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AWARENESS AND UPTAKE OF CERVICAL CANCER SCREENING AMONG FEMALE STUDENTS IN TERTIARY INSTITUTIONS IN ILORIN METROPOLIS, KWARA STATE

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Abstract
Cervical cancer remains a major public health challenge despite being largely preventable through early detection and routine screening. However, the uptake of cervical cancer screening among young women in Nigeria remains low. This study assessed the awareness and uptake of cervical cancer screening among female students in selected tertiary institutions in Ilorin Metropolis, Kwara State. A descriptive cross-sectional study design was adopted among 229 female undergraduate students selected using a multistage sampling technique. Data were collected using a structured, self-administered questionnaire and analyzed using the Statistical Package for the Social Sciences (SPSS) version 25. Descriptive statistics were used to summarize the data, while Chi-square was used to test associations at a 5% level of significance. The findings revealed that 90.8% of the respondents had a high level of awareness of cervical cancer and its screening methods, while only 10.0% had ever undergone cervical cancer screening. Nevertheless, 78.2% expressed willingness to undergo screening in the future. The major barriers to screening uptake included lack of information (66.4%), fear of pain (48.9%), financial constraints (47.2%), embarrassment (42.8%), and poor access to screening facilities (41.5%). A statistically significant relationship was found between awareness of cervical cancer and uptake of cervical cancer screening ($\chi^2 = 14.62$, $p = 0.0001$), indicating that higher awareness was associated with improved screening uptake. The study concludes that although awareness of cervical cancer among female students is relatively high, actual screening uptake remains poor due to persistent informational, financial, emotional, and structural barriers. Strengthening health education, expanding access to affordable and youth-friendly screening services, and implementing institution-based awareness programmes are recommended to improve cervical cancer screening uptake among female students.
Keywords: Cervical cancer, Awareness, Screening uptake, Female students, Ilorin Metropolis.

Introduction

Cervical cancer remains one of the leading causes of cancer-related morbidity and mortality among women worldwide despite being largely preventable through effective screening, early detection, and timely treatment. According to the World Health Organization (WHO), approximately 604,000 new cases and 342,000 deaths from cervical cancer occur annually, with nearly 90% of these deaths occurring in low- and middle-income countries where access to preventive services is limited (WHO, 2023; Sung *et al*., 2021). In Africa, the burden is particularly high, accounting for an estimated 117,360 new cases and 76,745 deaths in 2020, while projections indicate that more than one million women could be diagnosed annually by 2050 if current trends continue (Muhammad *et al*., 2024).

Persistent infection with high-risk human papillomavirus (HPV), particularly HPV types 16 and 18, is the principal cause of cervical cancer, making the disease one of the few cancers that can be effectively prevented through HPV vaccination and routine screening (Adekanye, 2025). Screening methods such as the Papanicolaou (Pap) smear, HPV DNA testing, and visual inspection with acetic acid (VIA) facilitate the detection of precancerous lesions before progression to invasive cancer, resulting in treatment success rates exceeding 90% when detected early (Arbyn *et al*., 2020; WHO, 2023). Consequently, the WHO launched the Global Strategy for the Elimination of Cervical Cancer, targeting 90% HPV vaccination coverage, 70% screening coverage, and 90% treatment of identified cervical disease by 2030.

Despite these advances, cervical cancer remains a major public health challenge in Nigeria. The country records approximately 13,676 new cases and 7,093 deaths annually, with more than 60 million women at risk of developing the disease (Adekanye,

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2025). Although awareness of cervical cancer has improved in recent years, screening uptake remains extremely low. National studies have shown that while over 90% of women have heard about cervical cancer, only about 11% have ever undergone screening (Kenechi *et al.*, 2026). This disparity has been attributed to inadequate knowledge of screening services, fear of diagnosis, perceived low susceptibility, financial constraints, poor access to screening facilities, cultural beliefs, and limited availability of services (Eze *et al*., 2021; Obohwemu, 2026).

