

Original Research Article

Effectiveness of interactive health dialogue in improving knowledge of cervical cancer screening among women in rural Nigerian communities

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ABSTRACT

Background: Cervical cancer (CC) remains a growing public health problem, especially in developing countries like Nigeria, where the uptake of CC screening is low. Limited knowledge about screening contributes to this low uptake. This study examined the effectiveness of an interactive health dialogue (IHD) in improving knowledge of CC screening among women in rural Nigerian communities.

Methods: A one group pre-test post-test interventional study was conducted among 50 women of reproductive age in selected rural communities of Nigeria. Participants were selected using a multistage sampling technique. Data were collected using a structured interviewer-administered questionnaire before and after the intervention. Descriptive statistics summarized sociodemographic characteristics and knowledge scores, while paired t-tests assessed the intervention's impact. Chi-square tests explored relationships between age and knowledge.

Results: The mean age of respondents was 42±6.2 years, with most respondents (44.0%) married and 78.0% identifying as Christians. At baseline, 82.0% of respondents had low knowledge of CC screening, with only 18.0% knowing its causative organism. Post-intervention, 84.0% had high knowledge scores, indicating a significant improvement in knowledge ($p=0.000$). The chi-square analysis revealed no significant relationship between age and knowledge ($X^2=11.412$, $df=307$, $p=0.117$).

Conclusions: The IHD intervention significantly improved respondents' knowledge of CC screening, highlighting its potential as an effective strategy for health education in rural communities. Awareness programs should prioritize engaging, interactive approaches to empower women with critical health information.

Keywords: Cervical cancer, Cervical cancer screening, Interactive health dialogue, Rural communities, Nigeria, Health education

INTRODUCTION

Cervical cancer (CC) is a growing public health problem in developing countries.¹ Despite significant advancements in prevention and treatment, CC cases and deaths are still on the rise.²⁻⁵ Developing countries now

account for more than 80% of CC cases and deaths that occur globally.^{1,6}

Regrettably, the sub-Saharan African region, which Nigeria is part of, bears the greatest CC burden. The region records the highest incidence and mortality rates at global level resulting in about 34.8 new cases and 22.5

deaths per 100,000 women each year.^{2,7-9} Available Country-based reports make the situation even clearer and worrisome. For example, CC affects 1 in 40 women in South Africa; Ethiopia sees 7,095 new cases and 4,732 deaths annually, while Kenya records 2,454 cases and 1,676 deaths each year.¹⁰ In Uganda, 40 per 100,000 women are diagnosed with CC, with half dying within three years.^{10,11}

In Nigeria, CC remains the most prevalent cancer among women, with about 14,943 new diagnoses and 10,403 fatalities each year. Regional cancer registries indicate age-specific rates of 36.0, 30.3, and 21.0 per 100,000 women in Ibadan, Abuja, and Calabar, respectively. The average age at diagnosis in Ibadan, Abuja, and Calabar was 56.1, 52.3, and 50.1 years, respectively, indicating a relatively late diagnosis.¹²

A major factor strongly implicated for high CC incidence and mortality rates in developing countries like Nigeria is inadequate use of CC screening services by women at risk.^{2,3,5,13,14} CC screening offers several benefits, including the early detection of the causative agent, human papilloma virus (HPV) and subsequent treatment of any changes the virus might have caused to cervical cells. In other words, screening prevents the transition of precancerous cells to cancer cells which are currently untreatable.²

In Nigeria, CC screening rates are notably low, particularly in rural areas and urban slums. For instance, research indicates screening rates of 0.0% in rural Okada, Edo State, 0.7% in a Lagos urban slum, 1.8% in Onitsha, Anambra State, 8.0% in Ilorin, Kwara State, and 12.1% in Amassoma, Bayelsa State.^{4,9,15,16} These figures highlight a pervasive challenge across the country.

