your breast, press the flat portions of the 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> fingertips into your breast. Moving in small circles slowly around your breast, work toward the nipple. Press firmly to feel deep tissues and gently to feel tissues under the skin. Be sure to cover the entire breast without skipping any areas. Repeat for your opposite breast.

### **Wheel spokes method**

Imagine that your breast is divided into pie shaped sections, much like spoke divide a wheel. Begin at the outermost top of the breast. Press the flat portions of the fingertips into your left breast, moving first toward the nipple,

then away from the nipple. When you complete the section, slide your fingers slightly to the next area and repeat the process gradually moving around your entire breast repeat for your opposite breast.

### **Grind method**

Begin at the innermost portion of the breast, near the breastbone. With the flat portions of the fingertips move down your breast pressing firmly and gently. Slide your fingers slightly and move up your breast, then down and so forth, until the entire breast area has been examined. Repeat for the opposite breast. Whichever method you use, do not skip any areas of the breast. Check for lumps, thickening, or any change from the previous examination.

a) Lying down

To examine your left breast, using one of the 3 methods mentioned, lie flat on your back with a small pillow or a folded towel under your left shoulder. Raise your left arm over your head. Use the flat portions of the 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> fingertips of your right hand to examine the left breast. Press firmly to feel deep tissues and more gently to feel tissues under the skin repeat the entire process for the right breast. In addition, be sure to check the area between the upper outer breast and your armpit as well as the armpit itself. Check the area just above your collarbone for enlarged lymph nodes. Pay special attention to the area between the breast and your armpit, including the armpit itself. Check the area just above your collarbone for enlarged lymph nodes.

b) In the shower

The next part of the breast self examination is performed in the shower, where the soapy wet surface of the skin can

make it easy to feel lumps. Breast self examination in the shower is important because masses in the upper part of the breast are easier to detect while standing upright; masses in the lower part may be felt more easily while lying down. Place your left hand behind your head and with the flat portion of the 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> fingertips of the right hand, examine our entire left breast using one of the methods described. Repeat for your right breast.

Some guidelines suggest mentally dividing the breast into four quadrants and checking each quadrant separately. The palpation process covers the entire breast, including the axillary tail of each breast that extends toward the axilla (armpit).

### **Sources of information about BSE**

There are various sources of breast self examination which include mass media, electronic media, family and

health workers. A cross sectional study was carried out by Parisa, Mirnalin, Nor Afiah and Hejar (2008) on the “knowledge and behavior regarding breast cancer screening among female teachers in Selangor, Malaysia, found that the main sources of information on breast cancer and breast cancer early detection methods were the mass media followed by brochures, friends and doctors or nurses. This finding is quite similar to research done by Ali, Marriam, Iraj, Amir, Akram, & Fatemeh (2008) whereby the main sources of information about breast cancer were mass media (48%) and followed by friends (20%) but the most obvious difference between these two studies are a very low proportion of women indicated that they have received any information from their doctors. Primary health care professionals should play an important role in conveying correct information regarding breast cancer.

Salaudeen, Akande, Musa (2009) found out that more than half of the study respondents (81.9%) had heard about BSE. Most of the respondents (23.6%) reported that television as their first source of information followed by (18.6%) health workers (18.2%) radio (15%) print media and (6.5%) from their friends. However,, from the result Umran, Senay, Habibe, Fatma & Berna (2005) found that the commonest sources are newspaper and magazines (19.6%). On the other hand, CHioma and Asuzu (2007) did not collect data for source of information about breast cancer. They found out that the sources are radio, television, health workers, school, church and the commonest source of breast cancer is television. Hence, from these literatures the commonest source of information about breast self examination and breast cancer are print and electronic media. This is probably because these sources are easily found, more attractive as those medias may

include visual aids as well as providing proper and correct information. Furthermore with the level of education of the respondents, they were able to read newspaper and other relevant document watch television and browse the internet health information.

### **Practice of breast self examination**

Practice of breast self examination is very important as women can detect changes that occur in their breasts. Practice of breast self examination could be regular or irregular among women. There are few studies that revealed low and average to high practice of breast self examination. A study was done by Ozgul, Aklime and Arzu (2008) with the title “effects of peer and group education on knowledge, beliefs and breast self examination practice among university students in Turkey. This study included a total of 193 female university students, of whom 59 were assigned to peer education and 134 to group

education. Data collected at baseline and after six months included socio demographic characteristics, knowledge of breast cancer and breast self examination and performance of breast self examination. Effects of peer and group education was using champions health belief model scale. This study found that the rate of regular breast self examination increased from 25.9% to 55.7% six months after peer education and from 45.5% to 62.2% after group education. The rates of performance of BSE increased frequency of BSE following peer and group education can be attributed to increased knowledge about skills for BSE, increased perceived benefits and confidence and decreased barriers. This study revealed that peer and group education were equally effective in reaching the aims of increased knowledge about and frequency of BSE. Therefore, nurses and other health care

providers may choose either peer or group education to increase breast awareness among young women.

