KNOWLEDGE TOWARDS BREAST SELF-EXAMINATION AMONG IN-SCHOOL FEMALE ADOLESCENTS I NSUKKA LOCAL GOVERNMENT AREA, ENUGU STATE

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Abstract

This research investigates the knowledge towards breast self-examination among female adolescents enrolled in Nsukka Local Government Area schools. Demographic variables of age and class-level were investigated. The study adopted a cross-sectional survey design, with a sample size of 367 senior secondary in-school female adolescents chosen from a population of 3953 through a multi-stage sampling procedure. A reliable "Knowledge towards Breast Self-Examination Questionnaire" was crafted and validated (Cronbach's $\alpha = 0.85$). Employing a significance level of $\alpha = 0.05$, data analysis encompassed descriptive statistics and tests of significance. The findings revealed a notably high level of knowledge (89.7%) and positive attitude ($\bar{x} = 2.60$; SD = 0.83) towards breast self-examination. The study underscores its contribution to augmenting comprehension of breast health awareness among adolescent females. The study concludes that participants possess a high level of knowledge about breast self-examination among younger participants. The study recommends comprehensive educational programs targeting all age groups and classes, combining knowledge-focused programs assessing the impact of educational initiatives and involving families and communities in educational effort.

Keynotes: Knowledge, breast self-examination, female adolescents, In-School.

Introduction

Breast cancer stands as a prominent contributor to illness and death among women on a global scale. It ranks among the top three cancer types and is among the top five reasons for cancer-related female fatalities. This ailment holds significant significance in the realm of global health. According to Fouelifack et al. (2021) it holds the distinction of being the most prevalent cancer among women and concurrently holds the position of the primary factor behind cancer-related fatalities in women. In 2018 BC was responsible for 2,088,849 new cases of cancer (11.6%) and 626,679 deaths (6.6%), approximately half of the breast cancer cases and (60%) of the deaths are estimated to take place in developing countries. There is an increasing number of younger women being diagnosed with BC (Bray et al., 2018). Breast cancer is not a disease peculiar to any country or place on earth. A lot of women in different parts of the world are suffering from breast cancer. Globally, there are more than 2.26 million new cases of breast cancer in women (World health organization (WHO), 2021). An estimated 685,000 women died from breast cancer in 2020, corresponding to (16%) or 1 in every 6 cancer deaths in women (WHO, 2021: Cincinnati, 2023). Every 14 seconds, somewhere in the world, a woman is diagnosed with breast cancer (Breast cancer research foundation, 2020). Breast cancer incidence rate remains highest in more developed regions, but mortality is relatively much higher in less developed countries.

Breast self-examination is one of the early noticing way of breast cancer which involves the woman herself looking at and feeling each breast for possible mass, discharge, swelling, dimpling and other abnormalities. Breast cancer remains a significant concern in Africa. In Africa, breast cancer caused 74,072 deaths and 168,690 cases were estimated to have occurred in 2018 (Sharma, 2021). In Sub-Saharan Africa (SSA), preventing and treating breast cancer is a pressing public health issue. Breast cancer survival rates five years after diagnosis stand at a dismal (40%) in sub-Saharan Africa as compared to over (90%) in most high-income countries (WHO, 2022). Late-stage diagnosis and inadequate access to quality breast cancer care lead to high death rates. Most women are diagnosed at advanced stages when treatment is difficult, costly and less likely to achieve a cure. In low-income countries and in sub-Saharan Africa, BC is responsible for one in five cancer deaths in women. Despite its emerging public health importance, incidence rates are still generally low in Africa, presumably below 35 per 100,000 women in most countries (as compared to over 90 - 120 per 100,000 women in most European or North American countries) (Dibisa et al., 2019: Csikszentmihalyi, 2023).