While, non-availability, inaccessibility, cost, and misconceptions about CC screening contribute to low CC screening rates, women's knowledge of CC screening remains a critical determinant in their decision to seek screening at a time when interventions would yield positive results.^{15,17-19} Acceptability and utilization, as well as adherence to preventive and treatment procedures, are enhanced by sound knowledge. Specifically, poor knowledge of CC screening contributes to late presentation and makes it more difficult for healthcare providers to respond appropriately to the constantly rising incidence of CC.²⁰⁻²²

Generally, knowledge about CC screening in Nigeria is limited; however, this varies depending on the community, socio-economic status, location, and level of education. For example, poor knowledge of CC screening has been reported in a Lagos urban slum, South-West Nigeria, and a rural community in Awoomamma, Imo State, South-East Nigeria, as well as in Ibadan, South-West Nigeria.^{5,9,23} Conversely, good knowledge was observed in Owerri West LGA, South-East Nigeria.¹ In Bayelsa State, knowledge of CC screening was found to

be good among students, but little to no awareness was noted among university staff.¹⁶

Given the significant influence that knowledge has on the acceptability and utilization of health services, improving women's knowledge about CC screening services, especially in rural and hard-to-reach areas where health literacy is low, would be a timely and critical intervention for increasing CC screening uptake, and reducing CC incidents and deaths.

Although various approaches have been employed by researchers to enhance CC screening knowledge among women, the appalling state of CC screening knowledge in rural Nigeria underscores the need for innovative, area-specific strategies to achieve significant knowledge improvement. In this context, the IHD may serve as a valuable complementary approach, particularly given the poor characterization of health literacy in rural Nigeria. IHD is a method that promotes active engagement through meaningful conversations about health-related issues. The IHD approach proves especially effective for increasing knowledge, as it encourages participants to ask questions, share personal experiences, and address misconceptions in real-time. This interactive element fosters a deeper understanding of health issues, which is often difficult to achieve through traditional, less participatory methods.

Moreover, IHD not only enhances knowledge but also positively influences attitude and self-efficacy. IHD creates a supportive and open environment that enables participants to more likely adopt positive attitudes toward health behaviours. The dialogue which is focused on the needs and concerns of the participants, making it more relevant and engaging, also helps participants feel more confident in their ability to engage in health-promoting behaviours.

As far as we are aware, no prior research has employed IHD approach to improve CC screening knowledge among women living in rural communities of Bayelsa State, Nigeria. This study therefore, assesses effectiveness of IHD in enhancing knowledge of CC screening among women in rural areas of Bayelsa, Nigeria.

METHODS

Research design

A one group pretest-post test design was used to assess the effectiveness of the IHD approach in improving knowledge of CC screening among women in rural communities in Bayelsa State, Nigeria. The study was conducted between March and June 2024.

Sample size and sampling

The sample size was calculated using the formula for comparing two independent means in a quasi-

experimental pretest-post test design. A total sample size of 50 participants was determined, with a power of 80% ($Z\beta=0.84$), a 0.05 level of significance ($Z\alpha/2=1.96$), an assumed population variance of 1, and an effect size of 0.8. To ensure a representative sample, 5 participants were purposively recruited from each of 10 communities across three local government areas (LGAs), which were randomly selected from the three senatorial districts of Bayelsa State. Participants were women aged 18 years and above residing in the selected communities, who had no prior experience with CC screening, were not involved in any other ongoing study, and demonstrated a willingness to participate in the research.

Instrument for data collection

The instrument used for data collection consisted of two sections aimed at gathering essential sociodemographic information and assessing knowledge of CC screening among participants. Section 1 enabled the collection of sociodemographic data, including age, marital status, level of education, employment status, and the number of children. This information was vital for characterizing the study population and understanding any potential demographic influences on knowledge levels. Section 2 evaluated participants' knowledge of CC through 15 questions. These questions addressed key topics, such as the definition of CC, associated risk factors, common symptoms, the importance of early detection, recommended screening ages and frequencies, types of screening tests available, the effectiveness of the HPV vaccine, common misconceptions about CC, and sources for obtaining information regarding CC. Each question was formulated to allow for categorical responses, enabling participants to select their answers from the provided options. A score of '1' was awarded for each correct response, while a score of '0' was given for incorrect responses. The cumulative scores allowed for categorization of participants' knowledge levels as low or high.

The content validity of the instrument was verified through expert reviews from three senior nursing lecturers with expertise in oncology and public health, and their feedback was incorporated to enhance clarity, relevance, and appropriateness. Reliability was assessed using Cronbach's alpha coefficient on pilot data from 10 women in a similar rural community outside the study area, which yielded a satisfactory reliability score of 0.82, indicating good internal consistency.

IDH intervention

The intervention aimed to educate and empower participants on CC, its associated risks, prevention methods, and the importance of regular screening. It was structured into eight distinct sessions, each lasting between 10 to 30 minutes, and was conducted over the course of four days.