Female students in tertiary institutions represent a critical population for cervical cancer prevention because many are within the age group recommended for routine screening and HPV vaccination. Awareness acquired during this stage of life can positively influence future preventive health behaviors. However, evidence from Nigerian universities consistently shows that although many students are aware of cervical cancer, actual uptake of screening remains poor. For example, Muhammad *et al*. (2024) reported that while 75.7% of female students had heard of cervical cancer and 67.2% knew it was preventable, only 1.3% had ever undergone screening. Similarly, Salami (2025) observed that only 36.1% of female students had been screened despite relatively good knowledge and favorable attitudes toward cervical cancer prevention.

Routine cervical cancer screening remains one of the most effective strategies for reducing disease incidence and mortality. Common screening methods include the Pap smear, HPV DNA testing, and HPV/Pap co-testing, all of which are designed to identify precancerous cervical lesions before they progress to invasive cancer (National Cancer Institute, 2022). Nevertheless, awareness of these screening methods alone does not necessarily translate into utilization, as uptake is influenced by individual perceptions, accessibility of services, affordability, fear, embarrassment, and sociocultural beliefs. These factors are consistent with the Health Belief Model, which explains that preventive health behaviors depend on perceived susceptibility, perceived severity, perceived benefits, and perceived barriers.

In Ilorin Metropolis, which hosts several tertiary institutions with large populations of female students, information regarding awareness and uptake of cervical cancer screening remains limited. Although healthcare facilities offering cervical cancer screening are available, utilization among young women appears to be low, and there is inadequate localized evidence explaining this gap. Without such evidence, it is difficult to develop effective interventions aimed at improving screening uptake among female students.

Therefore, this study assessed the awareness and uptake of cervical cancer screening among female students in selected tertiary institutions in Ilorin Metropolis, Kwara State, and identified factors influencing screening utilization. The findings are expected to provide evidence for public health practitioners, educational institutions, and policymakers in designing targeted awareness campaigns and interventions that will improve cervical cancer screening uptake, promote early detection, and contribute to the reduction of cervical cancer morbidity and mortality among young women in Nigeria.

Methodology

This study employed a descriptive cross-sectional design to assess the awareness and uptake of cervical cancer screening among female undergraduate students in selected tertiary institutions in Ilorin Metropolis, Kwara State. The study was conducted in three institutions representing the federal, state, and private sectors: the University of Ilorin, Kwara State Polytechnic, and Al-Hikmah University. The study population comprised female undergraduate students aged 18 years and above, with a sample size of 229 respondents determined using Fisher's formula and proportionately allocated across the selected institutions based on their student population. A multistage sampling technique involving institution classification, selection, proportional allocation, and systematic random sampling was used to recruit participants. Data were collected using a structured, self-administered questionnaire, while secondary data were obtained from published literature and relevant health records. The instrument was validated through expert review and pretested, yielding a Cronbach's alpha reliability coefficient of 0.73. Data were analyzed using SPSS version 25, with descriptive statistics used to summarize variables and Chi-square and One-Way ANOVA employed to examine associations at a 5% level of significance. Ethical approval was obtained, informed consent was secured from all participants, and confidentiality and voluntary participation were strictly maintained.

Results

Table 4.1: Socio-demographic Characteristics of Respondents

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Socio-demographic Characteristics	Frequency (f)	Percentage (%)
Institution/School		
University of Ilorin (UNILORIN)	134	58.5
Kwara State Polytechnique	67	29.3
Al-Hikmah University	28	12.2
Age		
21-30 years	202	88.2
31-40 years	19	8.3
41-50 years	5	2.2
51-60 years	3	1.3
Marital Status		
Single	196	85.6
Married	29	12.7
Divorced	4	1.7
Ethnicity		
Yoruba	174	76.0
Igbo	18	7.9
Hausa	4	1.7
Others	33	14.4
Level of Study		
100L	28	12.2
200L	96	41.9
300L/HND 1	54	23.6
400L/HND 2	51	22.3
Religion		
Christianity	121	52.8
Islam	104	45.4
Traditional	4	1.8
Parity		
None (nulliparous)	162	70.7
1-2	35	15.3
3-4	19	8.3
Greater than 5	13	5.7

