

KNOWLEDGE, ATTITUDES, AND PRACTICES RELATED TO CERVICAL CANCER SCREENING AMONG WOMEN OF REPRODUCTIVE AGE IN ILORIN EMIRATE, KWARA STATE.

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Abstract

This study examined cervical cancer screening knowledge, attitudes, practices, and perceived barriers among women of reproductive age in selected Local Government Areas (LGAs) of Kwara State, Nigeria. Guided by the Health Belief Model, the descriptive survey design was adopted. A multi-stage sampling technique was employed to select women aged 18-49 (200) across five purposively chosen LGAs. Data were collected using a validated self-designed questionnaire $r = 0.81$ and analysed using frequency counts, mean, and standard deviation.

The results revealed high awareness, with 83.1% of respondents having heard of cervical cancer and a mean knowledge score of 3.20. However, detailed knowledge remained uneven. Despite positive attitudes, actual screening practice was low; only 32.4% had ever undergone screening, often prompted by symptoms rather than prevention. Primary information sources were healthcare workers and the mass media. Significant barriers included cultural and religious beliefs (86.6%), alongside various socio-cultural and economic constraints.

The study concluded that although awareness and attitudes are relatively high, screening uptake remains poor due to persistent socio-cultural, economic, and informational barriers. The study recommends implementing comprehensive, culturally sensitive health education programs and improving healthcare worker-client relationships. Furthermore, sustained awareness campaigns utilizing both traditional and digital media are essential to enhance the uptake of cervical cancer screening among women in the region. These interventions are vital for transitioning general awareness into proactive preventive health behaviour to reduce the burden of cervical cancer.

Keywords: Cervical cancer screening, Reproductive age, Knowledge, Attitude, Practices

Introduction

Cervical cancer continues to be a critical issue for public health worldwide, especially in low- and middle-income countries (LMICs) where it is a significant cause of cancer-related illness and death among women. The World Health Organisation (WHO, 2021), reports that cervical cancer is the 4th most common cancer in women globally, with an estimated 604,000 new cases in 2020, and 342,000 women died from the same in the year 2020. Disturbingly, more than 90% of these cases and deaths are in LMICs, emphasising the disproportionate challenge facing women in low-resource countries (Sung et al., 2021). In contrast to many other cancers, cervical cancer is highly preventable by vaccination against human papillomavirus (HPV), detecting precancerous lesions before cancer develops, and providing appropriate treatment. But inequalities in access to preventive care, screening and adequate treatment have perpetuated the issue, particularly in sub-Saharan Africa, where health systems are fragile. Cervical cancer was identified as the second most frequent cancer in women in sub-Saharan Africa and the primary cause of gynaecological cancer deaths by the International Agency for Research on Cancer (IARC, 2021). This harsh reality reflects a wide chasm between available prevention measures and their real-world application in at-risk populations.

The scale of the burden of cervical cancer can be better understood when looking at the global patterns over time. In 2008, it was estimated that there were 529,409 new cervical cancer cases worldwide and 274,883 deaths and that approximately 86% of the cases and deaths occurred in developing countries (Ferlay, Shin, Bray, Forman, Mathers, and Parkin, 2008). By 2020, the incidence had risen to the WHO's estimate of 604,000 new cases, indicating that the problem is not only enduring but also escalating, despite decades of awareness campaigns and medical progress. Women aged between 35 and 45 years are most likely to be affected by cervical cancer, a productive age in social, economic and family aspects (Ministry of Public Health and Sanitation & Ministry of Medical Service, 2012–2015). The impact of dying women in this age category is not limited to the individual but extends to their families, communities, and national development. Children are motherless, households lose vital breadwinners, and societies suffer long-term socioeconomic penalties. These ripple effects turn cervical cancer from a health issue into a development issue. A strong association between high-risk human papillomavirus (HPV) types, especially 16 and 18, and cervical cancer has been established. The high-risk types 16 and 18, which account for about 70% of all cervical cancer (Arbyn et al., 2020).