Day 1: Introduction and understanding CC

Session 1: Introduction to the intervention

The intervention began with a 10-minute introductory session where participants were welcomed, the objectives outlined, and the significance of the intervention emphasized. Ground rules for respectful and confidential dialogue were established to encourage participation.

Session 2: Understanding CC

Following the introduction, a 30-minute session was held to provide comprehensive knowledge about CC, including its definition, causes, and risk factors. Participants were engaged in an interactive discussion, sharing their knowledge and addressing myths, while visual aids illustrating the anatomy of the cervix and how HPV infection leads to CC were displayed.

Day 2: Symptoms and screening methods

Session 3: Symptoms and early detection of CC

On the second day, participants were engaged in a 20-minute session focused on recognizing the symptoms of CC and the significance of early detection. Explains that early stages may show no symptoms while common symptoms include abnormal vaginal bleeding and unusual discharge. An interactive question and answer segment was opened to allow participants discuss their understanding of the symptoms.

Session 4: CC screening methods

The second day also includes a 30-minute session dedicated to educating participants about the various CC screening methods, such as Pap smears, HPV testing, and Visual Inspection with acetic acid (VIA). Demonstrations using anatomical models to help participants visualize how each method is performed were done. This was followed by an interactive discussion addressing any fears or concerns about the procedures.

Day 3: Benefits of screening and overcoming barriers

Session 5: Benefits of regular CC screening

The third day began with a 20-minute session highlighting the importance of regular screening. Participants learnt how regular screening detects pre-cancerous changes, thus reducing incidence and mortality rates. They engaged in small group discussions to share insights on the benefits of screening.

Session 6: Barriers to screening and how to overcome them

Continuing on the third day, a 20-minute session conducted to identify common barriers to CC screening,

such as lack of awareness and financial constraints. Participants were allowed to brainstorm barriers within their community and collaborate in small groups to devise solutions to these challenges.

Day 4: Call to action and feedback

Session 7: Call to action and planning for the future

The intervention was concluded on the fourth day with a 20-minute call to action, encouraging participants to take proactive steps in seeking CC screening and promoting awareness within their community.

Session 8: Feedback and wrap-up

Finally, a 20-minute feedback and wrap-up session was opened to allow participants share their thoughts on what they learned. The researcher recaps the key messages, provide educational materials for participants to take home, and express gratitude for their participation, encouraging them to disseminate their newfound knowledge within their community.

Data collection process

The data collection process for this study involved two main phases: pre-intervention and post-intervention data collection, targeting women from ten different communities across three local government areas.

Group gathering

Local health workers and community leaders played a crucial role to facilitate the gathering of participants from their various communities. Meetings were organized in central locations within each of the ten communities, where participants were informed about the study and its purpose. Community announcements, and word-of-mouth were used to ensure that women from each community were aware of the sessions. On designated days for the intervention sessions, women were invited to attend at a selected community town hall which is a central venue that was accessible to all participants. Transportation assistance was also provided for women who had challenges in transiting to the central location. This approach ensured that all participants from each community could be assembled for both the intervention and data collection phases.

Pre-intervention data collection

Before the intervention commenced, a structured questionnaire was administered to participants to assess their baseline knowledge and attitudes regarding CC screening. The questionnaire included sections on sociodemographic information and specific knowledge-related questions about CC. Data were collected through face-to-face interviews conducted by the researchers who ensured that participants understood the questions.

Implementation of the intervention

Following the pre-intervention data collection, the IHD educational sessions were conducted for the group. These sessions were scheduled for four days to accommodate the availability of participants. The sessions covered topics such as the nature of CC, associated risk factors, symptoms, screening methods, and the importance of regular screening. Interactive discussions, and visual aids, facilitated engagement and comprehension among participants.

Post-intervention data collection

After the completion of the intervention sessions, a post-intervention data collection phase was conducted. To assemble participants again, local health workers and community leaders reached out to the women from the ten communities, using similar methods as during the pre-intervention phase. Community announcements, and direct communication were employed to ensure that participants understood the importance of the follow-up session. Data collection for the post-intervention phase took place in same central venue where the intervention sessions were held. This consistency allowed participants to feel comfortable returning to a familiar setting. Same structured questionnaire used in pre-intervention phase was administered to the group to evaluate changes in knowledge about CC screening. The researchers ensured that same methodology was applied as in pre-intervention phase, providing consistency in data collection.