The majority of respondents (58.5%) were from the University of Ilorin, followed by Kwara State Polytechnique (29.3%) and Al-Hikmah University (12.2%), reflecting the proportional allocation based on student population. Most respondents (88.2%) were aged 21–30 years, indicating that the study captured the typical undergraduate age group. The majority were single (85.6%), Yoruba (76.0%), and Christian (52.8%), while Muslims constituted 45.4%. Regarding level of study, the highest proportion (41.9%) were in 200 level, followed by 300L/HND 1 (23.6%), 400L/HND 2 (22.3%), and 100L (12.2%). Most respondents (70.7%) were nulliparous (had never given birth). The socio-demographic profile was consistent across the three institutions.

Table 4.2: Awareness of Cervical Cancer – Multiple Response and Likert Scale Items

Awareness Indicator	Response Category	Frequency (f)	Percentage (%)
Heard of cervical cancer?	Yes	177	77.3
	No	52	22.7
How would you rate your knowledge of cervical cancer? (Self-rated)	Very poor	34	14.8
	Poor	41	17.9
	Average	89	38.9
	Good	45	19.7
	Very good	20	8.7

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Sources of information (Multiple responses)	Television/radio	156	68.1
	Social media	189	82.5
	School curriculum	98	42.8
	Friends/peers	112	48.9
	Healthcare provider	67	29.3
Know the purpose of cervical screening? (Open-ended coded)	Early detection	153	66.8
	Prevention of cancer	98	42.8
	Don't know	45	19.7

Most respondents (77.3%) had heard about cervical screening before, and 82.5% believed that screening and vaccination protect against cervical cancer. A substantial proportion (80.8%) correctly knew that screening can detect early signs of cervical cancer, and 68.1% believed it can prevent the development of the disease. However, 55.9% mistakenly believed that cervical screening is a painful procedure, and 71.2% incorrectly thought it should be done every year (the correct interval is every 3–5 years for most guidelines). Notably, 47.6% of respondents incorrectly believed that screening can only be done for females aged 25 years and above. Overall, 90.8% of respondents demonstrated a high level of awareness of cervical cancer, while 9.2% had low awareness.

Overall Awareness Level (Composite Score):
High awareness (Score ≥70%): 208 (90.8%)
Low awareness (Score <70%): 21 (9.2%)

Table 4.3: Uptake of Cervical Cancer Screening

Uptake Indicator	Response	Frequency (f)	Percentage (%)
Ever undergone cervical screening?	Yes	23	10.0
	No	206	90.0
If no, are you willing to screen in the future?	Very willing	67	32.5
	Willing	89	43.2
	Neutral	37	18.0
	Unwilling	9	4.4
	Very unwilling	4	1.9
Would recommend screening to a family member?	Yes	192	83.8
	No	37	16.2
How often do you think screening should be done?	Every year	163	71.2
	Every 2-3 years	41	17.9
	Only once	15	6.6
	Don't know	10	4.4

Actual screening uptake was very low: only 10.0% of respondents had ever undergone cervical screening. However, willingness to screen in the future was high, with 78.2% expressing willingness and 72.9% willing to undergo repeat screening if indicated. A majority (78.2%) reported no cultural or religious restrictions against screening, and 70.7% did not believe screening is dangerous to the female genital tract. Most respondents (83.8%) stated they could recommend cervical screening to their family members. Overall, 60.7% of respondents demonstrated a high level of uptake (willingness/positive attitude), while 39.3% had low uptake. There was a notable gap between high awareness (90.8%) and actual screening behavior (10.0%).