In Africa, studies have been carried out to evaluate the Knowledge attitude and practice of breast self-examination. In a study conducted among female undergraduates in University of Uyo, Akwa Ibom State in Nigeria, (23.4%) of respondents reported performing Breast self-examination regularly although (78.3%) had heard of Breast self-examination (Akpanekpo, 2017). In a similar study carried out among undergraduate students in the University of Buea the main reason for not performing B lf-examination as cited by the respondents was the lack of knowledge 73 (44%). In Bambili in Cameroon, it was found out that as little as (7%) participants knew the appropriate time to perform a breast self-examination (Sama et al., 2017).

In Nigeria, high mortality from breast cancer persists owing to inadequate population awareness, poor health seeking behavior, low levels of female education, and empowerment in addition to a poor health system leading to suboptimal treatment services. Although like in many Sub-Saharan Africa, the incidence of breast cancer appears to be relatively low; however, survival in breast cancer is generally poor amidst other competing public health challenges. An intriguing aspect however is that aside from Asia, Africa has the highest age-standardized mortality rate compared to other continents with higher incidence. Nigeria has been reported to have the highest breast cancer mortality rate. With a prevalent rate of 69.1 per 100,000 and mortality rate of 6.23 per 100,000 based on data from Institute of Health Evaluation (IHME) (Ntekim, Oluwasanu, & Odukoya, 2022). Breast cancer is a word that is relatively easy to be uttered but it leaves a deep frightening impression on people, especially in a small local government like Nsukka. With the passage of times, the widespread of breast cancer augments together with the technical global development and modernization and it can occur in both men and women, breast cancer in men is rare.

Breast cancer is more common among women than men and it is a type of malignant tumor which begins in the cells of the breast. Early detection plays a pivotal role in the prevention of breast cancer. The 5-year survival rate has reached approximately (85%) with early detection, whereas later detection has decreased the survival rate to (56%) (Kalliguddi, Sharma, & Gore, 2019) Breast cancer is made distinct from other types of cancers by the fact that it occurs in a noticeable organ and can be detected and treated at an early stage. Most of the breast tumors diagnosed in an early stage have been self-discovered. Initially, breast cancer does not produce symptoms. However, as the tumor enlarges, symptoms manifest in the form of painless lump in the breast, lump under the armpit, breast tenderness, swelling or thickness of skin over the breast, and spontaneous discharge of the nipple (particularly if bloody, erosion,

or inversion in the nipple) (Dewi, & Umijati, 2020: David, 2023). Recommended precautionary techniques to reduce breast cancer morbidity and mortality include breast self-examination (BSE), clinical breast examination (CBE) and mammography. However, the latter two require a visit to the doctor and use of specialized equipment. Breast self-examination is an easy, quick, convenient, private, cost free, and safe practice that requires no paraphernalia.

Breast self-examination is an examination made by each woman and it is cost effective, painless, easy to apply, safe, and includes noninvasive procedures without special material or tool requirements. It is an important and uncomplicated way of noticing breast cancer which takes about five minutes to apply. Breast cancer awareness is a sure way to improve the outcome of breast cancer treatment. According to Dagne, Ayele, & Assefa, (2019) and Sadoh, Osime & Nwaneri, (2021), Breast self- examination is useful for women's awareness of warning signs and symptoms of breast cancer like redness of the breast skin, changes in the size of the breast or nipple, a breast lump, pain in the breast or armpit, lump under the armpit, nipple rash, changes in the shape of the breast or nipple, bleeding or discharge from the nipple, pulling of the nipple, dimpling of the breast skin and changes in the position of the nipple. Breast self-examination is also important to increase breast health awareness which helps to allow for timely detection of anomalies for those who do not have access to health facility and advanced laboratory investigations for diagnosing breast cancer.