There are very few students who practices. Breast self examination Umran, Senay, Habibe, Fatma, Gulhan & Berna (2005) discovered that only 46 out of 160 respondents perform BSE. Among 46 students 8 conducted an examination once a month, 7 of them conducted BSE once a week, 3 once in every 6 months and 28 could not remember when they performed BSE. Similarly, Chioma and Asuzu (2007) found only 25 out of 228 respondents actually practiced BSE regularly. This is a very small number compared to the whole population study. In addition, Salaudeen, Akane & Musa, (2009) reported that, the respondents who practiced breast self examination were 213 out of 700 students. The frequency of practice of BSE also varied. Thirty of them practiced weekly, 35 monthly, 40 every 2-4months 30 every 5-6months, 50 every 7-11 months and 28

mentioned other time interval. From these research, it indicates that the practice of BSE was poor and students did not perform BSE. The time interval was too long for one examination to another and this may could students not been able to familiarize themselves with their own breast condition. This shows that efforts are needed to encourage the practice of BSE among female students.

### **Barrier of breast self examination practices**

There are several reason given by respondents about the barriers of practicing breast self examination. A cross-sectional study was carried out by Parisa, Mimalini, Nor Afiah, & Hejar (2008) on the knowledge and behavior regarding breast cancer screening among female teachers in Selangor, Malaysia. The study involved 425 female secondary school teachers and the researchers obtained the information about

barriers that limit the women from practicing regular breast self examination as recommended. The women were allowed to state more than one reason. The most common barriers were inadequate knowledge of breast cancer screening, too busy, forgetfulness, embarrassment and fear of cancer diagnosis.

Another study carried out by Majeda, Kamel, Samia & Gamal (2008) with the title of “knowledge and factors affecting breast self examination among Kuwaiti women”. Data was collected from 966 educated Kuwaiti female volunteers through self administered questionnaire. A total of 609 women did not practice breast self examination. This study found that the main reasons for not practicing breast self examination were fear of cancer discovery (13.5%), forgetfulness and failure to realize its importance (15.3%). Moreover, 28.9% did not know the method of examination.

Both of the studies by Parisa , Mimalini, Nor Afiah, & Hejar (2008), and Majeda Kamel, Samia & Gamal, (2008) found out the respondents in the studies gave almost similar answers of not practicing breast self examination. This also happened to be the same in the study conducted by Salaudeen et al (2009) other reasons given were absence of lump during previous examination (22.7%) and 8.1% of the respondents stated that it ws not necessary.

### **Risk factors of breast cancer**

The following are some of the risk factors for breast cancer.

- i. Gender factor: being a woman was found to be the single most important risk factor for breast cancer. Although men could get breast cancer, male breast accounted for less than 1% of breast cancer cases (American cancer society, 2004).

- ii. Physiological factor: physical activities can have an impact on the risk of breast cancer as moderate physical activity is associated with a lower risk of breast cancer. (Robbins, Cotran & Kumar, 2001)
- iii. Environmental Factors: international agency for research on cancer (2000) stated that women exposed to ionizing radiation due to nuclear war and medical diagnostic therapeutic procedures are more at an increased risk of developing breast cancer for instance, if you received radiation therapy as a child or young adult to treat the chest area, you stand a higher risk of developing breast cancer the younger you started such radiation and the higher the dose, the higher your risk, especially if the radiation was given during breast development, (Hayes, 2007).

- iv. The use of oral contraceptives and long term estrogen replacement by postmenopausal women was also found to be a risk factor for breast cancer (American Cancer society, 1999).
- v. Breast condition: women with highly dense breast tissue have 2-6 times risk of breast cancer compared to women with least dense tissue (American cancer society)
- vi. Diethylstilbestrol (DES) factor: women who took diethylstilbestrol (DES) to prevent miscarriage may have an increased risk of breast cancer after age 40.
- vii. Obesity: obesity has been linked to breast cancer. The theory is that obese women produce more estrogen which can fuel the development of breast cancer (American cancer society, 1999).
- viii. Reproduction factor: another risk factor related to women's reproductive function. A woman who had never

been pregnant or was older than the age of 30 at first pregnancy, had fewer pregnancies was younger at menarche and was older at menopause was at greater risk for breast cancer (Davis & Bradlow,1995).

- ix. Genetic predisposition: a positive family history, in the opinion of Oussama and Atord, (2006), increases the risk of breast cancer in first line /degree relatives (mother, sister or daughter). Furthermore, the probability of genetic inheritance increase if there are multiple affected relatives and the cancer occurs at a younger age. Supporting this view the American cancer society (2000) asserted that women with a family history of breast cancer were equally at greater risk.
- x. Age factor: being over the age of 50 also increased a woman's risk for breast cancer.