Though HPV infection is prevalent and typically transient, persistent infection with high-risk types can induce precancerous lesions of the cervix that may eventually progress to invasive cancer. Preventive measures such as HPV vaccination, regular screening with Pap smears, Visual Inspection with Acetic Acid (VIA) or Human Papillomavirus Deoxyribonucleic Acid (DNA) Test have been proven to lower incidence and mortality significantly. Cervical cancer burden is particularly high in Nigeria, the most populous country in Africa. It is estimated that there were 14,943 new cases of cervical cancer in Nigeria in 2020, with 10,403 women dying from the

disease (IARC, 2021). These rates place Nigeria among the countries with the highest rates of cervical cancer incidence and mortality worldwide. Research has consistently identified the issue of low knowledge and poor utilisation of cervical cancer screening services within the Nigerian context. This trend of low screening rates is not isolated to Nigeria but is part of a larger issue within sub-Saharan Africa.

The barriers to low screening uptake in Nigeria and other developing countries are complex. Lack of awareness about cervical cancer and its prevention is one of the most important barriers (Eze et al., 2021). Women are also deterred from seeking screening by fear of diagnosis and stigma. Numerous women believe that cancer is synonymous with death and would rather not be tested (Bamgboye et al., 2023). Misunderstandings abound, with some believing cervical cancer is caused by spiritual forces, a curse or promiscuity, rather than understanding it is biologically connected to HPV (Abiodun et al., 2020). Such attitudes inhibit open dialogues about the disease, especially in conservative societies where even talking about reproductive health is often considered taboo. In addition, penalties often are not specific enough or not directed enough. Although some women obtain their health information from official channels or health care providers, many get their information from unofficial sources, which tend to be sources of myth and misinformation (Nweke et al., 2019; Akinlotan et al., 2020).

Cervical cancer screening behaviour is also greatly affected by certain socio-demographic and other factors, including level of education, marital status, income and age of the woman. Women who are more educated have proven to be more likely to attend for cervical screening amongst other preventive health care services (Ezechi et al., 2020), to whom this comment is being made. In contrast, women with no or low levels of formal education might not be aware, or they might consider such issues as the necessity of the moment and the priority, as against engaging in preemptive health actions (Olowookere et al., 2018). Financial constraints are a formidable challenge in Nigeria, where a majority of women are either unemployed or rely on their spouses for monetary assistance. Religious and cultural taboos make these issues more challenging to address, and in some societies, it is considered a violation, or at least extremely uncomfortable for women to expose their genitalia to health-care workers, particularly male practitioners (Obeid et al., 2021).

New evidence has shown that it is possible to effectively intervene to reduce cervical cancer mortality in LMICs. For example, Sankaranarayanan et al. (2009), reported a cluster-randomised trial in India in which community-based education and screening using VIA resulted in a significant 31% reduction in cervical cancer mortality compared with no screening. This demonstrates that public health interventions, if employing adequate design and implementation, can be groundbreaking even in resource-poor settings. Replicating such interventions can guide similar efforts in Nigeria, and specifically in Ilorin Emirate, Kwara State.

With a growing burden to tackle, in 2020 the WHO launched its Global Strategy to Accelerate the Elimination of Cervical Cancer, which proposed ambitious 90-70-90 targets: 90% of girls fully

vaccinated with HPV vaccine by age 15, 70% of women screened by ages 35 and 45, and 90% of women identified with cervical disease receiving suitable treatment (WHO, 2020). Meeting these goals will entail an increased need for raising awareness, strengthening health systems, and changing behaviour in reproductive-age women. While some progress has been made globally, many African countries, including Nigeria, remain far from meeting these targets due to systemic and community-level barriers.