Data analysis

Data were analysed using descriptive and inferential statistics. Descriptive statistics provided frequencies, percentages and mean scores for demographic data, and initial knowledge levels. To evaluate the effectiveness of the IHD intervention, paired samples t-tests was performed to compare pre-and post-intervention knowledge scores before and after intervention. Statistical significance was set at $p < 0.05$, and analyses were conducted using statistical package for social sciences (SPSS) software version 24.

RESULTS

The mean age of respondents was 42 (SD±6.2). However, those who fall within the age range of 30 to 39 were more (28.0%). Majority were married (44.0%), 30.0% had junior secondary education, and 78.0% were Christians, 33.0% were farmers (Table 1).

All the respondents (100.0%) have heard about CC and 40.0% got their information from health institutions. Only 18.0% of the respondents knew the causative organism of CC; 68.0% do not know how it can be prevented; 82.0% do not know that it can be cured in the early stages, 44.0% do not know the risk factors; 78.0% do not know how it can be treated; 86.0% do not know the time

schedule for CC screening; 68.0% do not know the category of women eligible for screening, and 94.0% do not know any of the screening methods (Table 2). Classification of scores on the knowledge scale showed that 82.0% and 18.0% had low and high knowledge of CC screening respectively (Table 3).

Post-intervention data shows that all the respondents (100.0%) have heard about CC and 40.0% got their information from health institutions. More than half of the respondents (56.0%) knew the causative organism of CC; 4.0% do not know how it can be prevented; 2.0% do not know that it can be cured in the early stages, 26.0% do not know the risk factors; 4.0% do not know how it can

be treated; 12.0% do not know the time schedule for CC screening; 1.0% do not know category of women eligible for screening, and 32.0% do not know any of screening methods (Table 4). Classification of scores on knowledge scale also showed that 84.0% and 16.0% had high and low knowledge of CC screening, respectively (Table 5).

Results from the paired samples t-test showed that, there was a significant increase regarding CC screening knowledge ($p=0.000$) after introduction of intervention (Table 6). Chi square test showed that no significant relationship exists between respondents' age and knowledge of CC screening ($X^2=11.412a$, $df=307$, $p>0.05$) (Table 7).

Table 1: Demographic data (n=50).

Variables	N	Percentage (%)
Age (in years)		
20-29	11	22.0
30-39	14	28.0
40-49	13	26.0
50-59	10	20.0
60-65	2	4.0
Mean/standard 42 (SD±6.2)		
Marital status		
Single	13	26.0
Married	22	44.0
Separated	6	12.0
Divorced	3	6.0
Widowed	6	12.0
Education status		
Non-formal education	2	4.0
Primary	10	20.0
Junior secondary	15	30.0
Senior secondary	14	28.0
Tertiary	9	18.0
Religion		
Christian	39	78.0
Traditional worship	11	22.0
Occupation		
Artisan	8	16.0
Farming	16	32.0
Civil/public servants	8	16.0
Trading	7	14.0
Business woman	11	22.0

Table 2: Responses to questions on knowledge of CC screening before intervention (n=50).

Variables	N	Percentage (%)	P value
Have you ever heard about CC?			
Yes	50	100.0	0.763
No	0	0.0	
Where did you learn about CC?			
School	6	12.0	0.000
News media	10	20.0	0.033
Health institution	20	40.0	0.135
Family, friend, neighbor	11	22.0	0.000
Magazine	3	6.0	0.000

Continued.

Variables	N	Percentage (%)	P value
What is the causative agent of CC?			
Virus	9	18.0	0.013
Bacteria	29	58.0	0.002
Fungi	3	6.0	0.000
Parasite	4	8.0	0.126
Don't know	5	10.0	0.019
What are the symptoms of cancer of the cervix?			
Vaginal foul-smelling discharge	5	10.0	0.149
Vaginal irregular bleeding	7	14.0	0.000
Post coital bleeding	7	14.0	0.006
Don't know	31	62.0	0.007
Do you know the risk factors for cancer of the cervix?			
Having multiple sexual partners	6	12.0	0.000
Human papilloma virus	9	18.0	0.036
Early sexual intercourse	2	4.0	0.001
Cigarette smoking	3	6.0	0.000
Age	5	10.0	0.019
Oral contraceptives	3	6.0	0.003
Don't know	22	44.0	0.036
How can a person prevent getting cancer of the cervix?			
Avoid multiple sexual partners	6	12.0	0.144
Avoid early sexual intercourse	5	10.0	0.014
HPV vaccination	3	6.0	0.000
Quit cigarette smoking	2	4.0	0.000
Don't know	34	68.0	0.002
Can CC be cured in its earliest stages?			
Yes	6	12.0	0.000
No	3	6.0	0.315
Don't know	41	82.0	0.012
How can someone with cancer of the cervix be treated?			
Surgery	2	4.0	0.000
Specific drugs are given by a hospital	8	16.0	0.031
Radiotherapy	1	2.0	0.000
I do not know	39	78.0	0.125
What should the frequency of screening be?			
Once a year	2	4.0	0.017
Every 3 years	3	6.0	0.028
Every 5 years	2	4.0	0.020
Don't know	43	86.0	0.087
Which category of women should be screened?			
Women of > 25 years	10	20.0	0.019
Prostitutes	2	4.0	0.018
Elderly women	4	8.0	0.000
Don't know	34	68.0	0.022
Which screening method do you know?			
Papanicolaou smear	0	0.0	
Biopsy	2	4.0	0.000
Visual inspection with acetic acid	1	2.0	0.000
Don't know	47	94.0	0.118

