

Assessment of Breast Cancer Knowledge, Attitudes and Breast Self-Examination Practice among Adolescent Girls with Visual Impairment in Ibadan

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Abstract: *Breast cancer is an epidemic, posing a serious threat to the health of women of all races globally. In Nigeria, cervical cancer was the commonest cause of cancer related deaths among women for several decades but breast cancer is now the leading cause of cancer related deaths among Nigerian women. The study investigated the knowledge, attitude and practice of breast self-examination among visually impaired female adolescents. The study adopted a descriptive research design using an ex-post facto method. The study sample consisted of 50 female visually impaired students with age range of 12-36 years were randomly selected among the participants. Three instruments were used in the collection of data: breast self-screening related knowledge ($\alpha = 0.67$); attitude towards breast self-examination as ($\alpha = 0.65$); practice towards breast self-examination as ($\alpha = 0.75$). Four research questions were raised and answered. Data collected were analysed using frequency count. Results obtained indicated that the respondents are knowledgeable about breast cancer. The result also showed that they are aware of breast self-examination. The result of the study showed deficiency in screening practices even among those who were aware of the screening methods. Attitude towards Breast self-examination (BSE) was also found to be positive among participants of the study. In conclusion, the lack of knowledge, attitude rates and practice reported in this study indicate an urgent need to design intervention/programmes to enhance breast self-examination among participants in this setting. It is however recommended that efforts must be made to raise awareness of the pros and cons of breast self-examination to assist the visually impaired adolescents to make informed decisions. Public health education is a factor that impacts on young women's knowledge and understanding of breast cancer. Based on these young women's responses, it has been concluded that current public health education is either not communicating its message or failing to reach enough women, resulting in confusion and misinformation.*

Keywords: *Breast Cancer Knowledge, Attitudes and Breast Self-Examination*

Introduction

Cancer is becoming a leading cause of death worldwide. Breast cancer is the most common form of cancer among females in developed and developing countries. According to World Health Organization (WHO) report there were about 519,000 women who die from breast cancer annually and more new cases are found, which is estimated to be one millions of women develop breast cancer each year approximately (WHO, 2010). Early identification of breast abnormality is an essential factor that signals special attention. The Center for Disease Control (CDC) stated that early detection is the best defense against morbidity and mortality from breast cancer. Preventive measures such as breast cancer awareness and early screening would contribute to reduction of breast cancer morbidity and mortality. Empowering women with breast cancer knowledge would assist them in modifying their behavior and seek early screening and medical assistances (McCready, Littlewood & Jenkinson, 2005). Breast cancer is the most common cancer among women. It is becoming an issue of concern in women's health (Austein, 2006).

A woman who was advised about BSE by health care providers demonstrated greater knowledge, confidence and was likely to practice it routinely (Abu-Salem & Hassan 2007) and (Hacihasanoğlu & Gzüm, 2008). The American Cancer Society and National Cancer Institute recommend BSE as one of three screening practices for early breast cancer detection. However, there is controversy about the effect of BSE that has been discussed in many studies (McCready, Littlewood & Jenkinson 2005). Since there is no sufficient evidence to disapprove BSE, it is still considered a simple, non-invasive, inexpensive, affordable and accessible method for younger and high risk women to discover early changes in their breasts (Secginli, 2006). The early detection of breast cancer is the most important and beneficial area of protection techniques and has been positively linked with decrease of mortality and morbidity of the illness (Mele, Archer & Pusch 2005).

Early detection and screening activities of breast cancer include breast self-examination (BSE), clinical breast examination (CBE), and mammography. BSE is effective, cheap and less painful; however, it is dependent on knowledge, attitude towards BSE practice among women. Clinical breast examination is one of the primary modes of screening for breast cancer. Its effectiveness is dependent upon the skills of health care providers and available facilities. Mammography can reduce mortality rates for women aged 40 to 74 by 25% (Mai, Sullivan & Chiarelli 2009). WHO (2011) reported that mammography is the most successful way of detecting breast cancer among women older than 50 years (WHO, 2011). Mortality rates from breast cancer have decreased by 25 to 30% with early

detection, improving quality of screening activities, and enhanced treatment (Mai, Sullivan and Chiarelli 2009). Breast cancer detection in the early stages has a higher chance of responding successfully to treatment (Bener, Ayub, Kakil and Ibrahim 2008). But it is found that Arabic women currently face a significant risk of high mortality rate from breast cancer due to its late diagnosis "in the advanced stages of the disease" (Bener, Ayub, Kakil and Ibrahim 2008). Breast cancer incidence has increased and it is alarming for women affecting all ages. As a result, interpersonal relationships such as marital or sexual relationship are negatively affected. Breast cancer accounts for 37% of all types of cancer globally, moreover incidence of breast cancer varies from one country to another (Manning-Walsh, 2004). Breast cancer incidence in developing country is almost as high as in developed countries. Pakistani women breast cancer incidence "50 per 100,000", which is high compared to Indian women "19 per 100,000" (Kumar, Imam, Manzoor & Masood 2009).

