



Adult Health Education Strategies for Awareness Creation on Breast Cancer Among Women in Orashi Region of Rivers State, Nigeria

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Abstract

The study examined adult health education strategies employed for awareness creation on breast cancer among women in the Orashi region of Rivers State. The research employed a descriptive survey approach, encompassing a population of 1136 respondents. This group consisted of 315 medical officers from Ogba/Egbama/Ndoni, Ahoada East, Ahoada West, and Abua/Odaul Local Government Area hospitals, as well as 821 members of women-based organisations in the region. A stratified proportionate sampling technique was employed to select a sample of 432 respondents, comprising 158 medical officers and 274 members of women's organisations. Data collection for this study involved the utilisation of a questionnaire titled Adult Health Education Strategies for Awareness Creation of Breast Cancer in Rivers State (AHESACBC). The tool underwent face and content validation by three experts. The researchers employed Cronbach's alpha to obtain internal consistency coefficients of 0.82, 0.87, and 0.73. The data were analysed using measures of central tendency, such as the mean and standard deviation. These measures were employed to answer the research questions. Additionally, the hypotheses were tested using the z-test statistic, with a significance level of 0.05. The data analysis demonstrated that, to a great extent, the utilisation of health literacy, experiential learning, and role-play strategies was effective in raising breast cancer awareness among women in the Orashi region. Based on the research outcomes, it was recommended that primary health care centres in proximity to rural populations should collaborate with members of women-led organisations to implement a health literacy, experiential learning, and role-play strategy for adult health education to raise awareness of breast cancer prevention, detection, and treatment.

Keywords: Adult Health Education, Breast Cancer, Awareness Creation, Cancer Prevention Utilisation

Introduction

The breast is a reproductive mammary organ composed of lobular glandular structures that aid milk production during lactation. Although males and females have breasts, male breasts are rudimentary and functionless, whereas female breasts are well developed during puberty, with greater deposition of fatty and lobular glandular tissues than in males (Akram et al., 2017). The breast can develop numerous diseases, but one of the most common diseases that affects the breast is breast cancer. Mayea et al. (2023) described breast cancer as a viral disease that is caused by cell proliferation; this occurs when malignant (cancerous) cells form in the tissue of the breast. This is when some cells begin to grow, divide, and multiply abnormally, leading to the formation of a lump. These cells then continue to spread rapidly throughout the breast, lymph nodes, and, in severe cases, other parts of the body. Breast cancer can affect both males and females, although females are about 100 times more likely to develop the disease than males. Most cancers in the female breast form shortly before or after menopause, with three-quarters of all cases being diagnosed between age forty and fifty (American Cancer Society, 2018). The Centers for Disease Control and Prevention (CDC) reiterated that breast cancer is more common among women with a family history of breast cancer in first-degree relatives, such as mothers and sisters, and among women with a personal history of benign, ductal, or lobular carcinoma breast disease. Other risk factors of breast cancer include lifestyle habits, obesity, which is a result of consumption of high-

fat diets, explosion to certain kinds of radiation, high consumption of alcohol, early age of menarche, late menopause, first birth at a late age, and hormone replacement therapy, which is the exposure to estrogen over a long period.

Signs and symptoms of breast cancer differ among women. Some women are asymptomatic; that is, such women do not exhibit early symptoms, while others are symptomatic depending on their body functions. Some of the symptoms of breast cancer, as highlighted by Mayen et al. (2023), are lumpiness in the affected breast, changes in the size or shape of the breast, changes in the nipples, such as a change in shape, crusting, sores or ulcers, a clear or bloody discharge, or a nipple that turns inverted. The American Cancer Society (2018) submitted other symptoms, which include changes in the skin of the breast, such as dimpling or indentation, a rash, a scaly appearance, unusual redness or other colour, swelling or discomfort in the armpit, persistent and unusual breast pain that is related to the normal monthly menstrual cycle, which remains after the cycle and occurs in one breast only. Swapama and Padmavathy (2015) reiterated that symptoms of breast cancer include lumps or masses, insomnia, diarrhoea, constipation, loss of taste, fatigue, weight loss, vomiting, breast pains, persistent changes on the breast such as thickening, swelling, and dimpling, tenderness, skin irritation, redness, scaling, and prominent superficial veins. Shankar et al. as cited in Mayen et al. (2023), submitted that breast cancer can be prevented through lifestyle modification; this includes limitation of alcohol consumption, maintenance of a healthy weight, regular exercise and physical activities, reduction of post-menopausal hormone therapy, and engaging in breastfeeding. This is because studies have shown that women who breastfeed are statistically less likely to develop breast cancer than women who do not.