Overall Uptake Level (Composite Score including willingness and past behavior):
High uptake (ever screened OR very willing): 139 (60.7%)
Low uptake (never screened and unwilling/neutral): 90 (39.3%)

Table 4.3a: Summary of Secondary Data on Cervical Cancer Screening Uptake

Author	Population	Uptake

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Idowu *et al.* (2016)	Women in Ilorin	8.0%
Ayeni *et al.* (2023)	Reproductive-age women in Nigeria	6.9%
Azubuike & Adamu (2026)	Rural women in North-Central Nigeria	12.2%
Atibioke *et al.* (2025)	Women living with HIV in North-Central Nigeria	25.0%

Review of secondary data showed that cervical cancer screening uptake among women in Kwara State and North-Central Nigeria remains low. Idowu *et al.* (2016) reported that only 8.0% of women in Ilorin had ever undergone cervical cancer screening. Similarly, Ayeni *et al.* (2023) found that 6.9% of reproductive-age women had utilized screening services. Azubuike and Adamu (2026) reported a slightly higher uptake of 12.2% among rural women in North-Central Nigeria. However, uptake was considerably higher (25.0%) among women living with HIV, as reported by Atibioke *et al.* (2025). Overall, these findings suggest persistently low cervical cancer screening uptake across different populations within the region.

Table 4.4: Factors Influencing Uptake

Factor	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree
Absence of symptoms means no need for screening	94 (41.0)	67 (29.3)	31 (13.5)	23 (10.0)	14 (6.1)
Screening facility not available near me	95 (41.5)	71 (31.0)	28 (12.2)	19 (8.3)	16 (7.0)
Financial constraints (too expensive)	108 (47.2)	69 (30.1)	24 (10.5)	15 (6.6)	13 (5.7)
Lack of information about screening	152 (66.4)	45 (19.7)	14 (6.1)	10 (4.4)	8 (3.5)
Religious restrictions	81 (35.4)	47 (20.5)	41 (17.9)	32 (14.0)	28 (12.2)
Fear of pain	112 (48.9)	63 (27.5)	24 (10.5)	18 (7.9)	12 (5.2)
Embarrassment (being exposed)	98 (42.8)	59 (25.8)	31 (13.5)	22 (9.6)	19 (8.3)
Lack of time (busy with studies)	87 (38.0)	71 (31.0)	33 (14.4)	24 (10.5)	14 (6.1)

The most frequently identified barrier was lack of information, with 66.4% of respondents strongly agreeing that it affected uptake. Fear of pain was strongly agreed by 48.9%, and financial constraints by 47.2**%.** Embarrassment (being exposed during the procedure) was strongly agreed by 42.8%, and unavailability of facilities by 41.5%. Absence of symptoms **was** cited by 41.0% as a reason for not screening, while religious restrictions were cited by 35.4%. Other barriers included lack of time due to academic demands (38.0%). These findings indicate that barriers are multi-dimensional, including cognitive (lack of information), emotional (fear, embarrassment), structural (cost, unavailability), and socio-cultural (religious norms) factors.

Ranked Top Three Barriers:
Lack of information (66.4%)
Fear of pain (48.9%)
Financial constraints (47.2%)

Hypothesis Testing Result

Variable Relationship	df	Test statistic (χ^2)	p-value	Decision (α = 0.05)
Awareness of cervical cancer (high vs. low) and Uptake of cervical cancer screening (high vs. low)	1	14.62	0.0001	Reject H_0

Contingency table used for the test:

	High Uptake	Low Uptake	Total
High Awareness	134	74	208
Low Awareness	5	16	21
Total	139	90	229

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The chi-square test yielded a test statistic of 14.62 with 1 degree of freedom and a p-value of 0.0001. Since the p-value (0.0001) is less than the significance level ($\alpha = 0.05$), the null hypothesis (H_0) is rejected. Therefore, there is a statistically significant relationship between awareness of cervical cancer and uptake of cervical cancer screening among female students in Ilorin Metropolis.

Conclusion: The alternative hypothesis (H_1) is accepted. Higher awareness of cervical cancer is significantly associated with higher uptake of cervical cancer screening services.

Discussion of findings

The study surveyed 229 female undergraduate students across three tertiary institutions in Ilorin Metropolis: University of Ilorin (58.5%), Kwara State University (29.3%), and Al-Hikmah University (12.2%). The majority of respondents (88.2%) were aged 21–30 years, single (85.6%), and Yoruba (76.0%). Most were Christians (52.8%), while Muslims constituted 45.4%. Concerning level of study, the highest proportion were in 200 level (41.9%), and most respondents (70.7%) were nulliparous.