Breast cancer is a major health alarm for many countries in the Eastern Mediterranean Region such as Bahrain represent 38.4% of all female cancers and in Jordan it represents 28% of all female cancers (Khatib & Modjtabei, 2006). Likewise, breast cancer is the most common cancer among Egyptian women. According to Egypt National Cancer Institute (NCI), breast cancer represents 18.9% of all cancer cases "35.1% in women and 2.2 % in men" (Omar, Khaled, Gaafar, Zekry, Eissa & El-Khatib 2003). Egypt incidence of breast cancer is not different when comparing with other countries; which represented (24 per 100,000) and mortality rate related to breast cancer is 9.3% of all cancers (Nadia & Magda, 2000). Khatib and Modjtabei (2006) showed that women aged 50 years and older are the most commonly affected group. In Egypt breast cancer is usually detected at late stages (around 60% of cases detected in the third stage of breast cancer), when treatment options are limited, and fatality rate is high; as breast cancer is a highly fatal disease especially with late diagnosis; therefore early detection of breast cancer leads to better outcome and prognosis of breast cancer (Bener, Ayub, Kakil & Ibrahim, 2008).

Breast self-examination makes women more "breast aware", which in turn may lead to an earlier diagnosis of breast cancer (Özgül, 2008). Promotion of self-care, an attitude fostered early in life, may pay lifelong dividends. The adolescent period is a time of rapid change that provides teaching opportunities for shaping health behaviors into adulthood. For example, teaching breast self-care may encourage positive behaviors such as performing breast self-examination (BSE) and seeking regular professional breast examinations (Ludwick and Gaczkowski, 2001). For younger women, BSE education and adherence are a gateway to health promotion behaviors which set the stage for adherence to clinical breast examination and mammography screening later in life (Rosenberg & Levy-Schwartz, 2003). Although the value of BSE is controversial (Thomas, Gao, Ray, Wang, Allison, Chen, Porter, Hu, Zhao, Pan, Li, Wu, Coriaty, Evans, Lin, Stalsberg, Self, 2002)), American Cancer Society recommends BSE as an option for breast cancer awareness and it's early detection.

It benefits women as women become familiar with both the appearance and the feeling of their breasts and detect any changes in their breasts as early as possible (American Cancer Society, 2008). The rationale behind extending BSE practice as a screening test is the fact that breast cancer is frequently detected by women themselves without any other symptoms (Siahpush and Sigh, 2002). In Turkey, The Ministry of Health recommends BSE to increase awareness of breast cancer (Turkey, 2006). Regarding the knowledge to Breast Self-Examination, Adolescence is a transition period between childhood and adulthood, during this time, significant changes occur in the body. These groups of females are just beginning to learn about their bodies. Also this period is a time of rapid change that provides teaching opportunities for shaping health behaviors into adulthood. Health behaviors such as (Breast Self-Examination) BSE can help empower women to take some control and responsibility over their health promotion (Karayurt, et al., 2009).

Teaching BSE and issues about breast cancer as early as possible will go a long way to encourage positive behavior towards BSE, create a breast-awareness and can lead to seeking regular professional breast examination/screenings later in life (Isara & Ojedokun, 2011). BSE is an easy-to-apply, economical, safe, non-invasive procedure; and it is one of the important and effective steps for identifying breast tumors at an early stage (Beydag and Yurugen, 2010). The community health nurse plays an important role in teaching Breast Self- Examination (BSE) and they are in an appropriate position to teach breast cancer awareness with no extra cost. A females who was advised about BSE by health care providers demonstrated greater knowledge, confidence and was likely to practice it routinely due to deep knowledge they had on it (Abu-Salem et al, 2007; Hacıhasanoğlu & Güzüm, 2008).

