

Exploring the Awareness Level of Cervical Cancer Concept Among Post-Menopausal Women in Ezinihitte Mbaise, Imo State, Nigeria

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Abstract: Cervical cancer persists to be a major public health concern in low- and middle-income countries such as Nigeria, where limited healthcare access and awareness contribute to high morbidity and mortality rates among women. This study, conducted in the context of Ezinihitte Mbaise Local Government Area (L.G.A) in Imo State, Nigeria, aims to fill a data gap by assessing postmenopausal women's awareness of cervical cancer concepts. A cross sectional study design was adopted for the study. The method adopted in this study is a qualitative method that utilized a well-structured questionnaire & focused group discussions in collecting information from menopausal women who attended a free medical outreach organized by the researcher in three different zones (Ezi east, Ezi west, and Ezi center) in Ezinihitte Mbaise LGA through the help research assistant. The results indicated a significant lack of awareness, with 55.1% of participants unfamiliar with cervical cancer. Notably, 43.9% of women exhibited awareness, primarily among those with higher educational backgrounds. On Educational qualification, those with primary education had the highest percentage (36.4%), followed by informal education (31.7%) while tertiary education was the lowest among the participants (4.6%). This study underscores the urgent need for targeted awareness campaigns and educational initiatives to address the notably low levels of cervical cancer awareness among post-menopausal women. Integrating cancer screening education into routine healthcare services can as well empower women with vital information and contribute to a proactive approach towards cervical cancer prevention.

Keywords: Awareness, Cervical Cancer, Post-Menopausal Women, Cancer, Nigeria

1. Introduction

Cervical cancer presents a substantial worldwide health challenge, particularly in areas characterised by restricted healthcare availability and limited knowledge regarding preventative measures [1]. The underlying cause of this condition can be traced back to the cervix, where there is an abnormal proliferation of cells that possess the capacity to infiltrate other anatomical regions. Although early stages of the condition may not exhibit any noticeable symptoms, subsequent manifestations include atypical vaginal bleeding,

pelvic discomfort, or pain experienced during sexual intercourse [2]. The significance of human papillomavirus (HPV) infection in more than 90% of cases has been firmly established in the literature [3]. Nevertheless, it is important to highlight that the vast majority of cases of human papillomavirus (HPV) do not advance to the development of cervical cancer [4, 5]. Other risk factors that have been identified include smoking, individuals with weakened immune systems, the use of oral contraceptives, engaging in sexual activity at an early age, and having multiple sexual partners. However, it is important to note that these factors are considered to be of lesser significance when compared to

the risk posed by HPV [1]. In the Nigerian context, it has been observed that the mean age at which menopause occurs is approximately 49 years [6]. Notably, a proportion of approximately 13.1% of cervical cancer incidents are reported among women in the age bracket of approximately 50 years. The majority of this demographic is primarily located in rural regions characterised by limited access to information dissemination.

Despite advancements in efforts to combat cervical cancer, there continues to be a lack of emphasis on raising awareness and promoting understanding of the disease among post-menopausal women in certain regions [6]. Global research has been conducted to examine the factors that impede or facilitate women's access to cervical cancer screening and their level of knowledge regarding this disease. In Malaysia, previous research has examined the implementation of Pap smear practises and identified the barriers encountered in public hospitals [7]. Similarly, studies conducted in Saudi Arabia have shed light on the difficulties and factors that aid Saudi women in accessing breast and cervical cancer screening services [8]. Previous research conducted in Iran examined the influence of education on the utilisation of Pap smear tests, employing the theory of planned behaviour as a theoretical framework [9]. Conversely, studies conducted in Ghana focused on the level of knowledge, practises, and barriers related to cervical cancer within specific local communities [10].

Furthermore, a study conducted in the United Arab Emirates investigated the rates of opportunistic Pap smear screening and the occurrence of epithelial cell abnormalities among women who visited a teaching hospital [11]. The study conducted by El Banna *et al.* [12] examined the occurrence of high-risk human papillomavirus infection in women who received negative Pap smear results. In aggregate, these studies highlight the complex obstacles associated with raising awareness and implementing preventive measures for cervical cancer in various contexts. The objective of this study is to assess the level of awareness regarding cervical cancer concepts among post-menopausal women residing in Ezinihitte Mbaize L.G.A, Imo State, Nigeria, in light of the existing global disparities.