- xi. Hammond Factor: writing group for women's health initiative investigators, (WGWHII, 2002) revealed that hormone regulation is important in the development of breast cancer as current users of hormone replacement therapy are at higher risk of developing breast cancer than women who have never use hormone therapy. Also, the risk increases with duration of use while it decreases significantly following cessation of use.
- xii. Alcohol intake: the use of alcohol is clearly linked to an increased risk of developing breast cancer. The risk increases with the amount of alcohol consumed. Compared with non drinkers, woman who consume 1 alcoholic drink a day have a very small increase in risk compared to those who take 2 to 5 drinks daily who have about 1.5 times the risk of women who don't drink alcohol.

- xiii. Race and ethnicity: overall, white women are slightly more likely to develop breast cancer than are African-American women, but African American women are more likely to die of this cancer. However, in women under 45 years of age, breast cancer is more common in African-American women. Asian, Hispanic and Native-American women have a lower risk of developing and dying from breast cancer.
- xiv. Certain benign breast conditions: women diagnosed with certain benign breast conditions might have an increased risk of breast cancer. Some of these conditions are more closely linked to breast cancer risk than others. Doctors often divide benign breast conditions into 3 general groups depending on how they affect this risk they are non proliferative lesions, proliferative lesions without atypia.

- xv. Personal history of breast cancer: a woman with cancer in one breast has a 3 to 4 fold increased risk of developing a new cancer in the other breast or in another part of the same breast. This is different from a recurrence (return) of the first cancer.
- xvi. Stress and anxiety: there is no clear proof that stress and anxiety can increase breast cancer risk. However anything you can do to reduce your stress and to enhance your comfort, joy and satisfaction can have a major effect on your quality of life. Mind measures such as meditation, yoga, visualization exercise and prayer may be valuable additions to your daily or weekly routine.

### **Signs to look out for in the breast**

Haiken (2003) identified the following as signs and changes in the breast.

### **Pain in the breast or chest**

Whether it's an ache, throb, twinge, or sharp stab, pain or discomfort in the breast or chest area is not a good sign. One breast cancer survivor described the pain she brought to her doctor's attention as a "sharp pain that comes and goes". Another describes it as a "mild electric sensation that went from her left breast to her left breast to her right nipple. Breast tumors can take many different forms, there can be a single lump, but there can also be an area of scattered seed-like tumors or an amorphous shape with multiple tentacles extending into the tissues. The tumor might also be directly behind the nipple or in one of the milk ducts. All this growth causes different types of pain and discomfort. As many as 30 percent of all breast cancer tumors are the reasons which makes cancerous lumps harder to detect. Keep track of when, where and how often the pain occurs. Tell your doctor, being as specific as possible making sure to clear that the pain is a

new symptom, different from any sensation such as the sore breast of pre-menopausal syndrome (PMS) you have experienced before.

### **Itchy breast**

This symptom, primarily associated with inflammatory breast cancer, is often missed. Many women with inflammatory breast cancer spend months visiting the dermatologist only to be sent home with creams and medications for a rash. It is extremely itchy, the type of itch you might have with poison oak or ivy, which makes you feel like you absolutely have to scratch except scratching doesn't help and neither do the ointments that typically relieve itchiness. Your breast may also feel irritated, or the skin may be scaly or dimpled like cellulite. This is caused by fast growing cancer cells block, blood and lymph vessels that feed the skin. The normal flow of lymph through breast tissues is

impeded and fluid builds up in an under the skin. The median age of diagnosis for inflammatory breast cancer is 57, 54 among African American women and it is typically more aggressive than other types of breast cancer with a five year survival rate of 34 percent. If the skin of your breast looks odd or your breast feels different, see your doctor right away.

### **Upper back, shoulder and neck pain**

In some women breast cancer is felt in the back or shoulders rather than in the chest or breast. For this reason, spine specialists routinely look for the presence of tumors when treating chronic back pain that is unrelieved by physical therapy. The pain, which is typically in the upper back or between the shoulder blades, is easily confused with sore muscles, a pulled tendon or ligament, or osteoarthritis of the spine. The difference is that it doesn't go away with stretching muscles or changing position. Bone pain feels like a deep ache

or throbbing. It is mostly caused by the development of breast tumors in the glandular tissue of the breast, which extends deep into the chest, close to the chest wall. If the tumor growth pushes backwards, towards the ribs and spine, the resulting pain may be felt in the back rather than in the breast. The first place breast cancer usually metastasizes or spreads is to the spine or ribs, becoming secondary bone cancer. Pay close attention to how back pain feels. It doesn't go away with rest, stretching, or physical therapy, see your doctor. Keep the doctor informed if back pain continues despite treatment and request for a bone scan.

