Awareness And Practice of Student Nurses on Breast Self Examination: A Risk Assessment Tool For Breast Cancer

Brotobor Deliverance[1], Edeawe Isaac Osahogie[2], Brotobor Onoriode[3]

[1]Lecturer, Department of Nursing Science, Ambrose Alli University, Ekpoma, Nigeria
[2]Lecturer, Clinical Sciences, Ambrose Alli University, Ekpoma, Nigeria
[3]Independent Researcher, Delta State University Teaching Hospital, Oghara, Nigeria

Abstract

A. Background : Breast cancer is termed the second most common cancer. Breast-self examination (BSE) is a risk assessment tool for early detection of breast cancer, and though, its effectiveness is still controversial. However, it is important to spread its awareness since it is a risk-free, non-invasive, and cost-effective practice. It is important to educate women because awareness will enhance practice and help in the early detection and early treatment of breast cancer, one of the leading causes of morbidity and mortality in women.

B. Methodology: A descriptive cross-sectional study was conducted in the nursing department of the Ambrose Alli University, Ekpoma, Edo State. 191 clinical Nursing students were enrolled in the study within a period of three weeks.

C. Findings: The majority of the participants (86%) reported having heard about breast-self examination (BSE), while 14% claimed to have no knowledge of breast self-examination. Among the participants, 71% know that breast-self examination is done by an individual to check for anomalies in the breast, 25% no had an idea on who should perform the check, while 4% reported knowing that the breast-self examination is done by doctors. Participants were asked if they have ever performed the breast-self examination. 64% answered "yes" while 36 answered "no". But, 50% stated that they perform it once in a while, 21% stated monthly, 14% stated weekly, and 15% stated daily. When further asked at what time in the menstrual cycle they perform the breast-self examination, 67% stated they perform at random, 13% stated a week after menstruation, 8% during, and 12% before menstruation. Notwithstanding, some participants (47%) reported they could not remember the last time they performed the breast-self examination, while 46% indicated the recent regular practice of breast self-examination.

D. Conclusion: The majority knew about BSE, but not all that knew it knows the accurate way it should be done nor practiced it regularly. The majority of the student nurses got their information from the internet and social media. This negatively impacted their practice of BSE. Therefore, since the internet has taken a large part of people's lives, student nurses should be directed to the right databases to search for quality information, as this would greatly influence their practice.

Keywords - *Breast, cancer, self-examination, risk factor, awareness, practice*

I. INTRODUCTION

In recent times, cancer has been noting to be the most common cause of death globally. The global burden of breast cancer is expected to cross 2 million by the year 2030, with growing proportions from developing countries (Jemal, Bray, Melissa, Jacques, Elizabeth, and Forman,2011). In 2012, the report claimed that 8.2 million people died of cancer, and an estimated prevalence of about 32.6 million people alive who had cancer diagnosed in the previous five years (World Health Organisation [WHO], 2013). Among women, breast cancer is the most common cancer and a cause of mortality (WHO, 2008; WHO, 2013). Breast cancer is a global health issue and a leading cause of death among women internationally, and it is responsible for about 12% of cancer-related deaths throughout the world (Hosseni, Mahdavi and Pilevarzadeh, 2015). Incidence is highest in the developed countries, but mortality is higher in less developed countries due to poor access to healthcare services (WHO, 2013).

Breast cancer is one of the diseases that can be managed if detected early (Chioma and Asuzu, 2007). In less developed countries, it is quite difficult to estimate the incidence of breast cancer, as cases are usually not reported and diagnosed; due to lack of access to treatment facilities. In Nigeria, healthcare service is an out-of-pocket system. Hence, the level of individual income determines the level of healthcare services. Therefore, people tend to seek alternative and traditional healers before consulting medical services, usually at the terminal stage of the disease (Mon and Than, 2009). Notwithstanding, early detection, diagnosis, and treatment help to enhance chances for a good prognosis. Thus, creating awareness of possible early warning signs of the disease is important.

Breast-self examination (BSE) is a risk–free and painless procedure conducted with the objective of identifying breast-related disorders and cancerous conditions (Ameer, Abdulie, Pal, Arebo, and Kassa, 2017). Aside from clinical examination and mammography, breast-self examination is a cost-effective method for early detection of breast cancer (Ibnawadh, Alawad, Alharbi, Alduawihi, Alkowiter, and Alsalhy 2018). According to Segni, Tadesse, Amdemicheal, and Demissie (2016), more than 90% of breast cancer cases can be detected by women themselves through BSE. More so, Jenkins (2003), cited in Choima and Asuzu (2007), reported that 70-80% of breast cancer cases are detected by patients themselves using breast self-examination; through the detection of breast lumps.

The purpose of BSE is to learn the topography of the breast, which will, in turn, allow one to notice changes in the future in order to detect breast lumps or masses. BSE is carried out once monthly, between the 7th and 10th day of the menstrual cycle, go a long way in detecting breast cancer at an early stage of growth when there is a low risk of spread, ensuring a better outcome when treated (Kayode, Akande and osagbemik, 2005). Nonetheless, a menopausal woman and male perform this procedure at a specific date on the month.

Despite the non-expensive nature of BSE, the morbidity and mortality associated with breast cancer, either undiagnosed or lately diagnosed, is still on the increase. In Nigeria, breast cancer is responsible for about 16% of all cancer-related death (Gabriel, Ajetunmobi, Shabi, Elegbede, Okere, Busari, ….. *et al.*, 2016). The level of awareness and practice of BSEseem vary from one place to another, despite the easy way of performing the procedure. In a study, 66% of the 200 research subjects were unaware of BSE, whereas only 21% of those who participated know about the risk factors for breast cancer (Katkuri and Gorantla, 2018). In another study, 75% reported having knowledge of BSE, 63% know how to perform the procedure; however, only 6% revealed that they do BSEon monthly basis, and 44% never performed BSE (Haji-Mahmoodi, Montazeri, Jrvandi, Ebrahimi, Hghighat and Harirchi,2002). Odusanya and Tayo (2001) conducted a study with practicing nurses and reported that most of the nurses have knowledge of breast cancer but lack its risk estimation. On the contrary, research showed that the BSE education of students could positively affect their mother's knowledge of it. Therefore, nurses need to engage in health education regarding breast cancer and must be knowledgeable about breast cancer risk assessment and prevention. Thus, following the findings of Odusanya and Tayo (2001) and Abasi, Tahmasebi, Zafari, Tofigi, and Hasani (2018), this study sought to assess the awareness and practice of BSE among undergraduate student nurses of Ambrose Alli University, Ekpoma. The findings of this study would help to strategize ways to improve practice.

This is because student nurses are future practicing nurses who would enlighten and educate the public.

II. AIM OF THE STUDY

- To determine the level of awareness of breast-self examination among nursing students
- To assess the practice of breast self-examination among nursing students.

III. MATERIALS AND METHOD

A. Study Design
A descriptive cross-sectional study.

B. Study Area
Department of nursing, Ambrose Alli University, Ekpoma, Edo State, Nigeria.

C. Study Participants
Inclusion criteria
Nursing students in the clinical year (300 to 500level students of the department of nursing, Ambrose Alli University).

D. Exclusion criteria
Nursing students not in the clinical year (100 and 200 level students of the department of nursing, Ambrose Alli University).

E. Sample size
210 students were randomly enrolled for the study after consent was obtained and questionnaires distributed, but 191 questionnaires were retrieved.

F. Instrument of Data Collection
Structured questionnaires were used for data collection. Information about their demographic characteristics (age, level of year in training, marital status), awareness of breast self-examination, and practice of breast self-examination were collected. Participants were made to choose from the given options provided, and options of "yes" and "no" were also provided.

G. Data Analysis
The data were analyzed using descriptive statistics.

H. Validity and Reliability
The validity of the study was determined using content validity. At the same time, reliability is ensured by means of the test-retest method.

I. Ethical Approval
Ethical approvals were obtained from the Head of the Department of Nursing and the Health Research and Ethics Committee, Ambrose Alli University Ekpoma. Verbal consent was taken from the participants during data collection.

IV. RESULT

A. Demographics of the Participants

Data from 191 participants were retrieved and analyzed. The majority of participants, 74% were between the ages of 21-25years, 15% were between the ages of 16-20 years, 8% were between the ages of 26-30, and those above 30 years were 3%. Majority of the participants were single; 91% and 9% were married. Also, 96% were Christians while others were either Muslims or traditional worshippers.40% were 300level, 34% were 400level, and 26% were 500level students.

B. Awareness of Breast Self Examination

The majority of the participant (86%) reported having heard about BSE, while 14% claimed to have no knowledge of BSE. Among the participants, 71% know that BSE is done by the individual to check for anomalies in the breast, 25% had no idea on who should perform the check, while 4% reported knowing that the BSE is done by the doctors. Furthermore, the participants were asked their source of information; the majority of the participants (55%) reported they reported getting information from social media and the internet, 30% from lectures, and 15% from healthcare professionals. In addition, when asked how often BSE should be done, 42% reported monthly, 17% reported weekly, 24% reported daily, and 17% reported having no idea on how often BSE should be done. However, when asked the appropriate time to perform BSE, 63% stated no particular time, 18% stated a week after menstruation, 8% stated during menstruation, and 11% stated before menstruation. More so, 82% had good knowledge of what to look out for when performing BSE, while 18% claimed to have no idea.76% stated to know the techniques involved in BSE, and 24% claimed to have no idea about how BSE is done.

C. The practice of Breast-self Examination

Participants were asked if they have ever performed BSE; 64% answered "yes," while 36 answered "no". But, 50% stated that they perform it once in a while, 21% stated monthly, 14% stated weekly, and 15% stated daily. When further asked at what time in the menstrual cycle they perform BSE, 67% stated they perform at random, 13% stated a week after menstruation, 8% during, and 12% before menstruation. Notwithstanding, some participants (47%) reported they could not remember the last time they performed BSE, while 46% indicated the recent regular practice of BSE.

V. DISCUSSION

Breast cancer is termed the second most common cancer. Breast-self examination is a risk assessment tool for early detection of breast cancer, though its effectiveness is still controversial (Haji-Mahmoodi et al., 2002). However, it is important to spread its awareness since it is a risk-free, non-invasive, and cost-effective practice (Ibnawadh, Alawad, Alharbi, Alduawihi, Alkowiter, and Alsalhy 2018). It is important to educate women because awareness will enhance practice and help in the early detection, prevention, and early treatment of breast cancer, one of the leading causes of morbidity and mortality in women (Veena, Kollipaka, Rekha, 2017; Siddherth, Gupta, Narang and Singh, 2016).

Having analyzed the findings of this study, it was noted that the majority of the participants are in the age group of 21-25 years. There is no significant difference between the age groups, but there is a significant difference between the level of education and level of awareness of BSE. Those in the higher level showed good knowledge and practice of BSE. In a previous study, the majority of the participants were aged 21-30, and the awareness level was poor due to a low level of education and exposure (Katkuri and Gorantla, 2018). Furthermore, it was revealed that the majority of participants in this study claimed their source of information was the internet and social media. Can we say free internet access for the student is good? Many universities around the world restrict access to the internet and social media within their premises. They claim the restriction will help students stay focus on their studies. Internet use was reported to have a negative impact on student's academic performance (Owusu-Acheaw and Larson, 2015; Asemah and Okpanachi, 2013). More so, a study claimed that for young people who are used to fast stream of internet life, the truth might appear to be excessively dull and they can have difficulty in restoring what they have read, and they tend to hold on to the false impression in their mind (East 2016). However, critics argued that it would deny the students the opportunity to access useful materials they would need (Kolan and Dzandza, 2018). In addition, studies opined that internet aid access to knowledge, help students socialize, exchange quick information and find out related issues about their studies (Talaue, AlSaad, AlRushaidan, AlHugail and AlFahhad, 2018; Talaue, 2018; Social Media by Students, 2017).In addition, others claimed they knew about BSE through lectures and healthcare personnel. This indicates that among the undergraduate nurses who claim knowledge about BSE, their understanding of BSE is good.

Notwithstanding, a good number of them (86%) claimed to have knowledge of BSE, there is a discrepancy in the ways the procedure is done. Only 42% knew it is done monthly, and 18% knew the accurate time it should be done. This is less than the findings in a previous study done in Nigeria, where 40% of the participants knew the accurate time interval in relation to the menstrual cycle when it should be done (Odusanya and Tayo, 2001). However, a study done in the USA showed that 77% of university nursing students correctly identified the recommended time for BSE. This could be used to ease access to authentic academic material in the university database as opposed to limited access in our setting.

Furthermore, questions on their practice were asked. Although 86% claimed to have heard of BSE, it was found that 64% agreed to have performed BSE, but only 21% do it monthly, and 13% do it accurately a week after their menstruation. Moreso, 0nly 28% confessed to practicing it regularly. This is in line with previous studies (Katkuri and Gorantla, 2018; Haji-Mahmoodi, Montazeri, Jrvandi, Ebrahimi, Hghighat, and Harirchi, 2002). Notwithstanding,

reasons for the irregular practice were asked. Some claim it is due to fear of detecting an anomaly, and some said it is due to forgetfulness, while the majority claimed no reason. Consequently, it was found that those that knew about BSE during lectures and from healthcare personnel practiced regular BSE. Therefore, emphasis should be made on classroom teaching as this has proved to have a great impact on the students. It was also proved that those that got their information from the internet either did not practice it or did not do it accurately. This could be related to the fact the internet and social media, except academic journals or databases, are not always the right source of information. Hence, student nurses should be encouraged on the right databases to search for information. This is because they are the future nurses, and the right information they have now would determine their practice, the quality of care, and the advice they will give to their patients.

VI. CONCLUSION

Breast cancer has been considered to be one of the leading causes of morbidity and mortality in women. Breast-self examination is a risk-free, cost-effective tool use to detect breast cancer and another anomaly in the breast. Not just a head-knowledge, a regular practice would effectively help in the detection, prevention, and early management of dreadful breast cancer. This study proved that having the right information from the right source would adequately equip student nurses for their future practice. The majority of the student nurses got their information from the internet and social media. This negatively impacted their practice of BSE. Therefore, since the internet has taken a large part of people's lives, student nurses should be directed to the right databases to search for quality information, as this would greatly influence their practice.

REFERENCES

[1] Abasi, E., Tahmasebi, H., Zafari, M., Tofigi, M. and Hasani, S., The Impact of Female Students' Breast Self-Examination training on their Mothers' Awareness. Journal of Midwifery and Reproductive Health. 6(4) (2018) 1454-1461.

[2] Ameer, K., Abdulie, S.M., Pal, S.K., Arebo, K. and Kassa, G.G.,. Breast cancer awareness and practice of self-breast examination among female medical students in Haramaya University, Harar, Ethiopia. Ethiopia IJIMS. 2 (2017) 109-19.

[3] Asemah, S. amd Okpanachi, R., Influence of social media on the academic performance of the undergraduate students of Kogi State University, Anyigba, Nigeria, Research on Humanities and Social Sciences, 3(12) (2013) 90-96.

[4] Budden L., Young women's breast self-examination knowledge and practice. J Community Health Nurs, 12(1995) 23– 32.

[5] Chioma, C. and Asuzu, S.R.N., Knowledge, Attitude and Practice of Self-Breast Examination among the Female Undergraduate Students of the University of Ibadan, Nigeria. Pakistan Journal of Social Studies. 4(3) (2007) 400-402.

[6] East, S., Teens: This is how social media affects your brain. CNN. Retrieved from https://edition.cnn.com/2016/07/12/health/social-media-brain/index.html., (2016).

[7] Gabriel O.E., Ajetunmobi O.A., Shabi O.M., Elegbede O. T., Okere R.A., Busari O.A. et, al., Awareness and practice of self-breast examination among female nurses at the Federal Teaching

Hospital Ido-Ekiti, Nigeria. Journal of Public Health in Africa. 7 (2016) 528

[8] Haji-Mahmoodi, M., Montazeri, A., Jrvandi, S., Ebrahimi, M., Hghighat, S., and Harirchi, S., Breast Self-Examination: Knowledge, Attitude and Practice among Female Healthcare Workers in Tehran in Iran. The Breast Journal, 8(4) (2002) 222-225.

[9] Hosseni, S.F., Mahdavi, N. and Pilevarzadeh, M., Self-breast examination among women: A quantitative study. Indian Journal Fundamental Applied Life Sciences. 5(S2) (2015) 3089–3096.

[10] Ibnawadh, S.K., Alawad, M.A., Alharbi, S.S, Alduawihi, N.A., Alkowiter, F.S. and Alsalhy, A.E, Knowledge, attitude, and practice of breast self-examination among females in medical and non-medical colleges in Qassim University. Journal of Health Specialties. 5 (2018) 219-24.

[11] Jemal, A., Bray, F., Melissa, M. C., Jacques, F., Elizabeth, W. & Forman, D., Global cancer statistics. CA Cancer J Clin, 61 (2011) 69–90.

[12] Katkuri, S. and Gorantla, M., Awareness about breast cancer among women aged 15 years and above in urban slums: a cross-sectional study. International Journal of Community Medicine and Public Health, 5(3) (2018) 929-932.

[13] Kayode, F. O., Akande, T. M., &Osagbemik, G. K. Knowledge, Attitude and Practice of Breast Self Examination among Female Secondary School Teachers in Ilorin, Nigeria. European Journal of Scientific Research (2005) 10.

[14] Kolan, B.and Dzandza, P., Effect of social media on academic performance of students in Ghanian Universities: A case study of University of Ghana, Legon, Library Philosophy and Practice (e-journal), https://digitalcommons.unl.edu/libphilprac/1637 (2018).

[15] Mon, M. M.and Than, K. K., Women's Awareness, Knowledge and Perceived Magnitude Regarding Common Female Cancers in Yangon, Myanmar. Asian Pacific Journal of Cancer Prevention 10 (2009) 1047-1050.

[16] Odusanya, O.O.and Tayo, O.O., Breast Cancer Knowledge, Attitudes and Practice among Nurses in Lagos, Nigeria. ActaOncologica, 40(7) (2001) 844–848.

[17] Owusu-Acheaw, M. and Larson, A., Use of social media and its impact on academic performance of tertiary institution students: A study of students of Koforidua Polytechnic, Ghana. Journal of Education and Practice, 6(6) (2015) 94-101.

[18] Segni, M. T., Tadesse, D.M., Amdemicheal R, and Demissie, H. F., Self Breast Examination: Knowledge, Attitude and Practice among Female Health Science Students at Adama Science and Technology University, Ethiopia. Gynecol Obstet (Sunnyvale) 6(2016) 368.

[19] Siddharth, R., Gupta, D., Narang, R., and Singh, P., Knowledge, attitude, and practice about breast cancer and breast self-examination among women seeking out-patient care in a teaching hospital in central India. Indian Journal of Cancer. 53(2) (2016) 226.

[20] Social Media by Students., BlogDashConten creation by bloggers. Retrieved from http://blog.blogdash.com/media-industry/positive-negative-use-social-media-students/ ., (2017).

[21] Talaue, G. M., Practical Basic Research Writing Manual for College Students., Lambert Academic Publishing: Germany., (2018).

[22] Talaue, G. M., AlSaad, A., AlRushaidan, N.,AlHugail, A., and AlFahhad, S. The Impact of Social Media on Academic Performance of Selected College Students. International Journal of Advanced Information Technology. 8(2018) 4-5.

[23] Veena, K. S., Kollipaka, R., and Rekha, R., The Knowledge and attitude of breast self-examination and mammography among rural women. International Journal of Reproduction, Contraception, Obstetrics, and Gynecology.; 4(5) (2017) 1511-1516.

[24] World Health Organisation., World Health Statistics World Health Organisation., (2008).

[25] World Health Organisation., Latest World Cancer Statistics". World Health Organisation., (2013).