The Ilorin Emirate, Kwara State, Nigeria, demonstrates the yawning gap between knowledge and practice. Between 2007 and 2016, the University of Ilorin Teaching Hospital (UIH) cancer registry reports indicate that 125 cases of cervical cancer were recorded, highlighting its clinical importance within the locale (Uba et al., 2020). However, uptake of screening has consistently been worryingly low. A community-based study in Ilorin showed that 8% of women had ever been screened for cervical cancer (Oluwasola et al., 2019). Also, among the healthcare workers in the study area, Oluwasola et al. (2017), reported that 98.6% of them knew about Pap smear screening, but only 20.4% had ever been screened. In fact, previous reports had been more disheartening: Aboyegi and Ijaiya (2004), reported that only 3% of female clinical health staff in Ilorin had been screened. These observations not only reveal poor awareness in general but also indicate the discrepancy between knowledge and practice even among well-educated health care professionals.

This gap is still being emphasised in more recent studies conducted in Kwara State and its environs. Salami et al. (2015), sampled 5% of abnormal cervical cytology among women in a semi-urban community in the state. Afolaranmi et al. (2021) stated that socio-cultural barriers, the absence of spousal support, and financial issues remain major deterrents to screening uptake. More recent studies conducted from 2019 to 2023 still attest that knowledge of cervical cancer screening in North-Central, Nigeria, including Kwara State, is less than 30%, with practice ever among less than 10% (Adepoju et al., 2019; Nweke et al., 2021). These findings illustrate that despite growing global and national advocacy, Ilorin Emirate still faces significant barriers at the local level and, therefore, local solutions that address individual and systemic challenges are required. Hence, this study is poised to evaluate the knowledge, attitudes and practices of cervical cancer screening among women of reproductive age in Ilorin Emirate, Kwara State.

The following research questions were raised to guide the study

1. What is the level of knowledge of cervical cancer and cervical screening among women of reproductive age in Ilorin emirate?
2. What are the attitudes of women of reproductive age towards cervical cancer screening?
3. What are the screening practices among women of reproductive age in Ilorin Emirate?
4. Where do women of reproductive age obtain information about cervical cancer screening?
5. What are the perceived barriers preventing community women of reproductive age from undergoing cervical screening?

Theoretical framework

Health Belief Model (HBM)

The Health Belief Model (HBM) provides a theoretical framework for understanding health-related behaviours by examining individuals' beliefs, attitudes, and perceptions about health conditions and preventive actions. Originally developed in the 1950s and later expanded by Becker, the model was first applied to public health initiatives such as vaccination and screening programmes and has since been widely used to explain a variety of health behaviours (Becker, 1976).

The HBM posits that individuals are more likely to engage in a health-related action when they perceive themselves as susceptible to a condition (perceived susceptibility), believe the condition has serious consequences (perceived severity), perceive that taking a particular action would reduce their risk or mitigate the severity of the condition (perceived benefits), and believe that the anticipated benefits outweigh the perceived barriers or costs associated with the action (perceived barriers). Additionally, cues to action such as health education messages, media campaigns, or advice from healthcare providers, and self-efficacy play important roles in motivating behaviour change.

Applied to cervical cancer prevention, the model suggests that women are more likely to participate in screening and other preventive measures if they perceive themselves to be at risk of developing cervical cancer, recognise the potentially severe health and social consequences of the disease, and believe that screening and vaccination are effective in reducing susceptibility and adverse outcomes.

Methodology

A descriptive research design was employed for the study. The study population comprised women of reproductive age (18-49 years) in Ilorin Emirate, Kwara State, Nigeria. A multistage sampling technique was used to select respondents. In the first stage, five (5) Local Government Areas located in the study area were selected using the purposive sampling technique. In the second stage, 200 women of reproductive age (18-49 years) were selected from each Local Government Area, making up the sample size for the study.