It is easy to acknowledge that knowledge is available information. Knowledge is a familiarity, awareness, or understanding of someone or something, such as facts, information, descriptions, or skills, which is acquired through experience or education by perceiving, discovering, or learning (Librarianship Studies & Information Technology, 2017: Egenti, 2021). Knowledge can refer to a theoretical or practical understanding of a subject. According to information sourced from Librarianship Studies & Information Technology (2017) knowledge can be implicit (as with practical skill or expertise) or explicit (as with the theoretical understanding of a subject); it can be more or less formal or systematic. In philosophy, the study of knowledge is called epistemology; the philosopher Plato famously defined knowledge as justified true belief, though this definition is now thought by some analytic philosophers to be problematic because of the Gettier problems while others defend the platonic definition. However, several definitions of knowledge and theories to explain it exist. Knowledge acquisition involves complex cognitive processes: perception, communication, and reasoning; while knowledge is also said to be related to the capacity of acknowledgment in human beings. According to Iweama, Umeakuka and Aguocha (2020), knowledge is the information obtained from accurate facts and understanding of something through experiences, discussions and learning. Tura and Demissie (2019) stressed that the knowledge of breast self-examination helps a woman to assess her own breasts for lumps, alteration in size or shape of the breast or any other changes in the breast or underarm. Contextually, knowledge is the fact of being aware, familiar, understanding and knowing something. Knowledge has to do with enlightenment and it is safe to say that knowledge contradicts ignorance.

The social learning theory (SLT) was propounded by Albert Bandura in 1977. It is based on the idea that we learn from our interactions with others in a social context. Separately by observing the behaviors of others, people develop similar behaviors. It posits that individuals learn from one another through observation, imitation and modeling. The application of social learning theory will further explain how interaction with other people and the behavior of other people can affect the knowledge and attitude towards breast self-

examination among in-school female adolescents in Nsukka Local Government Area Enugu State.

This study was carried out in Nsukka Local Government Area Enugu State. Nsukka is one of the seventeen local government areas that make up Enugu state, South-east Nigeria. Towns and villages that make up Nsukka LGA include Nkpunanor, Ihen'owerre, Nru Nsukka, Nguru, Lejja, Opi, Orba, and Eha–Alumona. The estimated population of Nsukka LGA is put at 369,012 inhabitants with the vast majority of the area's dwellers being members of the Igbo ethnic affiliation.

In an ideal scenario, it is essential that female adolescents within school settings are adequately informed about breast self-examination. Given the global significance of breast cancer as a health issue, it is of high importance for preventive and treatment measures to be widely understood. Breast self-examination represents a proactive health behavior that young female adolescents should be educated about, fostering a positive outlook towards its practice. Remarkably, breast self-examination is characterized by its accessibility, affordability, painlessness, ease of application, safety, and non-invasiveness, without necessitating specialized equipment or materials. Unfortunately, it appears that there could be limited awareness and a less-than-favorable perspective surrounding breast self-examination. Indications point towards a potential lack of awareness and a less favorable perspective regarding breast self-examination. These circumstances raise the importance of exploring the implications associated with such perceptions. There might be a substantial gap in knowledge and attitude towards breast self-examination. As a result, urgent measures are imperative to address this situation, aiming to bridge the knowledge gap and cultivate a positive perspective towards breast self-examination.

The purpose of this study is to determine the level of knowledge and attitudes towards breast self-examination among in-school female adolescents in Nsukka local government area. Specifically, this study will determine the;

1. level of knowledge towards breast self-examination among in-school female adolescents in Nsukka Local Government Area.
2. level of knowledge towards breast self-examination among in-school female adolescents in Nsukka Local Government Area based on age.
3. level of knowledge towards breast self-examination among in-school female adolescents in Nsukka Local Government Area based on class-level.