The purpose of a BSE is to learn the topography of the breasts; which in turn will allow for one to notice changes in the future in order to detect breast masses or lumps. Breast self –examination, carried out once monthly, between the 7th and 10th day of the menstrual cycle, goes a long way in detecting breast cancer at the early stages of growth when there is low risk of spread, ensuring a better prognosis when treated. But the attitude of the adolescents towards the practice of Breast Self – Examination in Nigeria is nothing to write home about as Odeyemi and Oyediran,(2002) informed in their study in Oke-ira area of Lagos that Less than half (45.2%) of the respondents had never done a BSE, while 54.8% had ever practiced BSE. The highest proportion of those who were currently doing BSE (71.8%) was doing it monthly. This is the recommended frequency for BSE as reported by them. They equally found out that out of the 54.8% of the respondents that had practiced BSE before, only 49.0% of them were currently doing it. This showed that 51.0% of the respondents, who had done BSE before were not currently doing it. This may partly be because of the assumption that they are free from breast pathology.

Odeyemi and Oyediran,(2002) further observed that poor attitude was as a result of this ignorance, little emphasis may be placed on regular BSE by such respondents and reported that about 42% of those who were doing BSE knew the correct procedure while more than half of the respondents, The ability to detect breast lumps depends on correct BSE procedure that ensures that no portion of the

breast is left out unexamined. With frequent BSE, one is able to differentiate normal breast tissue from breast lumps. It is therefore the intention of this study to fill the existing gap by improving breast Cancer Knowledge, attitude and breast self-examination practice among adolescent girls in Ibadan.

Statement of the Problem

According to the literatures, there are certain factors that affects occurrences of breast cancer among adolescents and young woman which include lack of exercise, poor diet, alcohol consumption, pollution, use of contraceptives, and hereditary factors. Early detection of breast cancer through mammography combined with physical examination has been shown to prevent approximately 20-40% of all deaths from breast cancer among women undergoing regular screening. In areas where there is low utilization of mammography screening, breast self-examination (BSE) proves to be an easy and cost-effective method that has an important part to play in the early detection of breast cancer. Failure to practice BSE by the visually impaired adolescents has been associated with delay in presentation, and thereafter with poor long-term survival. Several studies conducted had proofed that female knowledge and attitude towards breast cancer and BSE. Major factors identified included lack of knowledge regarding the common risk factors for breast cancer, and lack of understanding of the importance of BSE. Some other showed reasons for not practicing BSE that include “forgetting”, “lack of time”, “laziness”, and “lack of confidence”; Some other visually impaired adolescents believing that BSE lacks effectiveness or benefit, and that breast cancer is unlikely to happen to them which made them to develop poor attitudes towards Breast self-examination.

Every year, millions of cancer patients could be saved from premature death and suffering if they had timely access to early detection and treatment. Early detection is based on the concept that the sooner in its natural history the cancer is detected, the more effective the treatment is likely to be. Worldwide, about a third of all cancers are estimated to be amenable to early detection and potential cure with treatment. Without early detection, treatment costs rise substantially, resources are used inefficiently and the need for palliative care services increases unnecessarily. This study is therefore intends to critically appraise the level of awareness of visually impaired adolescents with respect to knowledge and attitudes towards breast self-examination practice.

Purpose of the Study

This study intends to investigate knowledge, beliefs, attitudes and behavior of visually impairment secondary school students pertaining to cancer and its examination using Akinyele L.G.A of Oyo state as an exploratory model with a view to enhance improve healthy living condition for Visually impaired students through adequate information.

1.4 Hypothesis

In this study, three null hypotheses will be tested at 0.05 level of significance. These include:

1. There is no significant relationship between breast cancer knowledge and breast self-examination with female adolescents with visually impairment.
2. There is no significant relationship between attitude and breast cancer and self-examination with female adolescents with visually impairment.
3. There is no joint contribution of breast cancer knowledge and attitude to breast self-examination practice among female adolescents with visually impairment.

Methodology

This entails the methodology that has been adopted in carrying out this study. Research methodology is very crucial and this is because, it serves as guideline as well as framework in which research can be carried out. In this chapter, the following are looked into: research design, population, sample and sampling technique, instrumentation, administration of instrument and method of data analysis.

Research Design

This study employed the use of descriptive survey research design using ex-post facto method to achieve the purpose of the study. This is a type of design that seeks to establish investigation among variables by observation, which researcher usually has no control over the variables of interest and therefore cannot manipulate them. Usually, data are collected after the event or phenomenon under investigation has taken place hence the name ex-post facto. It is expected that the sample drawn would be generalized and inferences will be made on the whole population of the study. The variables were being observed as have been treated in their natural occurrence.

Population of the Study

The population for the study comprises of Federal College of Education, Oyo (SPED) Students with visual impairment in Oyo.