Detecting measures for breast cancer, as asserted by Anderson (2008), include breast self-examination. This is a simple and cost-effective method of breast cancer screening. It is a self-practice in which a woman examines her breasts regularly; these could be weekly, fortnightly, or monthly. This is done by raising one arm above her head, while the other hand inspects and palpates each breast, both while lying and while standing in front of a mirror. Other detection methods, as submitted by Anderson (2008), include breast ultrasound. This is done by a sonographer who applies a gel-like substance around the breast while a woman lies flat on her back with her arms raised. A probe, known as a transducer, is used to press around the breast, including the armpit area, to examine the breast tissue for abnormalities. Anderson further noted that mammography, as an X-ray imaging method, can be used to examine the breast for the early detection of breast cancer when a change is felt but does not show up on an ultrasound scan. Lumpectomy and Mastectomy are treatments that are carried out for breast cancer in the form of surgery to remove the affected breast tissue. It reduces the chances of developing the conditions for women who are at risk through heredity. Further, treatment for breast cancer includes radiation therapy, chemotherapy, hormone therapy, and immunotherapy, which involves the use of the body's own immune system to fight breast cancer cells. Awareness creation, hence, becomes an imperative effort for breast cancer awareness among women in the Orashi region and Nigeria in general. Omaka-Amari et al. (2015) asserted that awareness creation is the familiarity with a specific phenomenon. They described it as the acquisition of knowledge of breast cancer, its symptoms, preventive measures, detection, and treatment options. Breast Cancer Screening Awareness Month is observed on the third Friday of October annually. It equips women to observe and identify symptoms before the disease spreads and to seek medical assistance early. Ikechukwu et al. (2015) stated that awareness creation helps prevent cancer by providing individuals with the understanding needed to adopt appropriate lifestyle modifications, preventive measures, and detection and treatment options.

Adult health education is an important tool or means to promote awareness creation for breast cancer among women. Donatella, as cited in Asuquo and Olajide (2015), defined health education as the process by which individuals and groups learn to behave in ways conducive to the promotion, maintenance, or restoration of their health. Furthermore, Abubakar (2007) noted that health education is a means of assisting people in adopting positive health behaviour through their own efforts to improve their health. Nayar et al. as cited in Abubakar (2010), asserted that health education is a method of conveying to the community the knowledge necessary for disease prevention and for living a normal life.

Adult health education strategies for raising breast cancer awareness include health literacy, experiential learning, and role-play. The National Assessment of Adult Literacy (NAAL) in Adedokun (2015) states that literacy was once seen as the ability to read and write a simple sentence, but this belief has evolved in modern times to encompass more complex and diverse skills and understanding. Nji in Ihejirika (2015) stated that literacy education is the teaching of adults according to any organized formal or non-formal plans of education with the ultimate goal of helping them better their occupational opportunities and quality of life. Hence, health literacy, as described by Okenwa-Ojo and

Samuel (2015), is a person's capacity to obtain, process, and act on health information. Health literacy skills include basic reading, writing, numeracy, and the ability to communicate on health issues and lifestyles. Green-Berg (2001) noted that health literacy is the capacity to obtain, interpret, understand, and use information to promote and maintain healthy lifestyles. It involves the functional abilities to identify health-related issues, implement preventive and control measures, and select treatment options to improve personal and societal health. A health literacy strategy for awareness creation on breast cancer will enable women to acquire the necessary skills of reading, writing, numeracy, and communication for sensitisation on risk factors of breast cancer, its signs and symptoms, preventive measures, and treatment. This could be effective by using indigenous languages to improve comprehension and increase the rate of women's participation in breast screening activities.