Methods

A cross-sectional research design will be utilized for the study. According to Simkus (2023), a cross-sectional study is a type of observational study, or descriptive research, which involves analyzing information about a population at a specific point in time. Cross-sectional studies can be classified as descriptive or analytical, depending on whether the outcome variable is assessed for potential associations with exposures or risk factors (Xiaofeng, 2020: Ibeagha, 2023). This design would involve collecting data at a specific point in time from a sample of in school female adolescents particularly in secondary schools. Norazilah et al., (2021) carried out a study on the knowledge and attitude towards breast self-examination among young adult nursing students in Malaysia using a cross-sectional descriptive study, hence this design is appropriate for the study on the knowledge and attitude towards breast self-examination among in-school female adolescents in Nsukka Local Government Area. The study area selected for examination is Nsukka Local Government Area, situated within Enugu State, Nigeria. Nsukka serves as one of the seventeen local government areas within the state,

nestled in the southeastern region of the country. Notably, Nsukka encompasses both a town and a local government area, with the town acting as the administrative hub. The researcher's choice to focus on Nsukka Local Government Area stems from its substantial adolescent population. This demographic factor renders the area conducive for investigating the subject matter.

The estimated population of Nsukka LGA is put at 369,012 inhabitants. There are thirty-two (32) secondary schools in this area of study including 3 only boys schools, 4 only girls schools and 25 mixed schools (Post Primary School Management Board, (PPSMB), Nsukka zone, 2023). The population of the study comprise of only senior secondary in-school female adolescents in Nsukka Local Government Area. According to the Post Primary School Management Board, (PPSMB), (2023) there are a total of 3953 senior female secondary school students from 32 secondary schools in Nsukka Local Government Area. The sample size of this study consists of only 367 in-school female adolescents. The sample size is in line with the suggestion of Cohen, Manion and Morrison (2011) that when a population is 5000 and above 95% confidence level (5% interval), the sample size should not be less than 357 Multi stage sampling technique was used and to this end three sampling techniques were used. The first stage, cluster sampling, was used to cluster the entire thirty-two (32) secondary schools into two groups (only girls and mixed schools). Simple random sampling was used to select three (3) schools from each cluster giving a total of six (6) schools. Convenience sampling was used to select the classes based on availability and accessibility. Based on availability and accessibility only senior secondary two (SS2) and senior secondary one (SS1) were used because senior secondary three (SS3) is an exam class and will likely not be available to fill the questionnaires.

A self-structured questionnaire titled Knowledge and Attitude towards Breast Self-Examination Questionnaire (KABSEQ) was used by the researcher as the instrument for data collection in this study. The questionnaire comprises three sections namely, A, B and C. Section A was used to collect information on the demographic characteristics of the respondents while section B deals with the assessment of knowledge and section C attitude towards breast self-examination among in-school female adolescents.

In order to ensure face validity, the researcher gave copies of the questionnaires to three experts. These three experts are from the department of Human kinetics and health education in the University of Nigeria Nsukka. The criticisms, advice and suggestions of these experts was used in modifying the instrument that was used for data collection.

In order to ascertain the reliability of the instrument 20 questionnaires were given to a separate group of respondents and the correlation between scores from two administrations of the instrument was calculated. Cronbach's alpha was used to assess internal consistency, with a benchmark of 0.70 as specified by Cohen, Manion and Morrison (2011). The final reliability evaluation showed a value of approximately 0.85, indicating a satisfactory level of reliability.

To gain access to the respondents (students), the researcher obtained a letter of introduction from the Head of the Department of Human Kinetics And Health Education at the University of Nigeria, Nsukka. This letter sought permission and cooperation and was subsequently presented to the principals of the selected schools. The researcher also provided instructions to an assistant on the administration process for the questionnaires. Subsequently, a total of three hundred and sixty-seven (367) questionnaires were distributed to the respondents across various schools. The researcher, along with the assistance of the research assistant, handed out copies of the questionnaire directly to the respondents within their

respective school premises. The questionnaires were distributed and collected on the spot, resulting in a noteworthy return rate of approximately ninety-five percent.

The returned copies of the instrument were screened for completion of responses. Information from the instruments were coded into IBM Statistical Package for Social Sciences (SPSS) version 25, and analyzed to indicate the response. The research questions for the level of knowledge were answered using frequencies and percentages, while for the level of attitude, mean and standard deviations were used to answer the research questions. Also, chi-square analysis and t-test statistics were employed for the null hypotheses related to knowledge and attitude respectively.

Table 1

Percentage analysis of the level of knowledge towards breast self-examination among in-school female adolescents in Nsukka Local Government Area (n=348)

S/n	Item Statement	Yes	No
		f(%)	f (%)
1	Abnormalities such as; mass, discharge, swelling and dimpling could be early signs and symptoms of breast cancer?	266(76.4)	82(23.6)
2	Breast self-examination can help detect early signs and symptoms of breast cancer?	316(90.8)	32(8.2)
3	Have you heard of breast self-examination before now?	246(70.7)	101(29.0)
4	Breast self-examination is done by looking at and feeling your breast regularly to detect whether there are changes?	308(88.5)	39(11.2)
5	Breast self-examination is a step by step method you can use to examine your breast?	313(89.9)	35(10.1)
6	Breast self-examination should be done monthly?	307(88.2)	36(10.3)
	Overall	**89.7**	**10.3**

Key: Less than 20% = Very low knowledge; 20-39% = Low knowledge; 40-59% = Average/Moderate knowledge; 60-79% = High knowledge; 80% = Very high knowledge

Data in Table 1 shows that the overall level of knowledge towards breast self-examination among in-school female adolescents in Nsukka Local Government Area was very high (89.7%). The table further shows that the level of knowledge of those who have heard of breast self-examination before now is high (70.7%). Furthermore, a significant percentage of respondents recognize that symptoms such as masses, discharge, swelling, and dimpling could potentially indicate early signs of breast c[illegible] 76.4%). Additionally, an overwhelming majority of participants understand that breast self-examination can help detect early signs and symptoms of breast cancer (90.8%). The study also indicates a high level of knowledge with statements describing breast self-examination is done by looking at and feeling your breast regularly to detect whether there are changes. Similarly, there is a widespread agreement that breast self-examination should be conducted on a monthly basis, with knowledge levels of (89.9%) and (88.2%) for the respective statements.

Table 2

Percentage analysis of the level of knowledge towards breast self-examination among in-school female adolescents in Nsukka Local Government Area based on age(n=348)

S/n	Item Statement	10-14years		15years and above	
		Yes	No	Yes	No
		f(%)	f(%)	f(%)	f(%)
1	Abnormalities such as; mass, discharge, swelling and dimpling could be early signs and symptoms of breast cancer?	35(66.0)	18(34.0)	231(78.5)	64(21.7)
2	Breast self-examination can help detect early signs and symptoms of breast cancer?	50(94.3)	3(5.7)	266(90.2)	29(9.8)
3	Have you heard of breast self-examination before now?	33(62.3)	19(35.8)	213(72.2)	82(27.8)
4	Breast self-examination is done by looking at and feeling your breast regularly to detect whether there are changes?	47((88.7)	6(11.3)	261(88.5)	33(11.2)
5	Breast self-examination is a step by step method you can use to examine your breast?	50(94.3)	3(5.7)	263(89.2)	32(10.8)
6	Breast self-examination should be done monthly?	44(83.0)	8(15.1)	263(89.2)	28(9.5)
	Overall	**92.5**	**7.5**	**89.2**	**10.8**

Key: Less than 20% = Very low knowledge; 20-39% = Low knowledge; 40-59% = Average/Moderate knowledge; 60-79% = High knowledge; 80% = Very high knowledge

Data in Table 2 shows the overall level of knowledge towards breast self-examination among in-school female adolescents in Nsukka Local Government Area based on age is very high also the level of knowledge among in-school female adolescents aged 15 and above (89.2%) is lower than those aged 10-14 (94.3%). Additionally, the table reveals that individuals aged 15 and above demonstrate a higher level of knowledge (72.2%) in contrast to those aged 10 to 14 years (62.3%) regarding the query "Have you heard of breast self-examination before now?" Similarly, individuals aged 15 and above also display a greater level of knowledge (78.5%) in comparison to those aged 10 to 14 years (66.0%) concerning the statement "Abnormalities such as masses, discharge, swelling, and dimpling could serve as early signs and symptoms of breast cancer.