### **Changes in breast shape, size or appearance**

Contrary to popular belief, not all breast tumors causes a hard lump close enough to the surface to be noticeable. Instead of feeling a lump one can notice that one breast is more oval than the other or one hanging down lower and sort

of sticking out to one side because this change is one of appearance more than feel, your partner may notice it before you do. Or you might become aware of it as you put on your bra or look at yourself in the mirror at the gym. This can be caused by tissue growth that is deeper in the breast or masked by dense breast tissue may push out the shape or size of the breast without causing a noticeable lump. If you have been told you have dense breast tissue, be particularly alert for this sign. Study the size and shape of your breast in a mirror. Sit facing the mirror and look at both breasts dead on, then raise your arms, turn sideways and look from each side. If there is a difference in size or shape you have not noticed before, bring it to your doctor's attention.

### **A change in nipple appearance or sensitivity**

One of the most common locations for a breast tumor is just beneath the nipple which can cause changes in

appearance and feel to the nipple itself. One may notice that one of the nipple sticks up less than it used to, or it might have become inverted, flattened, or indented. Women with breast cancer often recall that they noticed a decrease in nipple sensitivity, which is most likely to come to your attention or your partner's attention during sex. Another nipple change to take seriously is discharge when you are not breastfeeding which can either be bloody, milky or watery. The skin of the nipple may become crusty, scaly or inflamed. This is usually caused as a result of breast cancer starting in the milk ducts just under and around the nipple, affecting the nipple's appearance or causing pain or discharge. There is also a rare cancer, Paget's disease of the breast that specifically strikes the nipple. A tumor in the milk ducts, just behind or to one side of the nipple, pushes the nipple aside. As tumors grow, they may attach to and thus retract the skin or the

nipple itself. The tumor might also cause irritation and infection, leading to discharge. Because some women have naturally inverted nipples or have discharge during and post pregnancy, a doctor won't necessarily notice this symptom. Since you are the one who knows best what your nipple look like, pay close attention to any changes and discuss them with your doctor.

### **Swelling or lump in your armpit**

Any pain in the armpit is a sign to check the area carefully with your fingers. A lump under the armpit is likely to be hard and attached to surrounding tissues, so it does not move when you touch it. Or tissue may feel thickened and dense compared with the armpit on the other arm. A lump in your armpit feels like a sore or tender spot under the arm. You may also feel a lump though not necessarily. Affected lymph nodes may feel swollen or tender or develop a lump before a

tumor is big enough to be felt in the breast itself. In some women, the swelling is more prominent under the arm or up under the collar bone. The lymph nodes in your armpit are where breast cancer spreads first, by way of lymphatic fluid that drains from the breast. Since the lymph nodes are the first place it is likely to metastasize, breast cancer is staged according to whether it is lymph node positive or negative. Colds, flu and infection can also cause swollen lymph nodes, so if you are sick or have an infection, wait for it to clear up before you worry. But if a lump or tender spot in the underarm area persists for a week with no apparent cause, see your doctor.

### **Red, swollen breasts**

When your breast hurts, it is easy to conclude that it is the typical soreness of PMS. And if your breasts feel hot or look reddened, you might suspect an infection such as

mastitis. But these are also signs of inflammatory breast cancer.

It feels as if the breast has a fever. They may feel swollen and sore, or the skin and underlying tissue may feel hot or look red even purple. Inflammatory breast cancer is the most likely cause of this symptom. But breast tumors can also push on tissues, causing breast to feel swollen and sore. In this case, one may also see that the breast is distended.

## **Summary**

Breast cancer, a global health problem can be treated when detected early. Every woman is at risk of breast cancer, hence females should practice. Breast self examination (BSE) regularly which is relatively simple, convenient, non invasive, minimal risk, and inexpensive method compared to the other two screening method; mammogram and clinical breast examination which requires hospital visitation, specialized

equipment and expertise. Women should begin BSE at an early age (age 20) so that they can learn the look and feel of their healthy breast so as to report changes in their breast to a health expert immediately. Women are encouraged to do a CBE once every three years. BSE is the only means of discovery tumors by the individual at an early stage where treatment and clinical cure are possible for younger women. Most breast cancer lumps are found by the patients themselves, although BSE increases the number of surgery performed on an individual because, it can make a woman to believe that a lump felt in her breast was cancerous when it was not. BSE benefits women who practice it regularly, hence detecting lumps early, which in turn result in early treatment and also help them know how their breast feel and look like. BSE can be carried out using either the circular method, the wheel spokes or the grid method. Information on BSE is

usually from mass media, print media, internet, health care providers, friends, schools, home and churches/mosques. The frequency of practicing BSE is based on the individuals' family history of breast cancer, personal history of breast cancer, awareness of BSE, level of education and social status of parents. One's age, use of contraceptive, obesity, genetic and gender predisposes one to breast cancer. Signs of breast cancer ranges from pain in the breast or chest, itchy breast, upper back, shoulder and neck pain, changes in shape, size and appearance of breast, change in nipple appearance or sensitivity, swelling or lump in your armpit to red, swollen breast. Therefore one can prevent breast cancer through preventive surgery, medication, controlling of one's weight, regular exercise, limiting one's does of hormone therapy and alcohol intake, increasing the duration of breast feeding and also regular breast cancer screening.

