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Knowledge and Perceptions of Cervical Cancer Screening in Keffi
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Original

Cervical Cancer Knowledge and Screening Perceptions Among Women in Keffi, Nigeria: A Facility-Based Cross-Sectional Study

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ABSTRACT

Background: Cervical cancer is the second most common cancer among women globally and a leading cause of mortality in Nigeria. Women's knowledge and perception of cervical cancer and its screening significantly affect early detection and prevention. This study assessed knowledge and perceptions of cervical cancer and screening services among women of reproductive age at Federal Medical Centre Keffi.

Methods: A cross-sectional study was conducted among 384 women aged 15–49 years attending clinics at the Federal Medical Centre Keffi. Systematic random sampling was used to select participants. Data were collected using interviewer-administered structured questionnaires and analysed with Statistical Package for Social Sciences v26. Descriptive and inferential statistics were applied, with chi-square tests assessing associations between socio-demographics and knowledge/perceptions ($p<0.05$).

Results: Most respondents (90.6%) demonstrated good knowledge of cervical cancer causes and transmission, with Human Papilloma Virus infection (44.8%) and multiple sexual partners (32.3%) recognized as major risk factors. About 81.5% had good perception of screening, with 65.9% agreeing that screening aids early detection. Misconceptions included screening being unnecessary without symptoms (41.4%), potential infertility (15.6%), and high cost (31.0%). Knowledge and perceptions were significantly associated with age, education, and marital status ($p<0.05$).

Conclusion: Although knowledge and perception of cervical cancer screening were generally good, misconceptions and socio-cultural barriers persist. Targeted health education and community interventions are essential to improve informed decision-making in cancer screening. Therefore, experts and policy makers need to incorporate suitable culturally acceptable awareness campaigns into mainstream healthcare services in Nigeria to enhance cervical cancer screening uptake.

Keywords: Cervical cancer, knowledge, perception, reproductive women, Nigeria, screening.

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INTRODUCTION

Cervical cancer, a preventable disease, remains a leading cause of cancer-related deaths among women in low- and middle-income countries, including Nigeria due to late-stage diagnosis and insufficient screening coverage. The available and effective screening methods include the Papanicolaou (Pap) smear, visual inspection with acetic acid (VIA), and Human Papilloma Virus (HPV) testing. Recent statistics on cervical cancer in Nigeria indicate that in 2023, there were approximately 12,075 new cases of cervical cancer, with about 7,968 deaths attributed to the disease annually.[1] The age-standardized incidence rate was about 26.2 per 100,000 women, and Nigeria has an estimated 60.9 million women over the age of 15 at risk of developing cervical cancer.[2] The high mortality rate, partly due to clinical factors such as advanced disease at presentation and co-morbidities like HIV/AIDS, underscores the urgent need for improved prevention, screening, and treatment services in the country. Cervical cancer remains a major public health challenge in Nigeria, with the burden impacting women in their productive years and contributing to socioeconomic hardship.

Globally, initiatives like the World Health Organization's 90-70-90 targets aim to eliminate cervical cancer by 2030, emphasizing vaccination, screening, and treatment.[3] Achieving these goals in Nigeria requires strong political commitment, public awareness, and effective health system responses, as the risk remains significant with an estimated 60.9 million women at risk without preventative interventions.[4] Knowledge and perception of cervical cancer and its screening are critical determinants of uptake; poor awareness and negative attitudes often hinder utilization of available services, even when accessible. Barriers include cultural beliefs, financial constraints, and inadequate education on screening benefits.

This contextual background serves as a foundation for understanding the urgent need to improve cervical cancer awareness and screening uptake in Nigeria to reduce preventable morbidity and mortality. In the Federal medical Centre (FMC) Keffi where various cervical cancer screening services are available, many women seem not to be aware of the services. Over the years, women only visit the hospitals when they have disease symptoms with regular general screening or healthcare check-ups very uncommon. Consequently, women with cervical cancer in Keffi are not identified until they are at an advanced stage of disease, which is associated with low survival rates. No previous study has focused on this public health concern in Keffi.

Therefore, this study aimed to assess the knowledge and perceptions of cervical cancer and screening services among women attending the FMC Keffi, Nasarawa State, Nigeria and to identify socio-demographic factors that may influence these outcomes.