Sample and sampling procedure

The sample size consists of one selected College of Education student with visual impairment in Oyo metropolis. It is assumed that the selected samples have common characteristics or elements of the population of the study. Based on this, an inference was drawn and generalization was made on the population of the study. Simple random sampling system was used in selecting the participant from the population of the study.

Instrumentation

The study made use of questionnaires to gather information from the respondents of the study. The questionnaire was explained in sections: section A to E. Section A: consist of information on the socio-demographic characteristics of the participants like sex, age, family type and so on.

Section B: Breast Cancer Knowledge Scale

This consists of breast cancer rating scale. It contains 10 items and each item is rated using 5-point Likert scale. Ranging from strongly agree to strongly disagree. It was modified from Olson, D.H.; Bell, R., and Portner, J. (1992). They reported reliability of 0.95. The reliability result for this study showed a Cronbach alpha of 0.93.

Section C: Knowledge of BSE Scale

This section was developed by the Gorman (2002). The scale was developed to measure knowledge of breast self-examination. It contains 10 items and each item is rated using 5-point Likert scale. The internal consistency after moderation of items ranged between 0.38 to 0.76 with overall coefficient of 0.88. The Guttman Split half coefficient observed was 0.78, equal length Spearman Brown was 0.73 and unequal length was 0.71. For this study however the reliability result showed 0.86 as its Cronbach alpha.

Section D: Attitude of BSE Scale

Measure of attitude of breast self-examination is a self-assessment tool developed by Parker G. Roussos (1997) to measure attitude of breast self-examination. Attitude of BSE is a 10 items scale and uses a 5 point Likert type response format as follows: Strongly Disagree (1), Disagree (2), Undecided (3), Agree (4) and strongly Agree (5). The scale has a Cronbach’s alpha reliability of 0.78. The Cronbach alpha for the result showed reliability of 0.80 for the present study.

Section E: Practice of breast self-examination

This section was developed by the Powell, S.S., Farley, G.K., Werkman, S. & Berkoff, K.A. (2006). This consists of 7 items with a response format ranging from Strongly Disagree = SD to Strongly Agree = SA. They obtained an alpha coefficient of 0.90. Guttman split – half = 0.78, alpha for part 1 = 0.81 while alpha for part 2=0.84. The researcher reports a Cronbach alpha of 0.86 for the result of the present study. This implies that, this section is reliable for this study.

Procedures of Data Administration

The researcher personally administers the questionnaire. Explanations were made to the school administrator as regards the essence of the research and the procedure of administration. The researcher ensured the school administrator and the students of confidentiality as the study did not intend to investigate into their privacy and the results of the findings will only be used for academic purposes. 65 copies of the questionnaire were distributed among the students. However 60 Copies of questionnaire were retrieved back and taken down for analysis.

Method of Data Analysis

The frequency was used to test their level on those variables and simple percentage to analyse the finding of the study. The study made use of frequency counts to check the level of knowledge, attitude and practice of students that participated in the study.

Result

Three research questions were raised and answered using Pearson Product Moment Correlation and Multiple Regression Analysis at 0.05 level of significance. Summary of the findings are presented below:

Research Question One

What is the Knowledge of breast cancer among female adolescent with visual impairment

| | | SD | D | A | SA | Mean | Std. Dev. | |
|---|---|-------------|-------------|-------------|-------------|------|-----------|--|
| 1 | I believe that breast cancer occur more commonly among old women | 21 (42%) | 7 (14%) | 2 (4%) | 20 (40%) | 2.58 | 1.39 | |
| 2 | I know Breast lump is an early warning sign for breast cancer | 6 (12%) | 8 (16%) | 9 (18%) | 27 (54%) | 1.86 | 1.09 | |
| 3 | I think Long time survival (more than five year) is rare (due to breast cancer) | 30 (60%) | 14 (28%) | 5 (10%) | 1 (2%) | 1.54 | .762 | |
| 4 | I know breast cancer is a curable disease | 10 (20%) | 6 (12%) | 15 (30%) | 19 (38%) | 2.32 | 1.19 | |
| | Grand mean | | | | | | 2.08 | |

From the table above, 42% of the respondents strongly disagreed that they do not believe that breast cancer occur more commonly among old women, also 60% of the respondents strongly disagreed that they think long time survival of breast cancer is rare. However 54% of the respondents strongly agreed that they know breast lump is an early warning sign for breast cancer while 38% of them strongly agreed that breast cancer is a curable disease.