Quantitative data were collected using a self-developed structured questionnaire titled "*Knowledge, Attitudes, and Practices of Cervical Cancer Screening among Women of Reproductive Age.*" The instrument comprised four sections: socio-demographic characteristics; knowledge of cervical cancer and screening; attitude toward cervical cancer screening; and practice of cervical cancer screening, including sources of information and perceived barriers. Sections B and C were measured on a 4-point Likert scale of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD), weighted 4, 3, 2, and 1, respectively. Section D assessed screening practices and frequency using structured response options. Two hundred (200) copies of the questionnaire were administered, and a high proportion were duly completed, retrieved, and found valid for analysis. The instrument's reliability was determined following a pilot study conducted among women of reproductive age outside the study area. The reliability coefficient obtained indicated that the instrument was adequate, with $r=0.81$

Descriptive statistics such as frequency counts, percentages, means, and standard deviations were used to analyse the quantitative data collected. Ethical approval for the study was obtained from the Department of Adult Education, and informed consent was obtained from all participants

before data collection. Confidentiality and anonymity of respondents were strictly maintained, and all information obtained were used solely for academic purposes.

Results

Table 1: Socio-Demographic Characteristics of Respondents

Variable	Category	Frequency (N=200)	Percentage (%)
Age Range	18 – 25 years	50	25.50%
	26 – 33 years	65	32.5%
	34 – 41 years	55	27.5%
	42 years & above	30	15.0%
Marital Status	Single	90	45.0%
	Married	65	32.5%
	Widowed	25	12.5%
	Divorced	20	10.0%
Religious Affiliation	Islam	105	52.5%
	Christianity	90	45.0%
	Others	5	2.5%
Educational Qualification	No Formal Education	25	12.5%
	Primary	20	10.0%
	Secondary	45	22.5%
	Tertiary	110	55.0%
Occupational Status	Student	60	30.0%
	Self-employed	80	40.0%
	Civil Servant	35	17.5%
	Unemployed	25	12.5%

Regarding age, the findings show that the highest proportion of respondents fell within the 26–33 years age bracket (32.5%), followed by those aged 18–25 years (25.0%) and 34–41 years (27.5%), while the smallest proportion was 42 years and above (15.0%). This distribution indicates a young and middle-aged reproductive population, which is the primary target for cervical cancer prevention and early detection efforts. Marital status, the results show that the majority of the respondents were single (45.0%), followed by those who were married (32.5%), while a smaller proportion were widowed (12.5%) and divorced (10.0%). With respect to religious affiliation, Islam was the most reported religion among the respondents, accounting for 52.5%, followed by Christianity (45.0%), while 2.5% practiced other religions. This distribution reflects the religious landscape of Ilorin Emirate, where religious teachings and community leaders often play a significant role in shaping the health beliefs and attitudes of women toward medical interventions. Analysis of educational attainment indicates that the majority of respondents had attained tertiary education (55.0%), followed by secondary education (22.5%), while smaller proportions had no formal education (12.5%) or primary education (10.0%). This suggests a relatively high literacy level among the study population, which is a critical factor in the ability to process and act upon health-related information regarding cervical cancer. Occupational status, the findings reveal that the highest proportion of respondents were self-employed or traders (40.0%), followed by students (30.0%) and civil servants (17.5%), while 12.5% were unemployed. This occupational profile

highlights the economic diversity of the respondents, with a significant portion engaged in informal sectors, which may impact their financial access to regular screening services.

What is the level of knowledge of cervical cancer and cervical screening among women of reproductive age in Ilorin emirate?