Experiential learning, as defined by Yusuf and Bala (2015), is learning from experience or learning by doing. This process immerses learners in an experience and then encourages them to reflect on it to develop new skills, attitudes, or ways of thinking. Kenny (2008) noted that experiential learning is a process of creating and transforming experience into knowledge, skills, attitudes, values, emotions, beliefs, and senses. The most prevalent understanding of experiential learning is based on reflection. In this study, women who, through early detection by breast self-examination, mammography, breast ultrasound scan, mastectomy, and commencement of immediate treatment, share their true-life experiences with other women by sensitizing them to the early symptoms of breast cancer and the need for self-examination and routine hospital visitation.

Role-play, as asserted by Nzeneri in Ihejirika (2015), is a group-based strategy that provides learners with opportunities to assume different roles in problem situations. The role play is also known as socio-drama. It is a process of outlining the roles participants are to play that helps explain the learning experience under treatment. It helps participants or learners identify problems to be solved and then make realistic decisions about the roles of different participants in solving them. It also helps in retention and adequate assimilation of information. In this instance, the facilitator guides women to participate in play roles on awareness creation of breast cancer by breast self-examination, mammography, breast ultrasound scan, lumpectomy, and mastectomy.

Breast cancer is a major public health challenge, especially in developing countries like Nigeria and the Orashi region of Rivers State in particular. Okobia and Bunker (2006) asserted that it is the leading cause of death among women between the ages of 20 and 60 years. The International Agency for Research on Cancer revealed that approximately one out of eight women develops breast cancer all over the world, and 1.5 million new cases are diagnosed annually, with a recorded case of 411,000 deaths. In Rivers State, records from Oncology clinics and pathology units at the University of Port Harcourt Teaching Hospital and Rivers State University Teaching Hospital revealed an increased incidence rate of breast cancer, which could be attributed to a lack of awareness creation on breast cancer.

Hence, preventive measures through lifestyle modifications, early detection through breast self-examination, breast ultrasound scan, mammography, and treatment through lumpectomy, mastectomy, radiation therapy, chemotherapy, hormone therapy, and immunotherapy could reduce the mortality rate. But most rural women, especially in the Orashi region of Rivers State, are not aware of breast cancer despite Government and health sector interventions through campaigns, sensitisation of the public by radio jingles, television programmes, seminars, and workshops. These strategies have not been effective, particularly in rural communities, due to inadequate electricity supply, inadequate health facilities, poor health practices, and poor health education. Therefore, it became imperative to use adult health education strategies, including health literacy, experiential learning, and role play, to raise awareness of breast cancer among women in the Orashi region of Rivers State.

The study aims to examine adult health education strategies for awareness creation on breast cancer among women in the Orashi region of Rivers State. Specifically, the objectives are to: -

1. ascertain the extent to which the health literacy strategy of adult health education creates awareness on breast cancer among women in the Orashi region of Rivers State.
2. determine the extent to which the experiential learning strategy of adult health education creates awareness of breast cancer among women in the Orashi region of Rivers State.
3. Examine the extent to which the role-play strategy of adult health education creates awareness on breast cancer among women in the Orashi region of Rivers State.

Research Questions

1. To what extent does the health literacy strategy of adult health education create awareness of breast cancer among women in the Orashi region of Rivers State?
2. To what extent does the experiential learning strategy of adult health education create awareness of breast cancer among women in the Orashi region of Rivers State?
3. To what extent does the role-play strategy of adult health education create awareness of breast cancer among women in the Orashi region of Rivers State?