## **CHAPTER THREE**

### **METHODOLOGY**

This chapter describe the methods used in conducting the study. Specifically the method is laid out under the following sub – headings;

- Research design
- Population of the study
- Sample and sampling techniques
- Research instrument
- Validation of the instrument
- Reliability of the instrument
- Method of data collection
- Method of data analysis

#### **Research design**

The research design is a descriptive survey design. This design was adopted due to its suitability for a study of this nature (Bowling, 1999) reports revealed that survey research enables the collection of detailed and factual information. Survey research also describes existing phenomenon and it justifies current conditions and practices.

### **Population of the study**

The population of the study consist of all female undergraduate students of the University of Benin, Benin City, Edo State. The population at the time of this study was 11,095 students. (Academic Planning Council, 2014).

### **Sampling and sampling technique**

The sample size of this study is 335 female undergraduate students of the University of Benin, Benin City, Edo State. At this stage the proportionate sampling technique was used and 3% of the population was used representative

sample. Therefore the total representative sample of the population was approximately 333 students. The respondents were further selected with the use of the simple random technique through balloting.

### **Research instrument**

The type of instrument in this research was the questionnaire. The questionnaire was developed by the researcher specifically for the study.

The questionnaire is divided into two sections A and B. Section A consisted of the bio – data of the respondents such as age, religion, marriage status, level and faculty.

Section B consisted of twenty items drawn from the research questions raised in chapter one.

### **Validity of the instrument**

The questionnaire was given to the researcher's supervisor and two other lecturers in the field of Health Education for corrections in the final draft of the questionnaire.

### **Reliability of the instrument**

In order to establish the liability of the instrument, the test – retest method was used. The questionnaire was administered twice to the same set of respondents at two different intervals. Thereafter the data generated from both administrations was analyzed with the use of Pearson product moment correlation coefficient.

### **Method of data collection**

The questionnaires were distributed to the respondents after a careful explanation of areas likely to be misunderstood. The researcher waited for the questionnaires to be completed and retrieved them immediately to ensure a high rate of return.

### **Method of data analysis**

The method of data analysis was the simple percentage and frequency.

## **CHAPTER FOUR**

### **DATA ANALYSIS AND DISCUSSION OF RESULTS**

This chapter deals with analysis and interpretation of data collected from respondents. The main purpose of this study was to assess the level of knowledge and practices of breast self examination (BSE) among female undergraduate students of the University of Benin, Benin City.

#### **Research Question One**

What is the level of knowledge of breast self examination among female undergraduate students of the University of Benin?

**Table I:** Responses on the level of knowledge of breast self examination.

S/N	ITEM STATEMENT	RESPONSES = 333			
		(YES) POSITIVE RESPONSE		(NO) NEGATIVE RESPONSES	
		Frequenc y	Percentag e	Frequenc y	Percentage
1.	I have heard of BSE.	285	85.6%	48	14.4%
2.	I know how to perform BSE.	214	64.3%	119	35.7%
3.	I am sure of the steps to follow in performing BSE.	135	40.5%	198	59.5%
4.	When looking in the mirror I can recognize abnormal changes in my breast.	119	35.7%	214	64.3%
5.	BSE is the only means of discovering in the breast at an early stage by the individual.	113	33.9%	220	66.1%

It can be observed from row of Table I that out of 333 respondents, 285 respondents representing 85.6% indicates the facts that the female students of the University of Benin have heard of breast self examination, while 48 respondents representing 14.4% have not heard of breast self examination.

**Conclusions:** From the findings, it is indicated that majority of the respondents have heard of breast self examination.

Row 2 of Table I, 214 respondents representing 64.3% know how to perform breast self examination while 119 respondents representing 35.7% do not know how to perform breast self examination.

**Conclusions:** Based on the findings, majority of the respondent know how to perform breast self examination.

Row 3 of Table I, shows that 135 respondents representing 40.5% are sure of the steps to follow in

performing breast self examination, while 198 respondents representing 59.5% are not sure of the steps to follow.

**Conclusions:** Based on the findings, it is observed that majority of the respondents are not sure of the appropriate steps to follow in performing breast self examination.

Row 4 of Table I show that 119 respondents representing 35.7% can recognize abnormal changes in their breast when looking in the mirror while 214 respondents representing 64.3% cannot recognize abnormal changes in their breast when looking in the mirror.

Conclusion: From the findings, it is observed; majority of the respondents cannot recognize abnormal changes on their breast when looking in the mirror.