Table 3: Level of knowledge on CC screening before intervention (n=50).

Knowledge level	N	Percentage (%)
Low	41	82.0
High	9	18.0
Total	50	100

Scale interpretation: scores less than median score=low knowledge; scores greater than or equal to the median score=high knowledge.

Table 4: Responses to questions on knowledge of CC screening after intervention (n=50).

Variables	N	Percentage (%)	P value
Have you ever heard about CC?			
Yes	50	100.0	0.763
No	0	0.0	
Where did you learn about CC?			
School	5	10.0	0.000
News media	10	20.0	0.033
Health institution	20	40.0	0.135
Family, friend, neighbor	11	22.0	0.000
Magazine	4	8.0	0.000
What is the causative agent of CC?			
Virus	28	56.0	0.000
Bacteria	12	24.0	0.000
Fungi	2	4.0	0.000
Parasite	2	4.0	0.151
Don't know	6	12.0	0.000
What are the symptoms of cancer of the cervix?			
Vaginal foul-smelling discharge	15	30.0	0.113
Vaginal irregular bleeding	7	14.0	0.000
Post coital bleeding	18	36.0	0.000
Don't know	10	20.0	0.000
Do you know the risk factors for cancer of the cervix?			
Having multiple sexual partners	13	26.0	0.000
Human papilloma virus	3	6.0	0.010
Early sexual intercourse	5	10.0	0.001
Cigarette smoking	3	6.0	0.000
Age	7	14.0	0.012
Oral contraceptives	6	12.0	0.004
Don't know	13	26.0	0.021
How can a person prevent getting cancer of the cervix?			
Avoid multiple sexual partners	6	12.0	0.130
Avoid early sexual intercourse	7	14.0	0.000
HPV vaccination	30	60.0	0.000
Quit cigarette smoking	5	10.0	0.000
Don't know	2	4.0	0.000
Can CC be cured in its earliest stages?			
Yes	48	96.0	0.000
No	1	2.0	0.200
Don't know	1	2.0	0.010
How can someone with cancer of the cervix be treated?			
Surgery	6	12.0	0.000
Specific drugs are given by a hospital	12	24.0	0.000
Radiotherapy	30	60.0	0.000
I don't know	2	4.0	0.131
What should the frequency of screening be?			
Once a year	2	4.0	0.000
Every 3 years	39	78.0	0.000
Every 5 years	3	6.0	0.002
Don't know	6	12.0	0.061
Which category of women should be screened?			
Women of > 25 years	45	90.0	0.010
Prostitutes	1	2.0	0.000
Elderly women	3	6.0	0.000
Don't know	1	1.0	0.020
Which screening method do you know?			
Papanicolau smear	11	22.0	0.000
Biopsy	14	28.0	0.000
Visual inspection with acetic acid	9	18.0	0.000
Don't know	16	32.0	0.118

Table 5: Level of knowledge on CC screening after intervention (n=50).

Knowledge level	N	Percentage (%)
Low	8	16.0
High	42	84.0
Total	50	100

Scale interpretation: scores less than the median score=low knowledge; scores greater than or equal to the median score=high knowledge.

Table 6: Paired samples t-test comparing pre and post intervention mean scores on knowledge of CC screening.

Variables	Pre intervention, (n=50), mean (SD)	Post intervention, (n=50), mean (SD)	T	Df	CI	Sig. (2-tailed)
Knowledge of CC cancer screening	2.96 (3.9)	3.43 (2.8)	0.269	311	-1.893-2.486	0.000

Table 7: Relationship between respondents' age and knowledge of cervical cancer screening at baseline.