2. Methodology

Study Design

A cross sectional study design was adopted for the study and this study was carried out using both quantitative and qualitative methods of data collection. A detailed structured questionnaire was used to collect information on the women's demographic characteristics, their level of awareness of cervical cancer concepts, and also their level of awareness of cervical cancer preventive measures. Three focused group discussions, each comprising of 20 women who are post-menopausal was also used to collect data.

Area of Study

Ezinihitte Mbaize is a local government area in Imo state Nigeria. It is about 108km², with a population of 168767 in

the 2006 census and a projected 2011 population of 198050. (NPC 2014) and one of the three local government areas in Mbaize. The area consists of two towns Ezi and Ihitte, and its surroundings and is a part of the Mbaize district. The communities that make up Ezinihitte Mbaize are; Akpodim, Amumara, Choko and Eze, Ezi Agbaogu, Ezi Udo, Ife, Ihite, Itu, Obizi, Oboama, Okpuofe, Onicha, Owutu, Udo, and Umunama. As is congruent with the rest of Igbo land, some of the communities in Ezina- ihitte actually exist in duality, i.e., a single community that eventually metamorphosed into two. There is this pairing seen in Ezi Na Ihitte communities: Oboama and Umunama, Ife and Owutu, Akpoku and Umudim, Umuchoko, and Umueze, Udo and Obizi.

Target population

According to the 2006 and 2011 projected population of the LGA, the population of Ezinihitte Mbaize is 168,767 and 198,050, respectively. The study was carried out in 3 zones of EZINIHITTE MBAISE LGA (Ezi-west, Ezi-east, and Ezi-centre). All postmenopausal women who attended the free medical outreaches were recruited into the study by organizing free medical outreaches. Data was collected using a well-structured questionnaire with the aid of three trained research assistants. Through focused group discussion (the group size was 20), the researcher and one trained research assistant were present in any group as note-taker, moderator, and recorder. Women were asked to air the mind and views about what they know about cervical cancer. These were tape-recorded and transcribed verbatim, and the transcripts were developed using a thematic framework in 4 broad topics.

1. Information received about cervical cancer
2. Information received about cervical cancer preventive measures
3. Reasons why cervical cancer information should be disseminated
4. Suggestions on ways to improve the dissemination of cervical cancer information.

It was an open discussion as questions were asked, every participant was given an opportunity to respond to the questions, and they became aware of cervical cancer concepts and preventive measures.

- 1) The topic of awareness of cervical cancer: most of the responses were: we don't know about it, I am hearing about it for the 1st time please can you teach us about it. Only a few women agreed that they have heard about it, and it is hazardous as it affects the womb and can cause the womb to be removed.
- 2) The discussion on awareness of cervical cancer preventive measures: most of them said since they don't know about cancer, how they would know about the test. One said that she heard that the test could be done in the city through a friend, but she doesn't have money to transport herself to the city and also to pay for the test.
- 3) The discussion on the reasons why cervical cancer information should be disseminated; most of the women

said that they were hearing it for the first time, and it is a very dangerous disease. But since it could be prevented, every woman should know about it and ways to prevent it and avoid the death that can result from it. Information is very crucial to the prevention of this cancer.

- 4) The discussion on suggested ways to disseminate information on cervical cancer: you people should come to our market places, churches, and school. It should be announced over the radio, Television and also during health talk, and during this gathering.

Data was also collected through the interview methods using a well-structured questionnaire as most of the women

were did not have formal education. The questionnaire, created using the necessary information on a questionnaire in cervical cancer research studies, contained both closed and open-ended questions. It was pre-tested on 15 women, and their responses were used to create the final questionnaire. A pre-visit was made to the host communities, which were chosen from each zone based on central location and accessibility to other neighbouring communities. The research team met with the community head and women leader informing them of the visit, the free medical outreaches, and the purpose of the research. These leaders will, in turn, inform the members of the community.

3. Results

Table 1. Summary of Means and Standard Deviations for Educational Level on Cervical Cancer Awareness Level.

Levels	Mean	Std. Deviation	N
Informal	18.38	6.20	102
Primary	17.18	5.01	117
Secondary	20.21	6.45	87
Tertiary	20.40	6.89	15

Table 2. Summary of Analysis of Variance for Educational Level on Cervical Cancer Awareness Level.