Row 5 of Table I, indicates that 113 respondents representing 33.9% agreed that breast self examination is the only means of discovering abnormalities in the breast at an

early stage by the individual, while 220 respondents representing 66.1% disagreed.

Conclusion: It is observed from the findings that majority of the respondents do not know that breast self examination is the only method of prevention that can be carried out by the individual herself.

**Research question two:**

How frequently do female undergraduate students of the University of Benin practice?

**Table II:** responses on how frequently breast self examination is practised

S/N	ITEM STATEMENT	RESPONSES = 333			
		(YES) POSITIVE RESPONSE		(NO) NEGATIVE RESPONSES	
		Frequenc y	Percenta ge	Frequenc y	Percenta ge %
1.	I perform BSE weekly	12	3.6%	321	96.4
2.	I perform BSE monthly	107	32.1%	226	67.9
3.	I perform BSE every six month	39	11.7%	294	88.3
4.	I perform BSE year	54	16.3%	279	83.8
	Total performance	212	63.7%		
5.	I have never perform BSE	121	36.3	212	63.7

It can be observed from the table II that 12 respondents representing 3.6% perform breast self examination weekly while 321 respondents representing 96.4% do not perform BSE weekly.

**Conclusion:** from the findings, it is observed that majority of the respondents do not practices breast self examination weekly.

Row 2 of table II shows that 107 respondents representing 32.1% perform breast self examination monthly while 226 respondents representing 7.9% do not.

**Conclusion:** from the findings, it was observed that majority of the respondents do not perform breast examination monthly.

Row 3 of table 2 indicates that 39 respondents representing 11.7% perform breast self examination every six months while 294 respondents representing 88.3% do not.

**Conclusion:** From the findings, it is observed that majority of the respondents do not perform breast self examination every six months.

Row 4 of table II shows that 54 respondents representing 16.3% perform breast examination yearly while 27.9 of the

respondents represent 83.8% do not perform breast self examination once every year.

**Conclusion:** it is observed, from the findings, that majority of the respondents that practice breast self examination, do monthly breast self examination.

Row 5 of table shows that 121 respondents representing 63.7 performs breast self examination at least once a year.

**Conclusion:** from the findings, it is observed that majority of the respondents performs breast self examination at least once a year.

**Research question three:**

What are the reasons for not performing breast self examination among female undergraduate students of the University of Benin.

**Table III:** Response on the reasons for not performing breast self examination.

S/N	ITEM STATEMENT	RESPONSES = 333
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		<b>(YES) POSITIVE RESPONSE</b>		<b>(NO) NEGATIVE RESPONSES</b>	
		<b>Frequency</b>	<b>Percentage</b>	<b>Frequency</b>	<b>Percentage</b>
1.	I do not perform BSE because I do not know how to go about it.	119	35.7%	214	64.3%
2.	My culture does not encourage the practice of BSE.	21	6.3%	312	93.7%
3.	My religion does not support the practice of BSE.	9	2.7%	324	97.3%
4.	I do not perform BSE because there is no history of breast cancer in my family.	48	14.4%	285	85.6%
5.	Performing BSE will make me worry about breast Cancer.	40	12%	293	88%

It can be observed from Row 1 of table III three that 119 respondents representing 35.7% do not perform breast self examination because they do not know how to go about it while 214 respondents representing 64.3% disagrees.

Row 2 of table III shows that 21 respondents representing 6.3% do not practice breast self examination because their culture do not encourage the practice of breast self examination while 312 respondents representing 93% disagree that culture influence one's practice of breast self examination.

**Conclusion:** from the findings, it is observed that majority of the respondents is of the notion that their culture does not affect one's practice of breast self examination.

Row 3 of table III shows that 9 respondents representing 2.7% agreed that they do not practice breast self examination because their religion does not support it while 324 respondents representing 97.3% disagreed.

**Conclusion:** from the findings it is observed that majority of the respondents agreed that religion is not a barrier to the practice of breast self examination.

Row 4 of table III shows that 48 respondents representing 14.4% does not practice breast self examination because there is no family history of breast cancer.

**Conclusion:** from the findings, it is indicated that a majority of the respondents agreed that family history of breast cancer is not a barrier for not practicing breast self examination.

Row 5 of table III shows that 40 respondents representing 12% agreed that performing breast self examination will make them worry about breast cancer while 293 respondents representing 88% disagreed.

**Conclusion:** from the findings, it is indicated that a majority of the respondents disagreed that practicing breast self examination will make them worry about breast cancer.

#### **Research question four**

Is there a relationship between knowledge of breast self examination, parental educational background, media, age,

level of education and course of study among the female students of the University of Benin?

**Table IV:** Response on the relationship between knowledge of BSE, parental educational background, age, level of education and course of study.