Table 2: Frequency and Percentage of Respondents’ Responses on Knowledge of Cervical Screening in some selected LGAs in Kwara State, Nigeria

S/N		Strongly A	Agree	Disagree	Strongly Disagree	\bar{x} Mean	Standard Deviation
1.	I have heard of cervical cancer	113 56.2%	54 26.9%	17 8.5%	17 8.5%	3.31	0.95
2.	Cervical cancer is a common type of cancer among women	99 49.3%	68 33.8%	22 10.9%	12 6.0%	3.26	0.88
3.	Cervical cancer is caused by human papillomavirus (HPV)	79 39.9%	84 41.8%	26 12.9%	12 6.0%	3.14	0.86
4.	Cervical cancer can be prevented with regular screening	85 42.3%	89 44.3%	15 7.5%	12 6.0%	3.23	0.83
5.	The Human Papillomavirus vaccine can prevent cervical cancer	70 34.8%	85 42.3%	32 15.9%	14 7.0%	3.05	0.89
6.	A Pap smear is a screening test for cervical cancer	74 36.8%	91 45.3%	24 11.9%	12 6.0%	3.13	0.85
Average Mean = 3.20							

Source: Fieldwork: 2026

The results show that a large proportion of respondents (83.1% Strongly Agree and Agree) reported having heard of cervical cancer, indicating very high awareness. The high mean (\bar{x} =3.31) confirms that cervical cancer is a widely recognised health issue among the individuals surveyed. The moderate standard deviation (0.95) indicates some variation, but the majority still show consistent awareness. Most respondents (83.1% agreed or strongly agreed that cervical cancer is a common cancer among women. This shows that respondents understand the public health importance of cervical cancer. The Standard Deviation (0.88) again shows relatively close agreement among participants. About 81.7% agreed that HPV is the major cause of cervical cancer, indicating good scientific understanding of the disease’s aetiology. However, the mean (\bar{x} =3.14) is slightly lower than the awareness-related items, suggesting that although knowledge exists, some respondents still lack an accurate understanding of the cause (12.9% disagreed, 6% strongly disagreed). A large majority (86.6%) understand that cervical cancer can be prevented with regular screening, indicating strong knowledge of preventive behaviour. This item has a mean score (\bar{x} =3.05) among the set, though still above the acceptance threshold. While 77.1% agree that HPV

vaccination can prevent cervical cancer, about 22.9% lack this knowledge or are unsure, indicating that awareness of the vaccine is comparatively weaker than awareness of screening. This aligns with the known pattern in many communities where HPV vaccination awareness is lower due to limited health education, misconceptions, or inadequate access. Most respondents (82.1%) recognise the Pap smear as a screening method, showing good awareness of diagnostic options. The moderate Standard Deviation suggests relatively consistent responses across the sample.

The overall average of 3.20 indicates that respondents generally demonstrate high awareness and good knowledge about cervical cancer, its causes, prevention, and screening methods. Awareness is highest regarding the existence of cervical cancer and its commonness among women, while knowledge about HPV vaccination is the weakest area.

This data reveals that although general awareness is strong, there is still a need for targeted health education programmes focusing on HPV vaccination uptake, as vaccination is a critical primary prevention strategy.

What are the attitudes of reproductive-age women towards cervical cancer screening?**Table 3: Frequency and Percentage of Respondents' Responses on Attitude Towards Cervical Screening in some selected LGAs in Kwara State, Nigeria**

S/N		Strongly Agree	Agree	Disagree	Strongly Disagree	\bar{x} Mean	Standard Deviation
7	Participating in cervical cancer screening is a waste of time	17 8.5%	19 9.55	104 51.7%	61 30.3%	1.96	0.86
8	I don't think I will be available to attend cervical cancer screening	22 10.9%	34 16.9%	100 49.8%	45 22.4%	2.16	0.90
9	I don't think I am interested in cervical cancer screening	23 11.4%	36 17.9%	88 43.8%	54 26.9%	2.14	0.94
10	I don't think I want to attend cervical cancer screening despite it been recommended by health workers	20 10%	36 17.9%	91 45.3%	54 26.9%	2.11	0.92
11	Encouraging friends and family to go for cervical screening is a waste of time	17 8.5%	33 16.4%	92 45.8%	59 29.4%	2.04	0.89
12	I don't think I can be a victim, let alone go for the screening	24 11.9%	39 19.4%	91 45.3%	47 23.4%	2.20	0.93
	Weighted Mean	2.10					