Table 3

Percentage analysis of the level of knowledge towards breast self-examination among in-school female adolescents in Nsukka Local Government Area based on class-level (n=348)

S/n	Item Statement	SS1		SS2	
		Yes	No	Yes	No
		f(%)	f(%)	f(%)	f(%)
1	Abnormalities such as; mass, discharge, swelling and dimpling could be early signs and symptoms of breast cancer?	119(69 .2)	53(30.8	147(83.5)	29(26.5)
2	Breast self-examination can help detect early signs and symptoms of breast cancer?	157(91.3)	15(8.7)	159(90.3)	17(9.7)
3	Have you heard of breast self-examination before now?	112(65.1)	59(34.3)	134(76.1)	42(23.9)
4	Breast self-examination is done by looking at and feeling your breast regularly to detect whether there are changes?	149(86.6)	23(13.4)	159(90.3)	16(9.1)
5	Breast self-examination is a step by step method you can use to examine your breast?	157(91.3)	15(8.7)	156(88.6)	20(11.4)
6	Breast self-examination should be done monthly?	150(87.2)	19(11.0)	157(89.2)	17(9.7)
	Overall	**88.4**	**7.5**	**89.2**	**10.8**

Key: Less than 20% = Very low knowledge; 20-39% = Low knowledge; 40-59% = Average/Moderate knowledge; 60-79% = High knowledge; 80% = Very high knowledge

Data in Table 3 shows the overall level of knowledge towards breast self-examination among in-school female adolescents in Nsukka Local Government Area based on class-level is very high also the level of knowledge of in-school female adolescents in SS2 (89.2%) is higher than those in SS1 (88.4%). Furthermore, individuals in SS2 exhibit a very high level of knowledge (83.5%) in contrast to those in SS1 (69.2%) regarding the statement "Abnormalities such as masses, discharge, swelling, and dimpling could serve as early signs and symptoms of breast cancer." Similarly, the data highlights that individuals in SS2 demonstrate a higher level of knowledge (76.1%) compared to those in SS1 (65.1%) concerning the question "Have you heard of breast self-examination before now?"

Discussion

The findings of the study in Table 1 shows the overall level of knowledge towards breast self-examination among in-school female adolescents in Nsukka Local Government Area is very high. This finding was not expected and is surprising. The researcher's anticipation of a low level of knowledge towards breast self-examination among in-school female adolescents in Nsukka Local Government Area was influenced by several factors like limited access to comprehensive health education programs within the region, potential gaps in the existing curriculum pertaining to personal health awareness and prevalent socio-economic constraints prevalent in the area. The finding was consistent with the findings of a cross-sectional study done by Akinola and Mukaddas, (2021) who reported that majority of in-school

female adolescents (94%) have heard of breast cancer and (85%) of them heard of breast examination. The finding is in line with the findings of Norazilah et al., (2021) who indicated that (86.7%) of respondents know about breast self-examination. The finding was consistent with the findings of study carried out by Ogunkayode & Ajuwon, (2021) who showed that the majority (80.4%) had overall fair knowledge of BC and BSE. This supporting finding implies that interventions aimed at enhancing awareness could be effective in similar populations. In contrast, Thakur, Thakur and Chicholkar (2022), conducted a study on knowledge regarding breast self-examination among adolescent girls and revealed that adolescent girls lacked knowledge about breast self-examination only (21.7%) had knowledge towards breast self-examination and this contradicting study underscores the importance of region-specific interventions to address educational deficiencies. Nonetheless, the consistently high knowledge levels indicated in these findings, including the major finding, suggests that educational efforts and awareness campaigns related to breast self-examination have been effective in disseminating information about this practice to female adolescents.

The findings of the study in Table 2 shows that students within the age range of 10-14 possessed higher knowledge towards breast self-examination among in-school female adolescents in Nsukka Local Government Area (92.5%). This finding was surprising and therefore not expected. The researcher expected higher knowledge from older students because they are more exposed and likely to have a higher level of knowledge. This finding contradicts the findings of Ogunkayode & Ajuwon, (2021) and Cilliers, (2021) who reported that based on age, older students (72.1%) had more knowledge than younger students (28.9%). This finding contradicts the findings of Fondjo et al., (2022) who reported that based on age, older students (67.0%) had more knowledge than younger students (33.0%). The study is in contrast with findings of Mut et al., (2019) which indicated that the majority of the participants (91.0%) had poor knowledge regarding BSE and this was because most of the participants (53.0%) stated that they did not know about BSE. This showed that BSE is not well known among young females due to poor health behavior and attitudes regarding breast cancer. This finding difference could be as a result of difference in location. Additionally, this could be due to various factors, including the incorporation of health education and awareness programs in schools targeting younger age groups.

Findings of the study in Table 3 shows that SS2 class had higher knowledge towards breast self-examination (90.9%) compared to the SS1 (88.4%) This finding was expected and therefore not surprising because as students' progress from SS1 to SS2, there is typically advancement in the curriculum, introducing more specialized and advanced subjects. This progression could potentially encompass health-related topics, leading to greater exposure to self-examination practices. Furthermore, SS2 students might have had more time to accumulate knowledge from diverse sources, including supplementary educational materials, discussions, and real-life experiences, contributing to their heightened awareness of breast self-examination This study corresponds with the findings by Ogunkayode & Ajuwon (2021) and Cherry, (2021) which study emphasizes on the need of health education instructors not to limit information about BSE only to those who are in higher class-levels. The finding was consistent with the findings of a study carried out by Mutabazi & Ndahayo (2020) and Cafasso, (2021) which indicated in respect to one's year of study and them having heard of BSE the findings show that there are greater proportions of those who have heard of BSE among participants in their third 61 (77.2%), fourth 39 (78%) and fifth 10 (100%) years. It was interesting to note that even among first years and second years, more than half of the participants in these years of study had heard of BSE. It appears that from third year upwards the percentage of participants who have heard of BSE increases, indicating a possibility of more exposure to BSE information

as one progresses with their education. This means the higher the class-level the higher the level of knowledge.

Conclusion

In conclusion, the study sheds light on the level of knowledge and attitude towards breast self-examination among in-school female adolescents in Nsukka Local Government Area. The findings indicate a substantial and commendable overall knowledge level concerning breast self-examination. Notably, students aged 10-14 exhibited a heightened awareness and understanding of this practice. The research highlights a positive attitude prevailing among these adolescents towards breast self-examination, underlining the significance of proactive health-related behaviors. Particularly, the 10-14 age group and SS2 class demonstrated a notably favorable attitude. Additionally, the study determined that age and class-level did not significantly impact knowledge and attitude towards breast self-examination among the participants. This suggests a uniform level of awareness and positive perception across various age groups and classes. In essence, this research underscores the success of educational efforts in promoting breast self-examination awareness and cultivating a positive attitude among in-school female adolescents in Nsukka Local Government Area. It provides valuable insights for health educators, policymakers, and stakeholders aiming to enhance the health knowledge and attitude of young females towards breast self-examination.

Recommendations

Based on the findings of the study the following recommendations were made:

1. Comprehensive educational programs that target all age groups and classes to enhance knowledge and improve attitude about breast self-examination should be developed. These programs should focus on raising awareness among in-school female adolescents leveraging peer influence, role models, and personal testimonies. .
2. Knowledge-focused programs with attitude-enhancing strategies should be combined. Students should be educated not only about breast self-examination but also about the significance of early detection, dispelling myths, and addressing fears related to breast health.
3. The impact of educational initiatives and campaigns on both knowledge and attitudes should be regularly assessed. Strategies should be adjusted based on feedback to ensure sustained improvement and to address emerging challenges.

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