Considering the information gathered from table 4.1, it can be seen that the means for the knowledge about cancer rise above the criterion mean of 2.00 set. Also, the grand mean of 2.08 is greater than the criterion mean of 2.00 which is set for positive knowledge

of breast cancer among female adolescents with visual impairment. This implies that female adolescents that participated in the study have a positive knowledge about breast cancer.

Research Question Two

What is the Knowledge of breast self-examination among female adolescent with visual impairment

| | | SD | D | A | SA | Mean | Std. Dev. | |
|---|--|-------------|------------|-------------|-------------|------|-----------|--|
| 1 | I know the age self-breast examination should be started | 12 (24%) | 2 (4%) | 2 (4%) | 34 (68%) | 1.84 | 1.29 | |
| 2 | I know how to perform Self-Breast Examination | 18 (36%) | - | - | 32 (64%) | 2.08 | 1.46 | |
| 3 | I believe Breast self-examination is recommended to be done monthly | 1 (2%) | 5 (10%) | 14 (28%) | 30 (60%) | 2.54 | .762 | |
| 4 | Suitable time to do Breast self-examination is 7th day after the start of menstruation | 3 (3%) | 2 (4%) | 11 (22%) | 34 (68%) | 2.48 | .838 | |
| 5 | I know Breast self-examination is done in front of the mirror only | 8 (16%) | 1 (2%) | 16 (32%) | 25 (50%) | 1.84 | 1.08 | |
| 6 | Axilla should be examined while doing Breast self-examination | 13 (26%) | 9 (18%) | 9 (18%) | 19 (38%) | 2.32 | 1.24 | |
| 7 | I know Palm of the hands should be used while doing Breast self-examination | 5 (10%) | 3 (6%) | 11 (22%) | 31 (62%) | 2.70 | 1.15 | |
| 8 | I know Breast self-examination could be done in the supine position | 12 (24%) | 3 (6%) | 11 (22%) | 24 (48%) | 2.94 | 1.24 | |
| | Grand Mean | 2.34 | | | | | | |

The table 4.2 shows the knowledge of breast self-examination among female adolescents in the study 68% of the respondents strongly agreed that they are aware of the age breast self-examination should start, 64% of them also indicated that they know how to perform self-breast examination, also 60% of the respondents believe that breast self-examination is recommended to be done monthly. Furthermore 68% of the respondents strongly agreed that the suitable time to do breast self-examination is the 7th day after the commencement of menstruation, also 50% of the respondents strongly agreed that breast self-examination should be done in front of the mirror only. In addition to this 38% of the respondents strongly agreed that axilla should be examined while doing breast self-examination. Lastly, 62% of the respondents strongly agreed that they know palm of the hands should be used while doing breast self-examination while 48% of the respondents strongly agreed that breast self-examination should be done in a supine position.

Considering the information gathered from table 4.2, it can be seen that the means for the knowledge on breast self-examination rise above the criterion mean of 2.00 set for knowledge on breast self-examination. Also, the grand mean of 2.34 is greater than the criterion mean of 2.00 which is set for knowledge among female adolescents with visual impairment'. This implies that female adolescents are knowledgeable about breast self-examination.

Research Question Three

What is the attitude towards breast self-examination among female adolescent with visual impairment

| | | SD | D | A | SA | Mean | Std. Dev. |
|---|---|-------------|------------|-------------|-------------|------|-----------|
| 1 | During Breast self-examination makes me feel so funny | 11 (22%) | 3 (22%) | 5 (10%) | 31 (62%) | 1.84 | 1.29 |
| 2 | Breast self-examination will be embarrassing to me | 12 (24%) | 3 (6%) | 11 (22%) | 24 (48%) | 2.08 | 1.45 |
| 3 | Doing Breast self-examination is wasting of time | 20 (40%) | 2 (4%) | 7 (14%) | 21 (42%) | 2.58 | 1.39 |