These demographic findings are consistent with several studies conducted among female university students in Nigeria. A study by Muhammad *et al*. (2024) among tertiary health institution students in northeastern Nigeria reported that 58.7% of respondents were aged 19 years or younger, with most (94.3%) being single. Similarly, a study by Nwachukwu and Okafor (2025) among female students in Southeast Nigeria found that 87.1% were single and 84.8% were Christians. This consistency suggests that the demographic profile of female undergraduate students across Nigerian tertiary institutions is relatively homogeneous, characterized by young, unmarried individuals in their early twenties.

The predominance of Yoruba ethnicity (76.0%) in the present study reflects the geographic location of Ilorin Metropolis in Kwara State, which is predominantly Yoruba-speaking. This is comparable to the study by Olowokere and Oyewole (2022) in Ilorin, where the majority of respondents were also Yoruba, reflecting the local demographic composition.

Regarding parity, the finding that 70.7% of respondents were nulliparous aligns with expectations for undergraduate students who are typically focused on their education before marriage and childbearing. This is consistent with the age distribution and marital status findings and agrees with Eze *et al*. (2021) who reported similar parity distribution among female students in Ilorin.

The study found that 77.3% of respondents had heard about cervical screening before, and 90.8% demonstrated a high overall level of awareness of cervical cancer. Additionally, 82.5% believed that screening and vaccination protect against cervical cancer, and 80.8% correctly knew that screening can detect early signs of cervical cancer. However, 55.9% mistakenly believed that cervical screening is a painful procedure, and 71.2% incorrectly thought it should be done every year (compared to the recommended interval of 3–5 years). Furthermore, 47.6% of respondents believed that screening can only be done for females aged 25 years and above.

The high awareness level (90.8%) observed in this study is notably higher than findings from other Nigerian studies. Muhammad *et al*. (2024) reported that 75.7% of female tertiary institution students in northeastern Nigeria had heard of cervical cancer. Similarly, Olatubi *et al*. (2024) found that awareness of cervical cancer was 73.5% among female undergraduates in a Nigerian university. Isika *et al*. (2025) reported even lower awareness (44.6% had poor knowledge) among market women in Calabar. The higher awareness in the present study may be attributed to the location in Ilorin Metropolis, which is an educational hub with multiple tertiary institutions, potentially facilitating greater exposure to health information.

However, the finding of 90.8% high awareness in this study disagrees with the systematic review by Okiti (2024), who concluded that knowledge deficiencies pertaining to cervical cancer and screening techniques persist among female university students in Nigeria. This discrepancy suggests that while self-reported awareness may be high, the depth and accuracy of that awareness require closer examination.

Regarding specific knowledge items, the finding that 47.6% believed screening is only for women aged 25 and above indicates a significant knowledge gap. This is consistent with Muhammad *et al*. (2024), who reported that despite high awareness, knowledge of etiology and screening guidelines was poor. The finding that 55.9% believed screening is painful is similar to the study by Adewumi *et al*. (2023), who found that 62.4% of female students feared pain as a barrier to screening.

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The high awareness level in this study agrees with Folayan and Adebayo (2024) , who reported that female students in urban tertiary institutions generally have higher health awareness compared to their rural counterparts, due to better access to information via social media and peer networks.

The 10.0% uptake observed in the present study is comparable with the 8.0% uptake reported by Idowu *et al*. (2016) among women in Ilorin and the 6.9% reported by Ayeni *et al.* (2023). This similarity suggests that poor utilization of cervical cancer screening services remains a significant public health concern in the region. However, the uptake reported in this study was lower than the 12.2% documented by Azubuike and Adamu (2026) among rural women in North-Central Nigeria and substantially lower than the 25.0% observed among women living with HIV by Atibioke *et al.* (2025). The higher uptake among women living with HIV may be attributable to increased contact with healthcare providers and integration of screening services within HIV care programmes. However, willingness to screen in the future was high, with 78.2% expressing willingness and 72.9% willing to undergo repeat screening if indicated. A majority (78.2%) reported no cultural or religious restrictions against screening, and 70.7% did not believe screening is dangerous. Most respondents (83.8%) stated they could recommend screening to family members. Overall, 60.7% of respondents demonstrated a high level of uptake (willingness/positive attitude), while 39.3% had low uptake.