Source: Field work 2026

The findings reveal that the majority of respondents (51.7%) disagreed with the idea that cervical cancer screening is a waste of time. The low mean (1.96) shows strong disagreement with the negative statement. This suggests respondents attach value and relevance to cervical cancer screening. The standard deviation (0.86) indicates relatively consistent responses. A large number of respondents (72.2%) disagreed with the statement that they will not be available to attend screening. The mean (2.16) still falls below 2.50, indicating a generally positive intention to make time for screening. Most respondents disagreed (70.7%) that they are not interested in screening. The mean (2.14) suggests respondents show clear interest in screening. The Standard Deviation (0.94) is slightly higher, showing more varied opinions, but the majority remain positive. About 72.2% disagreed that they would avoid screening even when recommended by health workers. This indicates strong trust in health advice and openness to professional recommendations. The mean (2.11) again demonstrates positive behavioural intentions. Respondents overwhelmingly disagreed (75.2%) that encouraging others is a waste of time. This mean (2.04) implies they are willing to encourage peers and family to undergo cervical cancer screening. This reflects positive community-level health attitudes, which can enhance public health outreach. Even though 68.7% disagreed and strongly disagreed with the belief that they cannot be victims: The mean (2.20), while still low, is the highest among the items. This suggests that some respondents may still have

perceived susceptibility, believing they are unlikely to get cervical cancer. This misunderstanding can affect proactive health behaviour and may require targeted awareness campaigns.

The overall pattern of responses shows that respondents hold a generally positive attitude and strong behavioural intention toward cervical cancer screening. Across all items, the majority strongly disagreed or disagreed with negative statements about screening, indicating that they value the practice, are willing to make time for it, and remain open to health professionals' recommendations. Respondents also demonstrate readiness to encourage others, reflecting supportive community-level health attitudes. Overall, the discussion indicates favourable perceptions toward cervical cancer screening, with only minor misconceptions requiring targeted intervention.

Where do reproductive-age women obtain information about cervical cancer and screening?

Table 4: Frequency and Percentage of Respondents' Responses on Sources of Information about Cervical Cancer and Screening in some selected LGAs in Kwara State Nigeria

S/N		Strongly Agree	Agree	Disagree	Strongly Disagree	\bar{x} Mean	Standard Deviation
13.	I receive information about cervical cancer from healthcare worker	79 39.9%	84 41.8%	26 12.9%	12 6.0%	3.14	0.86
14	I often learn about cervical cancer through radio or television programmes.	85 42.3%	89 44.3%	15 7.5%	12 6.0%	3.23	0.83
15	Social media and the internet are major sources of information for me about cervical cancer screening.	70 34.8%	85 42.3%	32 15.9%	14 7.0%	3.05	0.89
16	Family and friends provide me with information about cervical cancer.	45 22.4%	86 42.8%	48 23.9%	22 10.9%	2.77	0.92
17.	Religious or community groups help raise awareness about cervical cancer screening.	31 15.4%	69 34.3%	76 37.8%	25 12.4%	2.53	0.90
18.	The information I receive about cervical cancer screening is from community healthcare programmes	80 39.8%	30 14.9%	61 30.3%	30 14.9%	2.55	0.92
	Weighted Mean	2.88					

Source: fieldwork 2026

The findings show that 89.78% of respondents agreeing, Healthcare workers are identified as a major source of reliable information. This is significant because healthcare professionals often provide accurate, credible, and actionable information. The mean (3.14) reflects high reliance on