Source	Type II Sum of Squares	Df	Mean Square	F	Sig.
Education (A)	394.91	3	131.64	4.19	.006
A * B	957.14	6	159.52	5.08	.000
Error	9671.78	308	31.40		
Total	121797.00	321			

In the results presented in Tables 1 and 2 above, an analysis of variance was conducted to explore the impact of educational level on awareness of cervical cancer among postmenopausal women in Ezinihitte Mbaise.

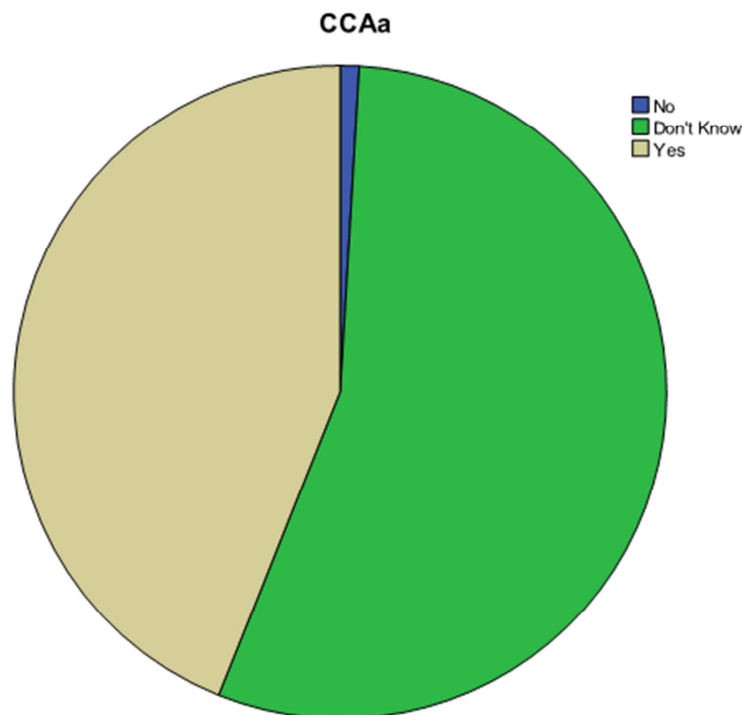


Figure 1. Descriptive Statistics of the Demographics of the Samples Surveyed.

Table 3. Awareness of Cervical Cancer Concept.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	3	.9	.9	.9
	Don't Know	177	55.1	55.1	56.1
	Yes	141	43.9	43.9	100.0
	Total	321	100.0	100.0	

Table 4. Analysis of Age Range.

Age Range		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	≤ 40 Years	12	3.7	3.7	3.7
	41 - 50 Years	81	25.2	25.2	29.0
	51 - 60 Years	96	29.9	29.9	58.9
	60 Years and Above	132	41.1	41.1	100.0
	Total	321	100.0	100.0	

Table 5. Analysis of Language Spoken.

Language Spoken		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	English	21	6.5	6.5	6.5
	Igbo	288	89.7	89.7	96.3
	Yoruba	12	3.7	3.7	100.0
	Total	321	100.0	100.0	

Table 6. Analysis of Marital Status.

Marital Status		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single/Never Married	12	3.7	3.7	3.7
	Married - Living with Partner	177	55.1	55.1	58.9
	Married- Separated	9	2.8	2.8	61.7
	Divorced	12	3.7	3.7	65.4
	Widowed	111	34.6	34.6	100.0
	Total	321	100.0	100.0	

Table 7. Between-Subjects Factors.

Between-Subjects Factors		Value Label	N
Educational Qualification	0	Informal	102
	1	Primary	117
	2	Secondary	87
	3	Tertiary	15

Table 8. Educational Qualification.

Educational Qualification	Mean	Std. Deviation	N
Informal	17.00	5.405	24
	18.81	6.390	78
	18.38	6.195	102
	14.11	.459	19
Primary	17.89	5.705	19
	18.15	5.804	60
	16.47	2.144	19
	17.18	5.013	117
	14.00	.000	6
	22.00	3.286	6
Secondary	18.33	5.231	45
	23.90	7.198	30
	20.21	6.450	87
	28.00	.000	3
	19.50	9.311	6
Tertiary	17.50	.548	6
	20.40	6.885	15
Total	16.23	4.893	52

Educational Qualification	Mean	Std. Deviation	N
	18.88	5.464	25
	18.51	6.010	189
	20.64	6.519	55
	18.53	6.007	321

Table 9. Tests of Between-Subjects Effects.