S/N	ITEM STATEMENT	RESPONSES = 333			
		(YES) POSITIVE RESPONSE		(NO) NEGATIVE RESPONSES	
		Frequency	Percentage	Frequency	Percentage %
1.	I became aware of BSE due to my educational exposure.	200	60.1%	133	39.9%
2.	I became aware of BSE as a result of why parent's social status.	47	14.1%	26	85.9%
3.	I became aware of a BSE through the media.	253	76.0%	80	24.0%
4.	My knowledge of BSE increased as I matured in age.	285	85.6%	48	14.4%
5.	My course of study influenced my knowledge of BSE.	102	30.6%	231	69.4%

It can be observed from Row 1 of table IV that 200 respondents representing 60.1% agreed that they became

aware of breast self examination due to their educational exposure while 133 respondents representing 39.9% disagreed.

**Conclusion:** from the finding, it is indicated that a majority of the respondents became aware of breast self examination due to their educational exposure.

Row 2 of table IV shows that 47 respondents representing 14.1% agreed that they became aware of breast self examination as a result of their parent's social status while 286 respondents representing 85.9% disagreed that their parent's social status influenced their knowledge of breast self examination through the media. While 80 respondents representing 24% disagreed.

**Conclusion:** from the findings, it is indicated the majority of the respondents became aware of breast self examination through the media.

Row 4 of table IV shows that 285 respondents representing 85.6% agreed that their knowledge of breast self examination increased as they matured while 48 respondents representing 14.4% disagreed.

**Conclusion:** from the findings, it is observed that majority of the respondents' knowledge of breast self examination increased as they matured in age.

Row 5 of table IV shows that 102 respondents representing 30.6% agreed that their course of study influenced their knowledge of breast self examination, while 231 respondents representing 69.4% disagreed.

**Conclusion:** from the findings, it is indicated that majority of the respondents knowledge of breast self examination was influenced by their course of study.

### **Discussion of Findings**

The discussion is based on the statistical analysis of the questionnaire which was divided into sections reflecting the four (4) research questions used in the study.

According to popular radio jingles, cherry and Weisis(2006), every woman is at risk of breast cancer and early detection is the key for survival. Breast self examination is one of the screening method recommended by the American Cancer Society (2010) for early detection of breast cancer.

From table one analysis, it is obvious that there is positive knowledge of breast self examination and knowledge on how to perform breast self examination due to the 85.6% who have heard of breast self examination and 64.3% who can perform breast self examination this is promising because, according to Akande and Musa (2009) on knowledge and attitudes to breast cancer and breast self examination among female undergraduates in Nigeria, the results shows that 81.9% had

heard of breast self examination. Also according to Awatif (2006) with the title 'knowledge off breast cancer and risks and protective factors among women in Riyadh', the results shows that 82% of the respondents know about breast self examination.

Also research question two, how frequently do female undergraduate students practice breast self examination? The findings observed that the practice of breast self examination is positive because 63.7% of the respondents practiced breast self examination, this is promising because according to Lannin & Ponn, (2005), one third of breast cancer lumps are found by the individual. Also Kaplan, Weinberg, Small& Herndon,(1991), some lumps are found during a planned breast self examination and some are fond accidentally. Completing monthly breast self-examination is significantly more effective than accidental discovery in detecting the

disease at an early stage. The high practice of breast self-examination is regarded as a good cause in the fight of breast cancer because according to Lerner, (2002) added that breast self examination is strategy that empowers women who are concerned with having healthy breasts.

From research question three, what are the reasons for not practicing breast self examination among female undergraduate students of the University of Benin? The findings observed that culture, religion, family history of breast cancer, having no knowledge of breast self examination and worrying over breast cancer do not significantly influence the practice of self breast examination which is in contrast with the study carried out by Akande & Musa(2009) found that majority of the respondents mentioned that their reason for not practicing breast self examination was forgetfulness, lack

of time , followed by lack of lump during previous breast self examination.

Finally, from research question four; is there a relationship between knowledge of breast examination, parental educational background, media, age, level of education and course of study among female undergraduate students of the University of Benin? Findings show that there is a relationship between knowledge of breast cancer, media, age, level of education and course of study because of 76%, 85.6%, 60.1% and 30.6% of the respondents respectively acknowledges their knowledge of breast self examination to the media, maturity, level of education and course of study. Which is in support of a study carried out by Parisa, Mirnalin, Nor Afiah and Hejar(2008) on the knowledge and behaviour regarding breast cancer screening among female teachers in Selangor, Malaysia, found out that the main source of

information on breast cancer and breast cancer early detection methods were the mass media.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATION**

This chapter presents the summary, conclusion and recommendation of the study.

#### **Summary**

The purpose of the study was to find out the level of knowledge of breast self examination among female undergraduate students of the University of Benin, if they practice it and how often they practice it.