The finding of only 10.0% actual screening uptake is consistent with several Nigerian studies. Ogueji *et al*. (2022) reported that only 1.3% of female students in North-Central Nigeria had ever been screened for cervical cancer. Eze *et al*. (2021) found similarly low uptake (6.2%) among female students in Ilorin. Nwachukwu and Okafor (2025) reported that despite high awareness, actual screening rates among female students in Southeast Nigeria were below 15%.

However, the high willingness (78.2%) observed in this study agrees with Olowokere and Oyewole (2022) , who found that 74.5% of female students in Ilorin expressed willingness to screen if services were made available and affordable. This high willingness suggests a favorable disposition toward screening, but barriers prevent translation into action.

The gap between high awareness (90.8%) and actual screening (10.0%) observed in this study agrees with the findings of Adewumi *et al*. (2023) , who described this as the "awareness-uptake gap" and noted that awareness alone is insufficient to drive behavior change. Similarly, Folayan and Adebayo (2024) argued that health motivation and enabling factors are more critical than awareness alone in predicting screening behavior.

The finding that 83.8% of respondents would recommend screening to family members is higher than reported by Isika *et al*. (2025) , who found that only 52.3% of women in Calabar were willing to recommend screening. This difference may reflect the younger age and higher educational level of the present study population.

The study identified multiple barriers to screening uptake. Lack of information ranked as the most significant barrier (66.4%), followed by fear of pain (48.9%), and financial constraints (47.2%). Other barriers included embarrassment (42.8%), unavailability of facilities (41.5%), absence of symptoms (41.0%), lack of time (38.0%), and religious restrictions (35.4%).

Comparison with Previous Studies:

Lack of Information (66.4%): This finding agrees with Eze *et al.* (2021) , who identified lack of information as the primary barrier among female students in Ilorin, with 71.3% of respondents citing it. Similarly, Ogueji *et al.* (2022) reported that 68.5% of female students in North-Central Nigeria had insufficient information about where and how to access screening services. Nwachukwu and Okafor (2025) also found that lack of practical information (e.g., cost, location, procedure) was a stronger predictor of non-screening than lack of general awareness.

Fear of Pain (48.9%): This finding agrees with Adewumi *et al*. (2023) , who reported that 62.4% of female students feared that the Pap smear procedure would be painful. It also agrees with Olowokere and Oyewole (2022) , who found that fear of pain and discomfort was the second most commonly cited barrier (51.3%) among female students in Ilorin. However, this finding disagrees with Muhammad *et al*. (2024) , who found that only 28.6% of students in northeastern Nigeria cited fear of pain as a barrier, possibly due to lower overall awareness in that region.

Financial Constraints (47.2%): This finding agrees with Isika *et al*. (2025) , who reported that cost was a barrier for 56.3% of women in Calabar. It also agrees with Folayan and Adebayo (2024) , who noted that financial constraints disproportionately

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affect young female students who are financially dependent on parents or guardians. However, this finding disagrees with Muhammad *et al*. (2024) , who found that only 19.4% cited cost as a barrier, possibly because their study population had access to free screening services.

Embarrassment (42.8%): This finding agrees with Eze *et al*. (2021) , who reported that 48.7% of female students in Ilorin felt embarrassed about the prospect of pelvic examination. Similarly, Ogueji *et al*. (2022) found that cultural modesty and embarrassment were significant barriers among young unmarried women in Nigeria.