Dependent Variable: Cervical Cancer Awareness						
Source	Type II Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1874.125 ^a	12	156.177	4.973	.000	.162
Intercept	110251.093	1	110251.093	3510.970	.000	.919
Edu	394.913	3	131.638	4.192	.006	.039
ES	404.272	3	134.757	4.291	.006	.040
Edu * ES	957.142	6	159.524	5.080	.000	.090
Error	9671.781	308	31.402			
Total	121797.000	321				
Corrected Total	11545.907	320				

a. R Squared = .162 (Adjusted R Squared = .130)

*Post Hoc Tests**Educational Qualification*

Table 10. Multiple Comparisons.

Cervical Cancer Awareness Tukey HSD						
(I) Educational Qualification	(J) Educational Qualification	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Informal	Primary	1.20	.759	.389	-.76	3.16
	Secondary	-1.82	.818	.117	-3.94	.29
	Tertiary	-2.02	1.550	.562	-6.02	1.99
Primary	Informal	-1.20	.759	.389	-3.16	.76
	Secondary	-3.03 [*]	.793	.001	-5.08	-.98
	Tertiary	-3.22	1.537	.157	-7.19	.75
Secondary	Informal	1.82	.818	.117	-.29	3.94
	Primary	3.03 [*]	.793	.001	.98	5.08
	Tertiary	-.19	1.567	.999	-4.24	3.85
Tertiary	Informal	2.02	1.550	.562	-1.99	6.02
	Primary	3.22	1.537	.157	-.75	7.19
	Secondary	.19	1.567	.999	-3.85	4.24

Based on observed means.

The error term is Mean Square (Error) = 31.402.

The results showed a statistically significant main effect for educational level [$F(3, 308)=4.19, p=.006$]. The Post-hoc comparisons for educational level using the Tukey HSD test indicated that the mean score for secondary school post-menopausal women ($M = 20.21, SD = 6.45$) was significantly different from the primary school post-menopausal women ($M = 17.18, SD = 5.01$) in terms of their level of cervical cancer awareness. The informal group ($M = 18.38, SD = 6.20$) and the tertiary group ($M = 20.40, SD = 6.89$) do not differ significantly from either of the other groups in terms of their level of cervical cancer awareness.

4. Discussion

The aim of our study was to appraise the level of awareness of cervical cancer concept among post-menopausal women in Ezinihitte Mbaize L.G.A, of Imo state, Nigeria. Based on cervical cancer awareness, our study reveals that a significant portion of the participants (55.1%) were not aware of cervical cancer. This finding aligns with the global burden of cervical cancer, particularly in

developing regions such as sub-Saharan Africa, where awareness and access to healthcare services are often limited [13, 14]. The lack of awareness can contribute to delays in diagnosis and treatment, leading to poorer outcomes. This highlights the urgent need for targeted awareness campaigns and educational initiatives to address the gaps in knowledge. It also indicates that among the post-menopausal women interviewed, 43.9% were aware of cervical cancer. This awareness was particularly prevalent among individuals with higher educational backgrounds, such as those with a high academic background. This result underscores the influence of education on awareness levels, which has been observed in various studies [15, 16]. Educated individuals tend to have better access to health information and are more likely to comprehend and seek information about health-related issues. It also highlights the fact that individuals with primary education had the highest percentage (36.4%), followed by those with informal education (31.7%). This observation is consistent with the fact that education plays a pivotal role in shaping health knowledge and behavior. Limited access to formal education can result in lower health literacy and

reduced awareness of diseases like cervical cancer [17].

5. Conclusion

Though cervical cancer is leading cancer among women in post-menopausal women in Ezinihitte Mbaise Local Government Area of Imo State, Nigeria, this study has shown that they are ignorant about this disease. The utilization of media services like television, newspaper, and radio can have a massive impact on improving knowledge. Health professionals should not automatically assume immunization to be more effective than screening and treatment. Instead, a combination of programs for vaccination and screening would yield the most significant benefit.

6. Recommendation

Our findings highlight the necessity to enhance knowledge and comprehension concerning cervical cancer and its preventable nature within the community of Ezinihitte Mbaise. It is imperative that healthcare providers, during client consultations, offer educational sessions on cancer screening at healthcare facilities. Emphasis should be placed on conveying the rationale for screening, particularly given the unique position of healthcare practitioners in interacting with these women. Scholarly research has consistently indicated that having a clear understanding of the purpose behind screening and the proximity of healthcare facilities are among the most influential factors driving screening compliance.

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