Research questions were stated

1. What is the level of knowledge of breast self examination among female undergraduate students of the University of Benin?
2. How frequently do female undergraduate students of the University of Benin practice BSE?

3. What are the reasons for not performing BSE among female students of the University of Benin?
4. Is there a relationship between the knowledge of BSE, Course of study, family background and level of education?

### **Main findings**

From the analysis of the data collected, it was concluded that the female undergraduate students of the University of Benin are actually aware of Breast Self Examination. A percentage of 82.5% responded to have heard of breast self examination and 65.8% know how to perform breast self examination.

The female students in the University do actually practice breast self examination, 65.8% practice breast self examination while 48.9%% know how to perform breast self examination thoroughly and correctly.

The female students engage in breast self examination as often as possible, 12.0% weekly, 20.0% monthly, 12.6% every six month and 16.3% yearly while 39.1% have never performed BSE. Only a number of 32.0% actually perform it regularly.

### **Conclusion**

It is evident that from the findings that the female students are aware of breast self examination and they practice it and they practice it often. But it was also evident that they do not practice it at the required time. Only of the respondents have knowledge of the correct steps to follow in performing breast self examination and only practice it effectively, through their reasons cannot be linked to lack of awareness but it could be as a result of not having a detailed knowledge on the practice of breast self examination and also it could be linked to the level of relevance placed on breast self

examination. This study indicated that there is some gap that needs to be addressed in order to enhance the knowledge and improve the practice of breast self examination among female University students.

### **Recommendations**

Mass media should be utilized to disseminate correct, detailed and relevant information about breast self examination to female students and women in general in the University of Benin.

Further research should be conducted to look into the reasons for not practicing breast self examination often and thus to select suitable strategies to sustain regular practice over time.

Educational programs should be designed and implemented with the aim of increasing female competence in breast self examination to enable them to practice it efficiently and effectively.

Although the results are promising, the students need to be assisted throughout their study years to develop health behaviour needed in order to assume their own responsibility towards prevention.

Breast self examination should be routinely taught to women when possible in the various faculties.

A full discussion of breast self examination including risk should be provided for female students who request it and who need it.

Females should be taught the skills so that they can perform breast self examination proficiently.

All females should be counselled to perform monthly breast self examination. Also females should be aware that monthly breast examination does not replace clinical mammography.

Further studies should be done to address the knowledge gaps on breast self examination and the practices on BSE.

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**DEPARTMENT OF HEALTH ENVIRONMENTAL EDUCATION AND  
HUMAN KINETICS (HEK)  
FACULTY OF EDUCATION  
UNIVERSITY OF BENIN  
BENIN CITY**

**A STUDY ON THE KNOWLEDGE AND PRACTICES OF BREAST  
SELF EXAMINATION (BSE) AMONG FEMALE UNDERGRADUATE  
STUDENTS OF UNIVERSITY OF BENIN**

Dear Respondent,

The purpose of this questionnaire is to obtain information for research project on Knowledge and Practices of Breast Self Examination (BSE) among Female Undergraduate Students of University of Benin

Your co-operation in filling the questionnaire is therefore solicited. Your information will be used strictly for the purpose of the study and will be treated as strictly confidential and objectively and frankly as possible.

**Instruction:**

Please tick (√) which is appropriate to you from boxes below.

1. Age: 15 – 20 ( ), 21 – 25 ( ), 26 – 30 ( )
2. Marital Status: Single ( ) Married ( )
3. Level: 100 ( ), 200 ( ) 300 ( ), 400 ( ), 500 ( ), 600 ( )

4Faculty: \_\_\_\_\_

5 Religion: Christianity( ), Moslem( ), African tradition( )

Please tick (√) against the following statement below:

**SA** = Strongly Agree

**A** = Agree

**D** = Disagree

**SD** = Strongly Disagree

<b>S/N</b>	<b>QUESTION</b>	<b>SA</b>	<b>A</b>	<b>D</b>	<b>SD</b>
1	I have heard of BSE				
2	I know how to perform BSE				
3	I am sure of the steps to follow in performing BSE				
4	When looking in the mirror, I can recognize abnormal changes in my breast				
5	BSE is the only means of discovering abnormalities in the breast at an early stage by the individual				
6	I perform BSE weekly				
7	I perform BSE monthly				
8	I perform BSE once every six month				
9	I perform BSE yearly				
10	I have never performed BSE				
11	I don't perform BSE because I don't know how to go about it				
12	My culture does not encourage the practice of BSE				
13	My religion does not support the practice of BSE				
14	I do not perform BSE because there is no history of breast cancer in my family				
15	Performing BSE will make me worry about breast cancer				
16	I became aware of BSE due to my educational exposure				
17	I became aware of BSE as a result of my parent's social status				
18	I became aware of BSE through the media				
19	My knowledge of BSE increased as I matured in age				
20	My course of study influenced my knowledge of BSE				