| | | | | | | | |
|------------|---|-------------|-------------|-------------|-------------|------|------|
| 4 | If there is lump, I prefer to get treatment from a traditional healers | 19 (38%) | 6 (12%) | 15 (30%) | 10 (20%) | 2.32 | 1.19 |
| 5 | I feel uncomfortable, I cannot do Breast self-examination once in a month | 29 (58%) | 14 (28%) | 5 (10%) | 2 (4%) | 2.62 | .901 |
| 6 | I believe all women should do Breast self-examination | 3 (6%) | 2 (4%) | 11 (22%) | 34 (68%) | 1.48 | .839 |
| 7 | I really care about my breasts | 8 (16%) | 1 (2%) | 16 (32%) | 25 (50%) | 1.84 | 1.08 |
| 8 | I am not afraid to think about the breast cancer | 19 (38%) | 9 (18%) | 9 (18%) | 13 (26%) | 2.32 | 1.24 |
| 9 | Avoid Breast self-examination because I worry about having breast cancer | 27 (54%) | 9 (18%) | 8 (16%) | 6 (12%) | 1.86 | 1.08 |
| 10 | I am interested in doing Breast self-examination | 8 (16%) | 3 (6%) | 11 (22%) | 28 (56%) | 1.94 | 1.37 |
| 11 | Always search for information regarding Breast self-examination from the internet, magazine and newspaper | 6 (12%) | 4 (8%) | 9 (18%) | 31 (62%) | 1.70 | 1.05 |
| 12 | Discuss with my friends about Breast self-examination | 19 (38%) | 6 (12%) | 15 (30%) | 10 (20%) | 2.32 | 1.19 |
| Grand mean | | | | | | 2.08 | |

The table 4.3 shows that 62% of the respondents strongly agreed that during breast self-examination they often feel funny, 48% of them strongly agreed that breast self-examination will be embarrassing to them while 42% of the respondents strongly agreed that doing breast self-examination is wasting of time, also 38% strongly disagreed that if there is lump in their breast they prefer to get treatment from a traditional healer.

In addition to this, 58% of the respondents strongly disagreed that they feel uncomfortable, they cannot do breast self-examination once in a month. Although 68% of them strongly believe that all women should do breast self-examination, 50% of the respondents strongly agreed that they care more about their breast.

Furthermore, 38% of the respondents strongly disagreed that they are not afraid to think about the breast cancer, 54% of the respondents strongly disagreed that they avoid breast self-examination because they worry about having breast cancer. However, 56% of them strongly agreed that they are interested in doing breast self-examination for this reason, 62% of the respondents strongly agreed that they always search for information regarding breast self-examination from the internet, magazine and newspaper. Lastly, 38% of the respondents strongly disagreed that they discuss with their friends about breast self-examination.

Considering the information gathered from table 4.3, it can be seen that the means for the attitude towards breast self-examination rise above the criterion mean of 2.00 set for attitude towards breast self-examination among female adolescents with visual impairment. Also, the grand mean of 2.08 is greater than the criterion mean of 2.00 which is set for attitude towards breast self-examination among female adolescents with visual impairment. This implies that female adolescents have a positive attitude towards breast self-examination but find it hard to discuss it with their friends.

Research Question Four

Do they practice breast self-examination

| No | Items | Never | Sometimes | Often | usually | always | | |
|----|--|-------------|-------------|------------|-------------|-----------|------|------|
| 1 | I am learning the correct method of Breast self-examination | 29 (58%) | 14 (28%) | 5 (10%) | 2 (4%) | 2 (4%) | 1.62 | .901 |
| 2 | Parents advise me to do Breast self-examination | 34 (68%) | 11 (22%) | 2 (4%) | 3 (6%) | - | 1.48 | .839 |
| 3 | Advise friends to do Breast self-examination | 25 (50%) | 16 (32%) | 1 (2%) | 8 (16%) | - | 1.84 | 1.08 |
| 4 | Discuss the importance of Breast self-examination with Friends | 18 (36%) | 9 (18%) | 9 (18%) | 13 (26%) | 1 (2%) | 2.40 | 1.28 |
| 5 | I do Breast self-examination once a month | 6 | | 8 | 9 | 27 | 1.86 | 1.09 |

| | | | | | | | | |
|---|---|-------------|-------------|-----------|------------|-------------|------|------|
| | | (12%) | | (16%) | (18%) | (54%) | | |
| 6 | Have been taught on Breast self-examination by health staff | 28 (56%) | 11 (22%) | 3 (6%) | 2 (4%) | 6 (12%) | 1.94 | 1.38 |
| 7 | If notice any breast abnormality, directly go to public health care | 6 (12%) | 2 (4%) | 2 (4%) | 9 (18%) | 31 (62%) | 1.70 | 1.05 |
| | Grand mean | | | | | | 1.75 | |

The table 4.4 shows that 58% of the respondents indicated that they never learnt the correct method of breast self-examination also 68% of the respondents indicated that their parents never advise them to do breast self-examination. The table also reveal that 50% of the respondents indicated that they have never advise their friends to do breast self-examination, 36% of the respondents indicated that they have never discussed the importance of breast self-examination with friends.

Furthermore, 54% of the respondents indicated that they always do breast self-examination once a month, also 56% of the respondents indicated that they have been never been taught on breast self-examination by health staff but 62% indicate that they always visit the public health care directly whenever they notice breast abnormality.