clinical sources, and the Standard Deviation (0.86) shows relatively consistent responses. This item has one of the highest mean scores (3.23) in the table. 86.6% of respondents agreed that they obtain cervical cancer information from the radio and Television. This highlights the continued relevance of mass media in health communication in the community. The low Standard Deviation (0.83) indicates strong agreement with minimal variation. This suggests radio/Television are effective channels for broad community outreach. Respondents consider digital platforms important sources, as 77.1% of respondents agreed that they get information through social media/Internet. Mean of 3.05 indicates high engagement with digital information, especially among younger or tech-savvy populations. The Standard Deviation (0.89) is moderate, showing some variability but generally positive. This emphasizes the growing role of online health information in Nigeria. With 65.2% of respondents agreeing that Family and peers are informal information channels. The mean (2.77) shows they play a significant but less dominant role compared to healthcare workers or media. This could reflect personal discussions, community experiences, or shared concerns. However, informal sources may sometimes carry misinformation, making it important to strengthen community health literacy. 49.7% of respondents agreed that religious/community groups raise awareness. Mean of 2.53 shows that these groups play a supportive but not major role. Many attendees may receive occasional information during community gatherings, women's meetings, or religious events. This suggests an untapped opportunity, as religious bodies have high community influence in Nigeria. The mean (2.55) reflects moderate agreement. About 54.7% of respondents receive information from local community health programmes. This suggests that community-level health outreach exists, but participation may not be widespread. Variability (Standard Deviation = 0.92) indicates different levels of program exposure across LGAs.

The findings indicate that respondents receive cervical cancer information from a wide range of sources, with healthcare workers, mass media, and digital platforms emerging as the most influential. Healthcare workers are the most trusted and frequently used source, reflecting the importance of clinical credibility in shaping health knowledge. Radio and television also play a strong role, demonstrating the continued power of traditional mass media in disseminating health information across communities. Social media and online platforms show high engagement, highlighting the growing relevance of digital health communication, especially among younger and more connected populations.

Family, peers, community groups, and religious organisations serve as secondary but meaningful sources of information. While these groups contribute to awareness, their influence is less dominant, and variability in responses suggests that access to information through these channels is uneven. Community-level health programmes provide moderate support, though coverage and participation remain inconsistent.

Overall, the discussion shows that while reliable information sources are available and actively used, opportunities exist to strengthen community-based and faith-based information channels, expand digital health literacy, and enhance outreach programmes. Improving the coordination and accuracy of messages across all information platforms will help increase awareness and promote better cervical cancer prevention practices.

Discussion of findings

Research question one showed that the items in the survey measuring respondents' knowledge of cervical cancer and screening had high mean scores, ranging from 38.9% to 75.4%, demonstrating a high awareness among women of childbearing age. With these findings, it was possible to infer that the knowledge of cervical cancer as a female-related disease was high among the people of the study region. This indicates that cervical cancer has become a topic of concern in public health in the region. This observation is consistent with reports by Eze et al. (2019), Ifemelumma et al. (2019), and Nwabichie et al. (2022), who found a steady increase in awareness of cervical cancer in Nigeria and other countries in sub-Saharan Africa as a result of continuous population-based health education and media involvement. Likewise, this is also consistent with Osu (2021) and Akanbi et al. (2024), who found that frequent contact with public health institutions greatly increases women's access to information on reproductive health through antenatal clinics, immunisation services, and general outpatient visits. Similar results were also observed in Ghana and in Kenya (Ebu et al., 2021; Were et al., 2020), where education based on the healthcare facility was one of the key reasons for enhanced knowledge in reproductive health.

However, results further indicated gaps in specific knowledge areas, especially concerning HPV vaccination and viral aetiology of cervical cancer. While the general knowledge was good, the detailed preventive knowledge was poor. From these results, it can be inferred that the current health education programme may lay more emphasis on recognising the disease rather than a total preventive package. This finding is consistent with the findings of Okunade et al. (2020), Ebu et al. (2021) and Adekanle et al. (2023), who found similar discrepancies between knowledge of cervical cancer and knowledge of HPV vaccination. This is also confirmed by Akanbi et al. (2024), who also posited that health education in many public health facilities is more antecedent to curative rather than preventive education. Consistent with global evidence, WHO (2021) and Bruni et al. (2023) highlighted that limited knowledge of HPV vaccination impedes primary prevention in several African nations.

Research question two showed that a positive attitude towards; with the items about the respondents' attitude on cervical cancer screening had a high mean score among participants. The majority of the respondents did not agree with the negative views that screening was not necessary, or that it was an embarrassing procedure, or that it was a waste of time. In view of the results, it may be assumed that women residing in the study area recognise the severity of cervical cancer and the value of early diagnosis. This is in line with the findings of Okunowo et al. (2021), Nwabichie et al. (2022), and Adebayo et al. (2023), who found that good knowledge of cervical cancer predicted a positive attitude towards screening. Osu (2021), while commenting on the role of repeated institutionalisation in normalising screening practices, and Akanbi et al. (2024), who found that attributing health risks to family needs and financial security fosters positive attitudes. However, a study conducted in Nigeria and Ethiopia (Tesema et al., 2021; Eze et al., 2022) warned that a positive attitude alone may not necessarily result in screening practice in the face of persisting systemic and structural barriers.

The findings of research question three revealed that respondents relied on multiple sources of information, with healthcare workers, traditional mass media, and digital platforms yielding high mean scores as primary sources. With these results, it could be deduced that the health system plays a central role in shaping women's health knowledge and decision-making. This supports Osu (2021), who identified healthcare providers as key gatekeepers of reproductive health information,

particularly in semi-urban and rural communities. This is in line with the submission of Akanbi et al. (2024), who similarly reported that the quality and clarity of information received from healthcare workers significantly influence women's health-seeking behaviour. Furthermore, the continued relevance of radio and television in disseminating health information aligns with findings by Nwabichie et al. (2022) and Adepoju et al. (2023).

The increasing reliance on social media and internet platforms reflects evolving health communication patterns. While digital platforms expand access to information, studies by Eze et al. (2022) and Bruni et al. (2023) warn that unregulated online content may contribute to misinformation, particularly concerning HPV vaccination and screening procedures. With these results, it could be deduced that although multiple information channels are available, structured and credible digital health communication strategies are necessary to ensure accurate and consistent messaging on cervical cancer prevention.

Conclusion

Based on the results of this study, it was found that although there is some level of awareness of cervical cancer among women in Ilorin Emirate, the awareness is not comprehensive. Although the majority of respondents had heard about cervical cancer, knowledge of its causes, risk factors, symptoms, and screening methods was very low. Such limited knowledge depth undermines the potential for awareness to inform preventive action, such as regular screening.

Furthermore, the attitude towards cervical cancer screening is positive in the sense that many women agree on the necessity of early detection for cervical cancer and would like to be screened. Yet this positive attitude does not seem to contribute to its practice, as the rate of uptake of screening is abysmally low among the respondents. The contrast implies that positive attitudes are not sufficient to bring about screening behaviour in the absence of support, accurate information, and accessible services. Information about cervical cancer and its screening is primarily obtained through health workers, mass media, and social networks such as friends and peers. While these sources play an important role in creating awareness, the information disseminated is often superficial and lacks sufficient detail to address misconceptions, fears, and practical concerns related to screening. As a result, many women remain unconvinced or unsure about the necessity and safety of cervical cancer screening.

Several barriers were found to play a major part in limiting the use of screening. These are the fear of being diagnosed positive, socio-cultural and religious barriers, financial barriers, misconceptions related to the screening procedure, and paucity or inaccessibility of screening centres. All these lead women are discouraged from switching this awareness and positive attitude into the practice of screening.

In sum, there is a clear awareness-attitude-practice gap for cervical cancer screening among the women in the Ilorin Emirate as revealed by the findings of this study. This gap calls for urgent, both broad-based and context-specific interventions that move beyond merely raising awareness to enhancing knowledge, overcoming identified barriers and fostering sustained behaviour change at both the individual and community levels.

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