METHODOLOGY

Design, Setting, and Population

The methodology of this study was designed as a hospital-based cross-sectional survey conducted at the FMC Keffi, Nasarawa State, Nigeria. Since hospital-based studies may not fully represent all women in the community, especially for those who do not attend health facilities, this approach poses a potential for selection bias. However, this design and setting were chosen to capture a representative sample of women accessing general outpatient, gynaecology, and HIV clinic services because these clinics have the highest number of patient attendance since they serve as referral centres for a diverse population across Keffi and neighbouring Abuja and southern parts of Kaduna State, aligning with common practices in cervical cancer knowledge and screening perception studies to ensure relevance to populations at risk.[5]

The target population comprised women aged 15 to 49 years presenting at these clinics, a demographic chosen based on WHO cervical cancer screening recommendations emphasizing women's reproductive years and heightened risk periods. Therefore, the inclusion criteria were women of reproductive age between 15-49 years attending these outpatient clinics at FMC Keffi, while the exclusion criteria included non-consenting women of reproductive age group, pregnant women, and women with a history of cervical cancer.

Sample Size Calculation and Justification

The sample size of 384 respondents for this cross-sectional survey was determined using standard formulas for estimating proportions in population-based studies. Given the absence of precise prior prevalence data on cervical cancer knowledge in the target population, the conservative approach of setting the expected proportion (p) at 0.5 was used to maximize sample size and ensure adequate statistical power.

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The sample size formula applied is:

$$n = \frac{Z^2 \times p \times (1-p)}{MOE^2}$$

Where:

- Z is the Z-score corresponding to the desired confidence level (1.96 for 95% confidence)
- p is the estimated proportion (0.5 used for maximum variability)
- MOE is the margin of error (set at 0.05 for ±5%)

Calculating the initial sample size (n):

$$n = \frac{(1.96)^2 \times 0.5 \times 0.5}{(0.05)^2} = \frac{3.8416 \times 0.25}{0.0025} = 384.16$$

Since the study population at FMC Keffi is considerably large, the finite population correction was minimal and thus did not substantially reduce the sample size requirement. The final sample size of approximately 384 respondents was therefore sufficient to estimate proportions with a 95% confidence level and 5% margin of error, consistent with epidemiological best practices for survey research in healthcare settings.

This sample size ensures adequate precision to assess the knowledge and perception levels among women attending FMC Keffi, providing findings generalizable to similar settings in Nigeria. A 95.5% response rate (384 valid responses out of 400 questionnaires) further strengthened data reliability.

Sampling, Tools, and Data Collection

A total of 400 questionnaires were systematically distributed using systematic random sampling, a widely accepted probability sampling technique that reduces selection bias by selecting every fourth participant from a list, ensuring representativeness.[5] From this, 384 valid responses were retrieved, yielding a high response rate of 95.5%, which strengthens the study's reliability and validity.

Data collection employed a structured questionnaire adapted from previously validated instruments used in similar Nigerian and sub-Saharan African studies. A pilot testing was done with 20 copies of the questionnaires. All suggestions given were noted, and all corrections made were implemented. The goal was to ensure clarity of expression, simple and concise use of language, clear understanding of items by the respondents, and that the items measured what was intended by the researcher. The questionnaires, written in English language, were interviewer-administered for about eight weeks, and encompassed sections on socio-demographic characteristics, knowledge of cervical cancer, and perception of screening services, ensuring comprehensive data to explore the multifaceted influences on screening services as recommended by National and International Guidelines.[5,6]

Data Analysis

Analysis was performed with Statistical Package for Social Sciences (SPSS) version 26. Knowledge and perception scores were computed, with scores above the median categorized as indicating good knowledge or perception, a standard practice facilitating meaningful dichotomization of continuous variables for analysis. Associations between socio-demographic factors and knowledge/perception categories were evaluated using chi-square tests with significance set at $p < 0.05$ and Confidence Interval (CI) at 95%, consistent with epidemiological standards for categorical data analysis. Multiple groups were collapsed to two groups to generate odds ratios (ORs) in two-by-two (2x2) chi-square analysis. There were no missing data because the questionnaires were interviewer-administered to ensure that all questions were answered.

Ethics

Ethical considerations were rigorously addressed. The study protocol received approval from the FMC Keffi Ethics Committee (FMCKFIHRECO2609/23), aligning with ethical requirements for research involving human participants. Written informed consent (in English language and orally translated to Hausa) was obtained from all participants, ensuring adherence to ethical principles of autonomy, confidentiality, and voluntary participation.[5]

This methodology complied with international best practices for descriptive cross-sectional studies assessing health knowledge and perceptions, ensuring methodological rigour and ethical compliance for reliable and relatively generalizable results within the Nigerian context.[5,6]

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RESULTS

Descriptive Statistics

i. Socio-Demographic Statistics

Table 1: Socio-Demographic Characteristics of Respondents (n = 384)

Variable	Categories	Frequency	Percent (%)
Age (years)	≤20	46	12.0%
	21–30	182	47.4%
	31–40	91	23.7%
	41–50	65	16.9%
Ethnicity	Hausa	212	55.2%
	Igbo	64	16.7%
	Yoruba	40	10.4%
	Others	68	17.7%
Religion	Islam	226	58.9%
	Christianity	119	31.0%
	African Traditional	39	10.2%
Marital Status	Married	248	64.6%
	Single	104	27.1%
	Divorced/ Widowed	32	8.4%
Education	Tertiary	150	39.1%
	Secondary	102	26.6%
	Primary	47	12.2%
	No Formal Education	85	22.1%
Occupation	Housewife	149	38.8%
	Farming	62	16.1%
	Civil Servant	54	14.1%
	Others	119	31.0%
Marriage Type	Monogamous	290	75.5%
	Polygamous	94	24.5%

A total of 384 women aged 15–49 years attending FMC Keffi participated in the study. The respondents were predominantly young adults, with 47.4% aged 21–30 years (Table 1). The majority belonged to the Hausa ethnic group (55.2%) and practiced Islam (58.9%). Most were married (64.6%), with 39.1% having attained tertiary education. Occupations were varied, though many were housewives (38.8%) or engaged in farming (16.1%). The predominant marriage type was monogamous (75.5%).

ii. Awareness of Cervical Cancer

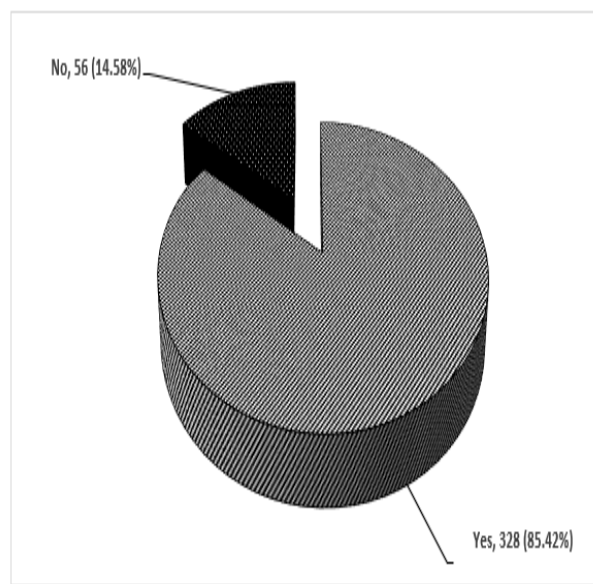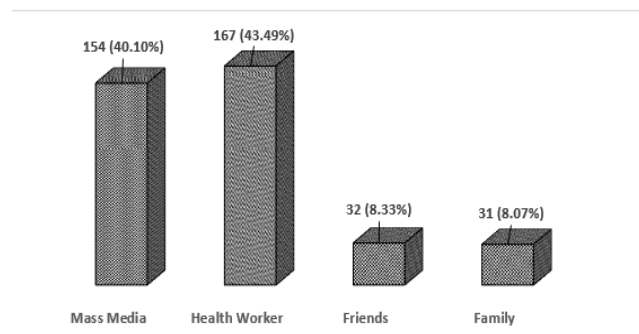***Figure 1: Awareness of Cancer of the Cervix***

Figure 2: *Source of Information on Cancer of the Cervix*

The awareness of cervical cancer was high, with 85.4% reporting prior knowledge, primarily gained through health workers (43.5%) and mass media (40.1%) as detailed in Figures 1 and 2.

iii. Knowledge of Cervical Cancer Risk Factors and Perceptions of Cervical Cancer Screening

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Table 2. Knowledge of Cervical Cancer Risk Factors and Perceptions of Cervical Cancer Screening

Variable	Category	Freq	Percent (%)
Necessity of screening	Yes	316	82.3%
	No	68	17.7%
Recommended age for screening	Puberty	116	30.2%
	21–30 years	138	35.9%
	31–40 years	106	27.6%
	> 40 years	24	6.3%
Preventable /Treatable	Yes	308	80.2%
	No	76	19.8%
Recognized risk factors	HPV infection	172	44.8%
	Multiple sexual partners	124	32.3%
	Early coitus	40	10.4%
	STDs	32	8.3%

Most respondents (82.3%) recognized the necessity of cervical cancer screening; 35.9% believed screening should commence between ages 21 and 30 years (Table 2). Furthermore, 80.2% acknowledged cervical cancer as preventable and treatable, with 44.8% and 32.3% identifying HPV infection and multiple sexual partners as major risk factors, respectively.

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Table 3: *Perception of Cervical Cancer Screening*

Variable	SA* n(%)	A* n(%)	N* n(%)	SD* n(%)	D* n(%)
Good for early detection of cervical cancer	253(65.9%)	85(22.1%)	16(4.2%)	17(4.4%)	13(3.4%)
All women at 25 years need to be screened for cervical cancer	168(43.8%)	122(31.8%)	47(12.2%)	14(3.6%)	33(8.6%)
For women with only one sexual partner	93(24.2%)	144(37.5%)	68(17.7%)	71(18.5%)	8(2.1%)
For women who have stopped having children	82(21.4%)	56(14.6%)	80(20.8%)	110(28.6%)	56(14.6%)
Not necessary for women who have received the HPV vaccine	78(20.3%)	83(21.6%)	91(23.7%)	82(21.4%)	50(13.0%)
It is painful	49(12.8%)	124(32.3%)	100(26.0%)	70(18.2%)	41(10.7%)
It is time-consuming	69(18.0%)	76(19.8%)	152(39.6%)	70(18.2%)	17(4.4%)
It destroys ability of a woman to have a baby	60(15.6%)	134(34.9%)	58(15.1%)	94(24.5%)	38(9.9%)
It enlarges the vagina and reduces sexual enjoyment	81(21.1%)	103(26.8%)	113(29.4%)	39(10.2%)	48(12.5%)
I have thought of having it	96(25.0%)	115(29.9%)	106(27.6%)	39(10.2%)	28(7.3%)
If I were given an explanation about cervical cancer screening and an opportunity to do the test, I would be willing to do the test	139(36.2%)	91(23.7%)	69(18.0%)	61(15.9%)	24(6.3%)
A Pap smear is unnecessary if there are no signs or symptoms	71(18.5%)	159(41.4%)	74(19.3%)	49(12.8%)	31(8.1%)
Going for a pap smear is too expensive	84(21.9%)	99(25.8%)	119(31.0%)	74(19.3%)	8(2.1%)
Having a pap smear is unpleasant and embarrassing	93(24.2%)	91(23.7%)	113(29.4%)	79(20.6%)	8(2.1%)
I am afraid that something wrong may be detected if I go for a pap smear	117(30.5%)	88(22.9%)	107(27.9%)	64(16.7%)	8(2.1%)
Is early detection of cervical cancer treatable	150(39.1%)	94(24.5%)	38(9.9%)	70(18.2%)	32(8.3%)
Should women with invasive cervical cancer be referred to the tertiary level for treatment	115(29.9%)	140(36.5%)	60(15.6%)	47(12.2%)	22(5.7%)
Cervical cancer can be treated in one or a combination of these options: surgery, radiotherapy and chemotherapy	131(34.1%)	118(30.7%)	80(20.8%)	39(10.2%)	16(4.2%)
Do the side effects of treatment come along with or in combination with the following: infertility, menopause, discomfort or pain with intercourse and possible bowel or bladder change	114(29.7%)	114(29.7%)	103(26.8%)	33(8.6%)	20(5.2%)
Treatment of cervical cancer could be for long-term.	129(33.6%)	130(33.9%)	56(14.6%)	41(10.7%)	28(7.3%)
Does untreated invasive cervical cancer almost always fatal	139(36.2%)	120(31.3%)	47(12.2%)	25(6.5%)	53(13.8%)

*Strongly Agreed (SA), Agreed (A), Neutral (N), Strongly Disagreed (SD), Disagreed (D); % in brackets.

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Regarding perceptions (Table 3), 65.9% strongly agreed that screening was beneficial for early detection of cervical cancer, and 81.5% demonstrated an overall good perception of screening. On the appropriate age for screening, 43.8% strongly advocated for screening all women at age 25 years, and 37.5% strongly supported the idea that women with only one sexual partner should undergo screening. Furthermore, 20.3% strongly believed that vaccinated women don't need screening. 32.3% found it painful while 39.6% said it was time-consuming.

A considerable proportion of the respondents (29.9%) had contemplated undergoing cervical cancer screening and 36.2% expressed a willingness to undergo screening if provided with an explanation. Concerns and misconceptions regarding Pap smear emerged with 41.4% believing it was unnecessary without signs and symptoms, 31.0% found going for a Pap smear too expensive, 29.4% found the process unpleasant and embarrassing, 30.5% expressed fear of potential detection of issues and 39.1% recognized the treatability of cervical cancer through early detection.

Additionally, 34.1% acknowledged that cervical cancer can be treated through surgery, radiotherapy, and chemotherapy in various combinations. Recognition that treatment could be long-term was 33.6%, and 36.2% understood the severity of untreated cervical cancer and fatal outcomes.

Associations Between Sociodemographic Factors and Knowledge/Perception of Cervical Cancer Screening Using Chi-Square Test

Socio-demographic groups were further collapsed and analysed for associations with knowledge and perception of cervical cancer screening. Age groups were dichotomized into 21-40 years and <21 & >40 years, while educational status was categorized as secondary and higher versus primary and below. Marital status was grouped as married versus single and others, religion as Islam versus Christianity and Traditional, and occupation as civil servant versus farmer and housewife. Chi-square tests were used to generate ORs.

i. Associations Between Socio-Demographic Factors and Knowledge of Cervical Cancer Screening

Table 4: Associations Between Socio-Demographic Factors and Knowledge of Cervical Cancer Screening (n=384)

Variable	Category	Good Knowledge n(%)	Poor Knowledge n(%)	OR (95% CI)	p-value
Age	21-40 years	246 (89.4%)	33 (65.3%)	5.16 (2.84–9.39)	<0.001*
	<21 and >40 years	28 (10.6%)	18 (34.7%)		
Education	Secondary or higher	332 (90.8%)	54 (60.7%)	7.72 (4.37–13.64)	<0.001*
	Primary or below	34 (9.2%)	35 (39.3%)		
Marital Status	Married	238 (89.7%)	48 (67.6%)	4.10 (2.37–7.10)	<0.001*
	Single or other	27 (10.3%)	23 (32.4%)		
Religion	Islam	220 (94.7%)	22 (44.0%)	21.60 (11.56–40.34)	<0.001*
	Christianity/Traditional	13 (5.3%)	28 (56.0%)		
Occupation	Civil servant	97 (90.7%)	38 (55.9%)	7.03 (3.92–12.61)	<0.001*
	Farmer/ Housewife	10 (9.3%)	30 (44.1%)		

*Calculated by collapsing multi-category variables into two groups to create 2x2 tables. OR = Odds Ratio; CI = Confidence Interval; p-values from chi-square tests.

Analysis of 2x2 categorized socio-demographic variables (by collapsing the grouping – Tables 4) revealed significant associations with knowledge of cervical cancer screening. Women aged 21–40 years were over five times more likely to have good knowledge (OR = 5.16; 95% CI: 2.84–9.39) compared to those younger than 21 years or older than 40 years. Educational attainment was strongly associated with knowledge; women with at least secondary education had nearly eight times the odds of good knowledge (OR = 7.72; 95% CI: 4.37–13.64) compared to those with primary education or less.

Marital status showed a significant association with knowledge; married women had approximately four times higher odds of good knowledge (OR = 4.10; 95% CI: 2.37–7.10). Religious affiliation demonstrated a strong influence; Muslim women had substantially higher odds of good knowledge (OR = 21.60; 95% CI: 11.56–40.34) compared to women affiliated with Christianity or traditional religions. Occupational status also impacted knowledge; civil servants were 7 times more likely to have good knowledge (OR = 7.03; 95% CI: 3.92–12.61) compared to farmers and housewives.

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ii. Associations Between Socio-Demographic Factors and Perception of Cervical Cancer Screening

Table 5: Associations Between Socio-Demographic Factors and Perception of Cervical Cancer Screening (n=384)

Variable	Category	Good Perception n(%)	Poor Perception n(%)	OR (95% CI)	p-value
Age	21–40 years	210 (77.9%)	18 (35.3%)	6.11 (3.09–12.06)	<0.001*
	<21 and >40 years	60 (22.1%)	33 (64.7%)		
Education	Secondary or higher	275 (75.2%)	53 (59.6%)	2.12 (1.21–3.71)	<0.001*
	Primary or below	91 (24.8%)	36 (40.4%)		
Marital Status	Married	187 (70.5%)	54 (68.4%)	1.10 (0.64–1.92)	0.74
	Single or other	78 (29.5%)	25 (31.6%)		
Religion	Islam	180 (77.6%)	47 (44.8%)	4.20 (2.55–6.89)	<0.001*
	Christianity/Traditional	52 (22.4%)	58 (55.2%)		
Occupation	Civil servant	110 (71.0%)	39 (57.4%)	1.86 (1.07–3.22)	0.02*
	Farmer/ Housewife	45 (29.0%)	29 (42.6%)		

* