

Knowledge and Practice of Breast Self-Examination among Female Outpatients of Wesley Guild Hospital, Ilesa, Osun State, Nigeria

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ABSTRACT

Introduction: A breast self-examination is an inspection of the breast done alone to help increase breast awareness, with the use of the eyes and hands to determine if there are any changes to the look and feel the breast. The study aimed to assess the knowledge and practice of breast self-examination among female outpatients in Wesley Guild Hospital, Ilesa.

Methodology: A descriptive research design was used in this study and random sampling technique was used to recruit 153 respondents. The theoretical framework used for the study was health belief model(HBM). A validated structured questionnaire with Cronbach's alpha reliability ranged from 0.715 to 0.775, was used for the study. The responses were analyzed with descriptive statistics using SPSS Version 25 and the hypothesis stated was tested using chi square.

Result: Majority of respondents were aged 18–30 years, 95(62.1%) of the respondents have high level of knowledge, 86(56.2%) of the respondents have high level of practice. The factors influencing the practice of breast self-examination are; lack of know-how 76(49.8%), culture 49(32.0%), busy 88(57.5%), forgetfulness 102(66.7%), no symptoms 101(60%), uncomfortable 68(44.4%), scared of breast cancer diagnosis 97(63.4%), and no enough information on media 108(70.6%). There is significant relationship between marital status ($p=0.000$), Ethnicity ($p=0.006$), Educational level ($p=0.025$), occupation ($p=0.001$), level of knowledge ($P=0.000$, $X^2=24.051^a$) and practice of breast self-examination among female outpatients of Wesley Guild Hospital, Ilesa.

Conclusion: Majority of the respondents have high level of knowledge and practice of self-breast examination. Therefore, nurses should develop culturally appropriate educational materials to address the cultural beliefs that discourage women from practicing BSE.

Keywords: Breast-Self Examination, Knowledge, Perception, Practice

INTRODUCTION

Breast Self-Examination (BSE) is a technique in which a woman examines her own breasts by seeing and feeling with fingers to detect any abnormality, the main purpose of breast self-examination is to look for any abnormal changes in the breast, to detect presence of lump in the breast at an early stage and increase familiarity with breast (1). Breast self-examination is best performed after menstruation day 5 to day 7, counting the first day of menses as day 1, this is because normal breast changes must be differentiated from disease signal signs, also, some women have grainy textured breast tissue, but such areas become less nodular after menstruation (2)

Breast self-examination is regarded as a highly effective screening tool for breast cancer when used as an adjunct to clinical breast examination (CBE), screening mammography, breast ultrasound and additional images in some cases (3). Furthermore, it can be utilized in enhancing breast cancer awareness among women.

Breast self-examination is recommended because it is inexpensive, private, painless, encourages personal control easy and safe and requires no special equipment. It has also been shown to improve breast health awareness and thus potentially allowing the early detection of breast anomalies. While screening programs with mammography have been effective in high income countries, research has shown that other strategies such as breast self-examination are equally important in reducing mortality from breast cancer particularly in low resource settings (1)

Breast cancer is the most common cancer among females and the most common cancer overall (4). As at 2020, there were 2.3 million women diagnosed with breast cancer and 685,000 deaths globally, by the end of 2020, there were 7.8 million women alive who were diagnosed with breast cancer in the past 5 years, making it the world's most prevalent cancer (5). There are more than 2.3 million cases of breast cancer occurring every year. Approximately 99% occurs in women, family history, history of radiation exposure, increasing age, obesity, harmful use of alcohol, tobacco use and post-menopausal hormone therapy are factors identified to increase the risk of breast cancer, breast self-awareness has been a useful tool in identifying and early detection of the breast cancer and this can be easily achieved by breast self-examination

The knowledge and health-seeking behaviour for breast cancer management are low in Africa, such that majority of the affected patients present late to the hospital when little or nothing can be done in terms of treatment. It has been reported that most patients with breast cancer in developing countries present for the first time at advanced stages (III and IV). This is possibly due to lack of early detection of the disease which can be prevented by increasing the awareness of breast self-examination.

In spite various efforts and awareness on early detection of breast cancer, it still remains an international health concern associated with high levels of morbidity (27%) and mortality (20%) in developing countries as a result of late presentation being the second most common cause of death among women. (5)

In Africa, the knowledge and health-seeking behaviour for breast cancer management are low such that majority of the affected patients present late to the hospital when little or nothing can be done in terms of treatment (6). It has been reported that most patients with breast cancer present for the first time at advanced stages (III and IV). This is possibly due to lack of early detection of the disease. The diagnosis of breast cancer using breast self-examination during the early stage has been linked to a reduction in mortality, morbidity, and cost of management of illness (6).

Various factors including lack of awareness about the breast self-examination, lack of knowledge on the right method of breast self-examination and anxiety/trust of discovering a lump have been noticed to affect the use of breast self-examination as a method of breast cancer screening. Therefore, it is imperative to assess the knowledge, and practice of Breast Self- examination among female outpatients in Wesley Guild Hospital, Ilesa.

The objectives of the study were to:

1. To assess the level of knowledge of Breast self-examination among selected female outpatients in Wesley Guild Hospital, Ilesa.
2. To assess the practice of breast self-examination among female outpatients in Wesley Guild Hospital, Ilesa.
3. To assess the possible factors influencing the practice of breast self-examination among selected female outpatients in Wesley Guild Hospital, Ilesa.

MATERIALS AND METHODS

A descriptive cross-sectional design was used in this study, since the research focused on assessing the knowledge and practice of breast Self - examination among selected female outpatients of Wesley Guild Hospital, Ilesa. This research was carried out in Wesley Guild Hospital, Ilesa, Osun State, Nigeria. Random sampling technique was used for this study.

Method of data collection

The data for this study was collected using a well-structured, self-administered questionnaire which contained close ended question made simple and clear with the targeted sections and questions. Each participant was informed about the purpose of the study and the guidelines for the completion of the questionnaire will also be explained to the participants. The respondents were assured that their opinion will remain anonymous and kept confidential.

Method of data analysis

The data was analyzed using statistical package for Social Sciences (SPSS package) 21st edition. The data was computed using descriptive and inferential statistical tool. The result of the analysis was presented in percentages, frequency, tables and charts.

Ethics

Application letter, letter of introduction and research proposal was submitted to the ethics committee of Obafemi Awolowo University Teaching Hospital complex and Approval was obtained from the Obafemi Awolowo Teaching Hospital ethical committee. All respondents were notified that participation is confidential and completely voluntary and that they can withdraw at any time if they do not want to, the purpose of the study was duly explained to them.

RESULTS

Table 1 showing the knowledge of breast self-examination among respondents

Variables	Categories	Freq.	Percent
Have you ever heard of Breast Self-Examination	Yes	121	79.1
	No	32	20.9
If yes, Where did you hear it from	Health care provider	88	57.5
	Television	32	20.9
	Newspaper	2	1.3
	Family member'	7	4.6
Do you think Breast self-examination can be used for early detection of abnormal changes in the breast	Yes	128	83.7
	No	25	16.3
How often should breast self-examination be performed	Monthly	44	28.8
	Weekly	55	35.9
	Yearly	6	3.9
	Don't know	48	31.4
Do you believe that changes in the shape and colour of the breast are signs of breast cancer	Yes	86	56.2
	No	67	43.8

Where is the appropriate place to perform breast self-examination	In front of mirror	59	38.6
	while lying down	44	28.8
	while having your bath	10	6.5
	Don't know	40	26.1
When is the appropriate time to do breast self-examination	5 days after period ends	20	13.1
	During the period	19	12.4
	Anytime	51	33.3
	Don't know	63	41.2
How have you ever received formal instructions or training on how to perform breast self – examination	Yes	95	62.1
	No	58	37.9
If yes, where did you receive the training	Health care provider	77	50.3
	Television	19	12.4
	Newspaper	9	5.9
	Family member	14	9.2
	Total	153	100.0

Table 2 showing the practice of women towards self–breast examination among respondents

Variables	Categories	Frequency	Percent
Have you ever done breast self-examination	Yes	107	69.9
	No	46	30.1
If no, why have you not performed it	don't know how	42	27.5
	Too busy	16	10.5
	Not necessary	9	5.9
If yes, when	A week after menstruation	13	8.5
	Anytime during menstruation	17	11.1
	When it comes to mind	50	32.7
	Don't know	35	22.9
When do you perform breast self-examination	5 days after period ends	8	5.2
	During the period	9	5.9

	Anytime	84	54.9
	Don't know	49	32.0
Have you ever detected any abnormality upon breast self – examination	Yes	36	23,5
	No	117	76.5
On detecting any abnormality in your breast, what would you do	Consult doctor/nurse	58	37.9
	Tell spouse	32	20.9
	Tell parent	31	20.3
	Not do anything to avoid embarrassment	32	21.0
Total		153	100.0

Table 3 showing the factors affecting practice of breast self–examination among respondents

Variables	Strongly agree	Agree	Disagree	Strongly disagree
Level of knowledge				
I don't know how to do it	56(36.6%)	20(13.1%)	47(30.7%)	30(19.6%)
I don't have enough information about self – examination in the media	48(31.4%)	60(39.2%)	29(19.0%)	16(10.5%)
Socio – cultural factors				
It is uncomfortable	26(17.0%)	42(27.5%)	49(32.0%)	36(23.5%)
My culture doesn't support women touching their body	13(8.5%)	36(23.5%)	56(36.6%)	48(31.4%)
Individual factor				
I am always very busy	15(9.8%)	73(47.7%)	38(24.8%)	27(17.6%)
I often forget	48(31.4%)	54(35.3%)	33(21.6%)	17(11.1%)
I don't have any symptoms	41(26.8%)	60(39.2%)	35(22.9%)	17(11.1%)
I am scared of being diagnosed with breast cancer	41(26.8%)	56(36.6%)	33(21,6%)	23(15.0%)

DISCUSSION OF FINDINGS

Knowledge of breast self-examination

The findings on the knowledge of Breast Self-Examination (BSE) revealed that more than half have heard of BSE, primarily from healthcare providers. This is consistent with findings by Sachdeva et al. (2021), who similarly reported that healthcare professionals are the main source of BSE information for women in India.

This underscores the critical role healthcare providers play in educating women about breast cancer prevention. However, the lack of consensus on the frequency of BSE, with 35.9% thinking it should be done weekly and 31.4% unsure, reflects a knowledge gap similar to that identified by Onyemachi (2023), who found that many women are uncertain about the correct frequency and timing of BSE. This highlights the need for clearer, standardized health education on the appropriate practices for BSE. The fact that 62.1% of respondents received formal training on BSE, mainly from healthcare providers, is encouraging and supports the findings by Naeem et al. (2021), which show that structured awareness programs are effective in enhancing women's knowledge about breast health. However, the variation in techniques reported, such as performing BSE in front of a mirror (38.6%) or lying down (28.8%), combined with the 41.2% who were unsure of the best time to perform BSE, points to inconsistencies in training or understanding, similar to what Kiran & Syed (2023) observed in their historical review of BSE practices. The limited knowledge about the correct timing of BSE, which should ideally be performed a few days after menstruation, indicates that while awareness exists, there is still a significant need for improving the depth of knowledge, as also noted by Ahmed et al. (2020) in their study on university students in Bangladesh.

Practice or Breast Self Examination

The findings on the practice of Breast Self-Examination (BSE) show that while about two- third of respondents had performed BSE, while less than half of the population had not, mainly due to not knowing how or being too busy. This reduction in practice, despite high knowledge, is consistent with findings by Onyemachi (2023), who also reported a gap between knowledge and practice of BSE among women in Nigeria, citing similar reasons such as inadequate knowledge on the correct techniques. Additionally, Sachdeva et al. (2021) observed that while awareness levels are high, many women fail to practice BSE regularly, with barriers such as lack of time or motivation being common. The fact that 54.9% of respondents in this study performed BSE without following a regular schedule reflects a similar trend seen in the work of Uzma et al. (2023), where women did not adhere to a structured approach to BSE, leading to inconsistent practices. This irregularity in practice suggests that although women may understand the importance of BSE, they lack adequate guidance on how to incorporate it into their routine effectively. Furthermore, only 23.5% of respondents reported detecting abnormalities during BSE, with a considerable number (37.9%) indicating that they would consult a healthcare professional upon detection, aligning with the findings of Naeem et al. (2021), which highlighted the importance of professional consultation in early detection of breast abnormalities. However, the fact that 21.0% of respondents would avoid seeking help to prevent embarrassment suggests the influence of cultural or psychological barriers. This is supported by Kiran and Syed (2023), who found that fear of embarrassment or social stigma often discourages women from reporting breast abnormalities. The tendency for some respondents to tell a spouse or parent rather than a healthcare provider indicates a reliance on close social circles, which may delay timely medical intervention. This highlights the need for educational programs, that not only teach the technique of BSE but also emphasize the importance of overcoming stigma and seeking professional medical help when abnormalities are found.

Factors Affecting the Practice of Breast Self Examination

The findings on the factors affecting the practice of Breast Self-Examination (BSE) indicate that knowledge gaps, cultural beliefs, time constraints, and fear of diagnosis play significant roles. A considerable portion of respondents (36.6% strongly agreed and 13.1% agreed) reported not knowing how to perform BSE, which is consistent with findings by Onyemachi (2023), who observed that many women in Nigeria lack practical knowledge of BSE despite being aware of its importance. This highlights the need for more accessible educational resources. Similarly, Sachdeva et al. (2021) found that knowledge gaps are a major barrier to consistent BSE practice in India, emphasizing that formal training is crucial for improving practice rates. Cultural influences also emerged as a factor, with 23.5% of respondents agreeing that their culture discourages women from touching their bodies. This aligns with Kiran and Syed (2023), who found that cultural taboos often hinder women's willingness to perform BSE, especially in conservative societies. Time constraints were a major barrier, with 47.7% agreeing they were too busy and 35.3% agreeing they often forget to perform BSE. These findings resonate with the study by Naeem et al. (2021), where women cited busy lifestyles as a significant reason for neglecting regular BSE. The discomfort associated with BSE reported by 27.5% of

respondents is also in line with the historical perspective of Kiran & Syed (2023), who noted that discomfort and uncertainty around proper technique often lead to avoidance of BSE. Additionally, the fear of a possible diagnosis, agreed upon by 36.6% of respondents, reflects a common psychological barrier seen in other studies, such as Uzma et al. (2023), where fear of cancer diagnosis discouraged women from practicing BSE. Lastly, the lack of media coverage was highlighted by 39.2% of respondents, supporting findings by Islam et al. (2020), which called for enhanced media campaigns to improve public knowledge of BSE.

In conclusion, this research revealed significant insights into the knowledge and practice of breast self-examination among female outpatients in Wesley Guild hospital, Ilesa while a considerable proportion of the patient showed good knowledge and practice, substantial gaps remain. Notably, lack of know-how, culture, busy schedule, forgetfulness, no symptoms, uncomfortable, scared of breast cancer diagnosis, and no enough information on media are factors influencing the practice of breast self-examination. There is significant relationship between marital status ($p=0.000$), Ethnicity ($p=0.006$), Educational level ($p=0.025$), occupation ($p=0.001$) and practice of breast self-examination among female outpatients of Wesley Guild Hospital, Ilesa. There is no significant relationship between age ($p=0.295$) and practice of breast self-examination among female outpatients of Wesley Guild Hospital, Ilesa. There is significant relationship between the level of knowledge and practice of Breast Self-Examination ($P= 0.000$, $X^2=24.051a$) among female outpatients of Wesley Guild Hospital, Ilesa.

Some Recommendations include:

1. Nurses should provide regular and comprehensive training on Breast Self-Examination (BSE) during health visits to improve knowledge and practice among women.
2. Health educators should develop culturally appropriate educational materials to address the cultural beliefs that discourage women from practicing BSE.
3. Healthcare providers should integrate psychological counseling into breast health programs to address fears and emotional barriers related to BSE and breast cancer diagnosis
4. The Ministry of Health, in collaboration with media outlets, should launch nationwide campaigns that promote BSE and breast cancer awareness, targeting women of all ages and backgrounds.

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REFERENCES

1. American Cancer Society. Breast cancer early detection and diagnosis. 2020 [cited 2025 Feb 3]. Available from: <https://www.cancer.org/cancer/breast-cancer/screening-tests-and-early-detection/breast-self-exam.html>
2. Islam, M. A., AlShayban, D. M., Nisa, Z. U., Al-Hawaj, G. A. M., Al-Eid, G. H. A., Alenazi, A. M. M., ... & Haseeb, A. (2022). What is the current state of awareness, knowledge, and attitudes toward breast cancer? A cross-sectional survey among health and non-health college students. *Frontiers in Public Health*, 10, 838579.
3. Kiran M, Syed R. Awareness of self-examination of lumps in the breast among married women of Karachi. ResearchGate [Internet]. 2025 [cited 2025 Feb 3]. Available from: ResearchGate (Note: Provide the specific URL if available.)
4. Mehtab, K., Naseem, R., Ali, S. R., Anees, M., Haider, A., & Shah, M. (2023, September). Awareness of Self-Examination of Lump in the Breast among Married Women of Karachi. In *Medical Forum Monthly* (Vol. 34, No. 9).

5. Naeem Z, Nadeem M, Kamil M, Ayub A, Nawaz K, Karim S. Impact of breast cancer awareness health campaigns on knowledge of female educationalists of Islamabad and Rawalpindi: An interventional study. *J Shifa Tameer Millat Univ.* 2021;4(1):44–9.
6. National Cancer Institute. Breast cancer screening (PDQ) – Health professional version [Internet]. 2025 [cited 2025 Feb 3]. Available from: <https://www.cancer.gov/types/breast/hp/breast-screening-pdq>
7. Onyemachi E. Knowledge of breast self-examination among female students of College of Health Technology, Aba, Abia State, Nigeria. *GSC Adv Res Rev.* 2023;17(2):21–29.
8. Sachdeva S, Mangalesh S, Dudani S. Knowledge, attitude, and practices of breast self-examination among Indian women: A pan-India study. *Asian Pac J Cancer Care.* 2021;6(2):141–7.
9. Smeltzer SC, Bare BG, Hinkle JL, Cheever KH. Brunner & Suddarth’s textbook of medical-surgical nursing. 15th ed. Philadelphia: Wolters Kluwer; 2022.
10. Uzma K, Amir A, Muhammad S, Anjum N, Areeba S. Women’s perception on role of breast self-examination in early breast cancer detection. *J Univ Med Dent Coll.* 2023;14(3):687–91.
11. World Health Organization. Breast cancer [Internet]. 2025 [cited 2025 Feb 3]. Available from: <https://www.who.int/news-room/fact-sheets/detail/breast-cancer>