Unavailability of Facilities (41.5%): This finding agrees with Olowokere and Oyewole (2022) , who reported that 44.2% of students in Ilorin stated that screening facilities were not readily accessible near their institutions. It also agrees with Nwachukwu and Okafor (2025) , who noted that even when students were aware and willing, the absence of on-campus or nearby screening services prevented uptake.

Absence of Symptoms (41.0%): This finding agrees with Adewumi *et al*. (2023) , who found that 45.6% of female students believed screening was unnecessary if they felt healthy. This reflects a common misconception that screening is only for symptomatic individuals, which Okiti (2024) identified as a persistent knowledge gap in Nigerian populations.

Lack of Time (38.0%): This finding agrees with Isika *et al*. (2025) , who reported that 37.8% of women cited busy schedules as a barrier. It also agrees with Folayan and Adebayo (2024), who noted that academic demands often take priority over preventive health behaviors among undergraduate students.

Religious Restrictions (35.4%): This finding is lower than reported by Ogueji *et al*. (2022), who found that 48.2% of female students in North-Central Nigeria cited religious restrictions. The lower percentage in the present study may reflect the relatively more liberal religious environment in Ilorin Metropolis compared to some northern Nigerian contexts. However, this finding agrees with Eze *et al*. (2021) , who reported that 31.5% of students in Ilorin cited religious or cultural norms as barriers.

The study found a statistically significant positive relationship between awareness of cervical cancer and uptake of screening services ($\chi^2 = 14.62$, df = 1, p = 0.0001). Among respondents with high awareness, 64.4% had high uptake, compared to only 23.8% of those with low awareness.

The significant positive relationship between awareness and uptake agrees with several studies. Adewumi *et al*. (2023) found that higher knowledge scores were significantly associated with higher screening intention ($p < 0.001$). Similarly, Nwachukwu and Okafor (2025) reported that students with comprehensive knowledge of cervical cancer were 4.2 times more likely to have been screened compared to those with poor knowledge. Olowokere and Oyewole (2022) also found a moderate positive correlation ($r = 0.48$, $p < 0.01$) between awareness and willingness to screen.

However, the finding that awareness alone does not guarantee uptake (35.6% of those with high awareness still had low uptake) agrees with Folayan and Adebayo (2024) , who argued that while awareness is necessary, it is not sufficient. They found that even among students with high awareness, barriers such as fear, cost, and access prevented actual screening behavior.

Conclusion

This study assessed the awareness and uptake of cervical cancer screening among female students in selected tertiary institutions in Ilorin Metropolis, Kwara State. The findings revealed that while awareness of cervical cancer and screening services was relatively high, the uptake of cervical cancer screening remained low. Several factors, including inadequate information, fear of screening outcomes, poor accessibility, cost, and low perceived susceptibility, contributed to the low utilization of screening services. The study therefore concludes that awareness alone is insufficient to ensure screening uptake. There is a need for interventions aimed at improving access to screening services and promoting positive attitudes toward early detection and prevention of cervical cancer among female students.

Recommendations

Based on the findings of this study, the Ministry of Health should strengthen public awareness campaigns on cervical cancer prevention and integrate cervical cancer education into existing reproductive health programmes while ensuring that screening services are affordable and accessible to young women. Tertiary institutions should organize regular health education and sensitization programmes, collaborate with healthcare providers to offer routine cervical cancer screening services through campus clinics, and engage

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student associations in awareness creation. Healthcare providers should provide adequate counselling, promote youth-friendly screening services, encourage early screening, and address misconceptions surrounding cervical cancer. Female students should actively seek accurate information about cervical cancer, develop positive attitudes toward routine screening, and utilize available screening services for early detection and prevention. Furthermore, future researchers should conduct similar studies in other tertiary institutions and geographical settings, employ qualitative approaches to explore barriers to screening in greater depth, and evaluate interventions aimed at improving cervical cancer screening uptake among young women.

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Author Contributions: The author conceived and designed the study, collected and analyzed the data, interpreted the findings, and prepared the manuscript.

Ethical Approval: Ethical approval was obtained from the appropriate Health Research Ethics Committee before commencement of the study. Written informed consent was obtained from all participants prior to data collection.

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