Age (in years)	Knowledge		Total	Df	Pearson Chi-square (X ²)	Significance (2-tailed)
	Low	High				
20-29	9	2	11	45	11.412	0.117
30-39	11	3	14			
40-49	12	1	13			
50-59	8	2	10			
60-65	1	1	2			
Total	41	9	50			

DISCUSSION

One of the major striking things found among the respondents at baseline was their level of knowledge on cervical cancer screening. Although, all the respondents had heard about cervical cancer, more than two-third of them (82.0%) had low knowledge of cervical cancer screening. For example, 68.0% of the respondents do not know the category of women to be screened and 86.0% do not know the schedule for screening. Though, data obtained cannot provide direct explanation for the observed result, it may not be unconnected to respondents' educational level. Knowledge is highly influenced by the level of education an individual has attained.^{1,3} Thus, considering the fact that more than two-third of the respondents in this study had secondary or lower levels of education, it would not be totally incorrect to assert that the educational level of respondents partly influenced the low level of cervical cancer screening knowledge they had.

Previous studies have reported inadequate knowledge of cervical cancer screening in developing countries including Nigeria, and implicated it as a key barrier to screening uptake.^{5,9,23} Thus, the observed low knowledge of cervical cancer screening among respondents in this study supports earlier reports and further justifies need for the development and implementation of interventions and policies aimed at improving knowledge of cervical cancer screening among women of child bearing age. Finding also indicates the need to redouble efforts in increasing cervical cancer screening education in rural areas.

The results of this study also revealed that the mean knowledge score of respondents before exposure to the intervention (m=2.96) was significantly lower than the mean knowledge score (m=3.43) after exposure. The paired samples t-test confirmed that there was a statistically significant difference (p=0.000) regarding cervical cancer screening knowledge before and after the intervention. This indicates that respondents gained knowledge about cervical cancer screening compared to when they had not participated in the IHD program. The difference in knowledge may, therefore, be attributed to the effect of the IHD, which equipped them with essential information about cervical cancer that they previously lacked. This finding reiterates the need to use one-on-one discussion models of interaction to improve knowledge of cervical cancer among rural dwellers and those with lower educational attainment, as it enables their active participation in the discussion. This finding is consistent with Binka et al and Hyacinth-Purcell et al who also adopted the discussion approach to improve women's knowledge about cervical cancer screening services.^{24,25}

Furthermore, the chi-square test showed that no significant relationship exists between respondents' age and knowledge of cervical cancer screening (X²=11.412a, df=307, p=0.117). This means that respondents' age does not determine the level of knowledge they have about cervical cancer screening. Other factors, such as educational status, have been reported to have a stronger association with specialized knowledge like cervical cancer screening knowledge than age.^{1,3} The finding suggests that awareness programs aimed at improving

knowledge of cervical cancer screening services should consider women within all age categories at risk of cervical cancer. This finding, however, supports Endalew et al, Dozie et al and Gebisa et al who also reported no association between age and knowledge of cervical cancer screening among their respondents in Gurage zone districts, Southern Ethiopia, Owerri West LGA, South-Eastern Nigeria, and Central Ethiopia, respectively.^{1,3,26}

Lastly, it is important to note the practical implications of these findings. The significant improvement in knowledge post-intervention highlights the effectiveness of interactive educational programs like the IHD. Decision-makers and healthcare professionals ought to consider integrating similar strategies into public health initiatives to address knowledge gaps and encourage cervical cancer screening uptake, especially in rural and underserved regions. Future efforts could also focus on training healthcare workers to deliver such interventions effectively and fostering community involvement to ensure sustainability.

Limitations

Despite the promising findings, this study has limitations. First, the sample size was relatively small, which may limit the generalizability of the results to broader populations. A larger sample across multiple rural communities would provide a more comprehensive understanding of cervical cancer screening knowledge and the effectiveness of the IHD approach. Second, the study relied on self-reported data, which may be subject to recall bias or social desirability bias, potentially influencing the accuracy of responses.

CONCLUSION

This study demonstrated that the IHD approach significantly improved knowledge of cervical cancer screening among women in rural Nigerian communities. The findings highlight the effectiveness of interactive, discussion-based model in addressing knowledge gaps and promoting cervical cancer screening awareness in low-resource settings.

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