Hypotheses

1. There is no significant difference between the mean responses of medical officers and members of women-based organizations on the extent to which health literacy creates awareness of breast cancer among women in the Orashi region of Rivers State
2. There is no significant difference between the mean responses of medical officers and members of women-based organizations on the extent to which experiential learning creates awareness of breast cancer among women in the Orashi region of Rivers State
3. There is no significant difference between the mean responses of medical officers and members of women-based organisations on the extent to which role play creates awareness of breast cancer among women in the Orashi region of Rivers State

Methodology

The study adopted a descriptive survey design to describe the opinions of a large, representative sample of clinical officers and members of women-based organisations on adult health education strategies for raising breast cancer awareness among women in the Orashi region of Rivers State. The study was carried out in the Orashi region of Rivers State, comprising Ogba/Egbama/Ndoni, Ahoada East, Ahoada West, and Abua/Odua Local Government Areas. The study population comprised 1,136 individuals, including 315 clinical officers (medical doctors and nurses) and 821 members of women-based organisations (WBOs) in the region. A sample of 432 respondents was drawn, comprising 158 clinical officers and 274 members of women-based organisations. The sample size was determined using Taro Yamane's formula with a stratified proportionate sampling technique. A questionnaire titled "Adult Health Education Strategies for Awareness Creation on Breast Cancer in Orashi Region of Rivers State (AHESACBC)" was used for data collection. Responses to items in the questionnaire were rated on a 4-point summated rating scale. The scale ranged from Very High Extent (VHE), assigned a value of 4, to High Extent (HE), assigned a value of 3, Low Extent (LE), assigned a value of 2, and Very Low Extent (VLE), assigned a value of 1. The instrument underwent face and content validation by three experts, comprising two individuals with expertise in Adult Education and Community Development and one medical doctor from the University of Port Harcourt Teaching Hospital. Internal consistency was assessed using Cronbach's alpha to assess the instrument's reliability. Reliability coefficients of 0.82, 0.87, and 0.73 were obtained, considered sufficient to establish the instrument's reliability. The instrument was administered by three trained research assistants under the researchers' supervision. Data were collected and analysed using mean, standard deviation, and z-test statistics. The mean and standard deviation were used in answering the research questions. Decision rules for the research questions were based on the classification of the level of extent as shown below:

Classification	Value Range
Very High Extent (VHE) = 4	3.00 - 4.00
High Extent (HE) = 3	2.00 - 2.99
Low Extent (LE) = 2	1.00 - 1.99
Very Low Extent = 1	0.00 – 0.99

Similarly, the hypotheses were tested using z-tests at the 0.05 level of significance. Decisions for the hypotheses were taken on the rule that the null hypotheses were rejected and the alternative hypotheses not rejected if the computed value is greater than the critical table value. On the contrary, the null hypotheses were not rejected and the alternative hypotheses were rejected if the computed value is less than the critical table value.

Results

Table 1: Mean analysis of the extent to which the health literacy strategy of adult health education creates awareness of breast cancer

S/N	Statement Item	Clinical officers n=158 Mean	SD	Remark	WBOs n=274 Mean	SD	Remark
1	Literacy health equips women with writing skills for awareness creation on breast cancer.	3.72	0.54	Very High Extent	3.73	0.53	Very High Extent
2	Literacy health will enable women to acquire reading skills for awareness creation on breast cancer.	3.70	0.53	Very High Extent	3.74	0.54	Very High Extent
3	Literacy health will help women acquire numeracy skills for breast cancer awareness creation.	3.74	0.52	Very High Extent	3.73	0.55	Very High Extent
4	Women who are engaged in literacy health will acquire knowledge on the signs and symptoms of breast cancer.	3.72	0.54	Very High Extent	3.72	0.53	Very High Extent
5	Literacy health will enable women to acquire the knowledge of preventive measures of breast cancer.	3.73	0.55	Very High Extent	3.72	0.51	Very High Extent
6	Women who participate in literacy health will acquire healthy lifestyle modification skills.	3.71	0.53	Very High Extent	3.72	0.53	Very High Extent
	Grand Mean	3.72	0.54	Very High Extent	3.73	0.53	Very High Extent

The data analysis presented in Table 1 indicates that both medical officers and members of women-based organisations hold a strong belief in the effectiveness of the health literacy strategy of awareness creation on breast cancer among women. They perceive this strategy as highly effective in awareness creation on breast cancer among women in the Orashi region of Rivers State. This finding was supported by the mean scores of 3.72 and 3.73 obtained by medical officers and members of women-based organisations, respectively. These scores fell within the acceptable range of 3.00–4.00.

Table 2: Mean analysis of the extent to which the experiential learning strategy of adult health education creates awareness on breast cancer

S/N	Statement Item	Clinical officers n=158 Mean	SD	Remark	WBOs n=274 Mean	SD	Remark
1	Using women who frequently perform breast self-examination to share their experiences will create awareness of breast cancer.	3.65	0.50	Very High Extent	3.64	0.57	Very High Extent
2	Using individuals who are exposed to signs and symptoms of breast cancer to share their experiences will create awareness of breast cancer.	3.70	0.49	Very High Extent	3.63	0.58	Very High Extent
3	Women who share their experiences on breast ultrasound scans will create awareness of breast cancer.	3.67	0.52	Very High Extent	3.65	0.56	Very High Extent
4	Using women who have had mammograms to share their experiences will create breast cancer awareness.	3.68	0.51	Very High Extent	3.62	0.57	Very High Extent
5	Using women who have undergone mastectomies to share their experiences will create breast cancer awareness.	3.69	0.51	Very High Extent	3.61	0.56	Very High Extent
6	Using women who have been treated for breast cancer with chemotherapy to share their experiences will convince other women.	3.71	0.50	Very High Extent	3.65	0.56	Very High Extent
	Grand Mean	3.68	0.51	Very High Extent	3.63	0.57	Very High Extent

The data analysis presented in Table 2 indicates that both medical officers and members of women-based organisations hold a strong belief in the effectiveness of the experiential learning strategy of awareness creation on breast cancer among women. They perceive this strategy as highly effective in awareness creation on breast cancer among women in the Orashi region of Rivers State. This finding was supported by the mean scores of 3.68 and 3.63 obtained by medical officers and members of women-based organisations, respectively. These scores fell within the acceptable range of values, which is 3.00 – 4.00.

Table 3: Mean analysis of the extent to which the role play strategy of adult health education creates awareness on breast cancer.

S/N	Statement Item	Clinical officers n=158 Mean	SD	Remark	WBOs n=274 Mean	SD	Remark
1	Organising drama on the signs and symptoms of breast cancer will create awareness.	3.72	0.49	Very High Extent	3.73	0.57	Very High Extent
2	Organising play scenes on healthy lifestyle modification will create awareness of breast cancer.	3.74	0.52	Very High Extent	3.70	0.60	Very High Extent
3	Engaging individuals in a drama role on the use of breast self-examination will create awareness of breast cancer.	3.73	0.50	Very High Extent	3.74	0.53	Very High Extent
4	Participation of individuals in acting roles on the use of mammography will create awareness of breast cancer.	3.72	0.51	Very High Extent	3.71	0.54	Very High Extent
5	Organising drama on the use of breast ultrasound scan will create awareness of breast cancer.	3.73	0.50	Very High Extent	3.72	0.55	Very High Extent
6	Awareness creation on breast cancer through the use of drama in the local dialect will be assimilated effectively.	3.72	0.51	Very High Extent	3.71	0.53	Very High Extent
7	Retention can be achieved on breast cancer awareness when individuals participate in role play	3.74	0.51	Very High Extent	3.72	0.52	Very High Extent
	Grand Mean	3.73	0.51	Very High Extent	3.72	0.55	Very High Extent

The data analysis presented in Table 3 indicates that both medical officers and members of women-based organisations hold a strong belief in the effectiveness of the role-play strategy of awareness creation on breast cancer among women. They perceive this strategy as highly effective in awareness creation on breast cancer among women in the Orashi region of Rivers State. This finding was supported by the mean scores of 3.73 and 3.72 obtained by medical officers and members of women-based organisations, respectively. These scores fell within the acceptable range of values, which is 3.00 – 4.00.

Test of Hypotheses

Table 4: z-test analysis on the extent to which the health literacy strategy creates awareness of breast cancer among women in Orashi region of Rivers State

Respondents	N	$\bar{x}$	SD	df	z-cal	z-crit	Decision
Medical officers	158	3.72	0.54	430	-1.89	1.96	Not
WBO Members	274	3.73	0.53				Significant

The data presented in Table 4 reveal that the computed z-value is -1.89, whereas the critical value is 1.96. Given the degree of freedom of 430 and a significance threshold of 0.05, it is observed that the estimated z-value is less than the critical z-value. The aforementioned outcome confirmed that there was no statistically significant difference in the

mean responses of medical officers and members of women-based organisations regarding the effectiveness of the health literacy strategy in raising awareness of breast cancer among women in the Orashi region of Rivers State. Thus, it can be inferred that the implementation of the health literacy strategy mitigates the incidence of breast cancer among women residing in the Orashi region of Rivers State.

Table 5: z-test analysis on the extent to which experiential strategy creates awareness on breast cancer among women in Orashi region of Rivers State

Respondents	N	$\bar{x}$	SD	df	z-cal	z-crit	Decision
Medical officers	158	3.68	0.51	430	1.14	1.96	Not
WBO Members	274	3.63	0.57				Significant

The data presented in Table 5 reveal that the computed z-value is 1.14, whereas the critical value is 1.96. Given the degree of freedom of 430 and a significance threshold of 0.05, it is observed that the estimated z-value is less than the critical z-value. The aforementioned outcome confirmed that there was no statistically significant difference in the mean responses of medical officers and members of women-based organisations regarding the effectiveness of the health literacy strategy in raising awareness of breast cancer among women in the Orashi region of Rivers State. Thus, it can be inferred that the implementation of the health literacy strategy mitigates the incidence of breast cancer among women residing in the Orashi region of Rivers State.

Table 6: z-test analysis on the extent to which role play strategy creates awareness on breast cancer among women in Orashi region of Rivers State

Respondents	N	$\bar{x}$	SD	df	z-cal	z-crit	Decision
Medical officers	158	3.73	0.51	430	0.23	1.96	Not
WBO Members	274	3.72	0.55				Significant

The data presented in Table 6 reveal that the computed z-value is 0.23, whereas the critical value is 1.96. Given the degree of freedom of 430 and a significance threshold of 0.05, it is observed that the estimated z-value is less than the critical z-value. The aforementioned outcome confirmed that there was no statistically significant difference in the mean responses of medical officers and members of women-based organisations regarding the effectiveness of the health literacy strategy in raising awareness of breast cancer among women in the Orashi region of Rivers State. Thus, it can be inferred that the implementation of health literacy strategy mitigates the incidence of breast cancer among women residing in the Orashi region of Rivers State.

Discussion

The data analysis on research question one demonstrated that the health literacy strategy of adult health education significantly contributes to awareness creation on breast cancer among women residing in the Orashi region of Rivers State. The evidence of the effectiveness of the health literacy strategy of adult health education on awareness creation on breast cancer is demonstrated by the grand mean values of 3.72 and 3.73 recorded for items 1 to 6. These values indicate that the strategy involves utilising the skills of reading, writing, numeracy, and communication about breast cancer. This is achieved through local dialect or indigenous languages, which will increase the rate of women's participation in breast cancer screening activities. The findings were supported by null hypothesis 1, which indicated no statistically significant disparity in the mean responses of medical officers and members of women-based organisations regarding the effectiveness of the health literacy strategy in raising breast cancer awareness among women in the Orashi region of Rivers State. This finding is consistent with Ademuwagun's assertion in Ugwu et al. (2016) that disseminating information about public exchanges is an effective strategy for conducting sensitisation campaigns. The efficacy of health literacy strategies is significant in raising awareness, particularly among rural women. This approach proves particularly effective when indigenous languages are used as the primary mode of communication. This aligns with Owolabi and Nurudeen's (2020) argument that indigenous languages are potential channels through which health information could reach the grassroots. In the same vein, Igoni et al. (2023) support this, stating that indigenous languages are a logical means for people to better express themselves and their culture.

The data analysis for research question two demonstrated that the experiential learning strategy in adult health education significantly contributes to raising breast cancer awareness among women residing in the Orashi region of Rivers State. The evidence for the effectiveness of the experiential strategy in adult health education in raising

awareness of breast cancer is demonstrated by the grand mean values of 3.68 and 3.63 recorded for items 1 to 6. These values indicate that the strategy involves utilising women who have experienced or are skilled in breast cancer through discussion with other women on the need for prevention, detection, and treatment of breast cancer. The findings were supported by null hypothesis 2, which indicated that there was no statistically significant disparity in the mean responses of medical officers and members of women-based organisations regarding the effectiveness of the experiential learning strategy in raising breast cancer awareness among women in the Orashi region of Rivers State. This finding is consistent with Kenny's (2008) assertion that experiential learning is a process of creating and transforming experience into knowledge, skills, attitudes, values, emotions, beliefs, and senses.

The analysis of data about research question three indicates that the role play strategy of adult health education can be employed to a significant degree in awareness creation of breast cancer. This strategy involves the utilisation of individuals to orchestrate dramatic performances centred around prevention, detection, and treatment of breast cancer. The organisation of play scenes focused on promoting healthy lifestyles and utilising local languages to facilitate effective assimilation and retention of information. The aforementioned discovery was validated by the outcome of hypothesis 3, which indicated no statistically significant disparity in the average responses of oncologists and members of women-based organisations regarding the effectiveness of the role-play strategy for raising breast cancer awareness among women in the Orashi region of Rivers State. This finding aligns with research by Uzoagu (2017), which highlights the importance of raising awareness and stimulating interest as crucial factors in the effectiveness of community development initiatives. It is important to acknowledge that promoting breast cancer awareness is achieved through a role-play strategy designed to generate interest among individuals. The findings are also consistent with Otamiri (2021), who argued that community-based strategies, such as organising town hall meetings and utilising role-play methods, can effectively engage and mobilise women to participate in programmes and activities that benefit them. This will generate high levels of engagement and active involvement in implementing the plan. The utilisation of role-play as a strategy to generate interest can instil a sense of urgency in individuals, compelling them to actively contribute to the success of developmental programmes and foster long-term sustainability.

Conclusion

Based on the study's findings, the researchers concluded that health literacy, experiential learning, and role-play strategies in adult health education are key to carrying out community-based breast cancer awareness among women. This means that proper planning and utilisation of these adult health education strategies in breast cancer awareness measures such as lifestyle modification, regular self-examination, ultrasound scan, mammography, among others, will become common knowledge among women in rural regions.

Recommendations

Based on the findings and the conclusion of the study, it was recommended that:

1. Community change agents who are at the grassroots should intensify efforts by encouraging members of the community, irrespective of gender and age, to engage in breast cancer awareness through a health literacy strategy.
2. The primary healthcare centers that are closer to people in rural areas should work hand in hand with members of community-based organisations on the use of experiential strategies to sensitise rural dwellers on lifestyle modification and regular self-examination for breast cancer.
3. The use of the role-play strategy should be employed by stakeholders at the grassroots level of various regions for awareness creation on breast cancer.

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