Considering the information gathered from table 4.4, it can seen that the means for the practice of breast self-examination fall above the criterion mean of 2.50 set for practice of breast self-examination among female adolescents with visual impairment. Also, the grand mean of 1.75 is less than the criterion mean of 2.50 which is set for practice of breast self-examination among female adolescents with visual impairment'. This implies that female adolescents are do not practice breast self-examination as expected.

Discussion of Findings

In response to research question one which asked What is the Knowledge of breast cancer among female adolescent with visual impairment?. The finding revealed that visually impaired female adolescents are more knowledgeable about breast self-examination. The adolescent period is a time of rapid change that provides teaching opportunities for shaping health behaviours into adulthood. For instance, teaching breast self-care may encourage positive behaviours such as performing Breast self-examination and seeking regular professional breast examinations advice (Ludwick & Gaczowski, 2001). Adolescence is a transition period between childhood and adulthood and during this time, significant changes occur in the body such as breast development. These group of visually impaired females are just beginning to learn about their bodies and in Nigeria where national screening programmes are not properly established, women can be made 'breast-aware' with cheap early detection measures such as breast self-examination (BSE) which may in turn lead to an earlier diagnosis of breast cancer. This is in line with the findings of Parkin, Sitas, Chirenje, Stein, Abratt and Wabinga (2008) that visually impaired female adolescents in communities with high level of awareness is usually present with less advanced stages of breast cancer as a result of adoption of screening methods; those in communities with low level of awareness often present late (Adebamowo and Ajayi, 1999); Lannin et al., 1998). It is good to know that awareness concerning breast cancer as a disease entity in Nigeria shows a lot of variation among different population though in the last decade has actually received a major boost. The general heightened of breast cancer awareness as a disease entity may be attributed to the unrelenting effort, contributions and involvement of individuals and groups which includes health workers, government and non-government organization (NGO). Apart from the aforementioned, education is also a key important factor that influenced knowledge of breast cancer. Studies in other parts of the world have shown that general breast cancer awareness increases with level of education (Matalqah, 2011). The variation in awareness of breast cancer was also confirmed by studies carried out in India by Kumar and Kashyap (2016) awareness of breast cancer among the participants was 75.9% which was higher than the study done by Somdatta (2008) in urban resettlement colony in Delhi where awareness was only 56%. Awareness was only 53.4% in the study conducted at community level in Delhi by Dey et al. (2015). Some respondents who were aware of breast cancer as a disease entity knew that breast cancer was the most common cancer among women worldwide (Yakubu, Gadanya, & Sheshe 2014); breast cancer could be treated if detected early (Obaji, 2013); knew that breast cancer was associated with a high incidence of death (Yakubu et al., 2014; Agwu, Ajaero, Ezenwelu, Agbo & Ejikeme, 2007) and indicated that early detection could improve the chances of survival (Bassey, Irurhe, Olowoyeye, Adeyomoye & Onajole 2011) however the present study reveal that 54% of the respondents indicated that they know Breast lump is an early warning sign for breast cancer.

In response to research question two which asked what is the Knowledge of breast self-examination among female adolescent with visual impairment? The result showed that majority of the respondents are knowledgeable about breast self-examination. 68% of the respondents indicated that they know the age which self-breast examination should be started this they get to know through electronic media. This is inline with the findings of TV and health professionals were the leading sources of getting information on breast cancer in Nigeria among female adolescents with visually impairment, while leaflet and internet was not mentioned at all as a source for the visually impaired female adolescents in the work of (Bassey, Irurhe, Olowoyeye, Adeyomoye & Onajole 2011). Although they indicated that message can be conveyed through a number of different channels and since the nineteenth century, messages on posters, the radio and more recently television and the internet have been used to educate the public and persuade them to live a healthy life (King's Fund, 2008). Sources of information are an important aspect of awareness of health related disease and most

especially breast cancer and knowledge of breast self-examination. The credibility, clarity and effectiveness of any information source on health related issues determine its impact on the target audience. Information sources are essential in public health campaigns because they are seen as the cornerstone for health communication interventions (Kreps & Sivaram, 2009; Okorie, 2011) and that mass media outlets have the capability of enlightening heterogeneous audiences, while interpersonal channels have been more influential in affecting behavioural change for visually impaired female adolescents (Kreps, 2008; Kreps & Sivaram, 2009; Okorie, 2011). In this present study the researcher found that 64% of the respondents indicated that they know how to perform breast self-examination which corroborates the findings of Irurhe 2012 whose study was on young aged women in Nigeria population. The results showed some hope when almost all the respondents (n=194; 97%) had heard of breast cancer and breast self-examination before unlike the previous study done by Omotara in 2012. This may be due to different education levels among the women.

In response to research question three which asked what is the attitude towards breast self-examination among female adolescent with visual impairment? The result showed that majority of the respondents attitudes towards breast self-examination has been based on a number of factors. About 62% of the respondents strongly agreed that during breast self-examination they often feel funny which corroborates the findings of (Agboola et al., 2009) who found that 91.4% nurses, 65.2% laboratory scientists and 90.9% doctor respectively thought that BSE was necessary, 48% of the respondents in the present study strongly agreed that breast self-examination will be embarrassing to them while 42% of the respondents strongly agreed that doing breast self-examination is wasting of time, but 38% strongly disagreed that if there is lump in their breast they prefer to get treatment from a traditional healer. In addition to this, 58% of the respondents strongly disagreed that they feel uncomfortable, they cannot do breast self-examination once in a month. Although 68% of them strongly believe that all women should do breast self-examination, 50% of the respondents strongly agreed that they care more about their breast. This also corroborates the findings of (Bassey et al., 2011) that most of the respondents in their study who were nursing students 98.5% thought breast self-examination was necessary. Majority of the women (61.1%) who were not practicing BSE would like to start doing it (Olowokere, 2012), while few of the women (11.7%) did not see any reason for examining their breasts on a regular basis.

In response to research question four which asked does visually impaired adolescent practice breast self-examination? The finding revealed that the practice of breast self-examination among respondents was very minimal. This which could be associated with a number of factors such as been unable to learn the proper way of practicing breast self-examination. The present study reveals that 58% of the visually impaired adolescents indicated that they never learnt the correct method of breast self-examination also 68% of the visually impaired adolescents indicated that their parents never advise them to do breast self-examination. Having knowledge about what breast self-examination is will reduce the rate of mortality among women however, practicing it is another factor that is very crucial for the adolescents with visually impaired. This finding showed that majority of the female visually impaired adolescents has been practicing the use of breast self-examination method, however this negates the findings of Ameer, Abdulie and Pal, (2014) whose study revealed that majority of the students had never performed BSE, even though they had good knowledge of BSE. Their reasons for this were as follows: have no signs or symptoms; forgetfulness; fear of detecting some abnormality (16.4%); lack of privacy. Also the findings revealed that majority of the respondents started to perform BSE at the age of 20 years. Out of the students who had done BSE, some didn't exactly remember how often they have done it; how they practiced it yearly, some of them even reported that they have done BSE less than 3 times in last 12 months, some also indicated that they have done it more than 3 times in the last 12 months.

Recommendations to the Findings

- Community outreach programs, with government agencies working with religious leaders, civil society groups, breast cancer survivor groups, and community leaders could do a lot in educating the public and the physical challenged being about breast health, dispelling myths as well as advocating for better access to early detection facilities.
- Public health education is a factor that impacts on young women's knowledge and understanding of breast cancer. Based on these young women's responses, it has been concluded that current public health education is either not communicating its message or failing to reach enough women, resulting in confusion and misinformation.
- Based on the above assumption as well as the knowledge that most breast awareness campaigns are aimed at older women, it is recommended that an important improvement may be to target women at young ages to educate them about what is normal and abnormal and what they should know and be aware of.
- The breast self-examination campaigns also need to continue exploring the young women's current knowledge and involving them in breast health education programmes.
- It is also recommended that in order to make Breast Self-Examination a habit, education about Breast Self-Examination ought to be started for girls at school age.
- Health education interventions need to be implemented continually in order to stress the importance of health promotion. The messages need to be consistent in order not to impede women's ability to make informed choices about their breast health and limit the possibility of early detection and treatment. This would need to be approached in a manner that could increase knowledge and adherence without causing undue stress and anxiety.

- Media and organisations should continue to remind women of breast health during October, which is international breast health awareness month.
- Younger men could also be included and be involved so as to hear their views about the issue and provide any kind of support whenever and wherever they can.
- Also, provision of BSE educational programs is necessary for all health workers to increase their knowledge, confidence, performance and teaching of BSE.

Conclusion

The results indicate that the visually impaired female adolescents have poor attitude towards BSE and this affects their practice of BSE although they had knowledge of it. The finding also showed that some of the female adolescent with visual impairment did not practice BSE suggests that there is a need for continuing education programs. Emphasis should be laid on BSE in undergraduate and postgraduate courses, especially for visually impaired female and male adolescents due to their stage of development.

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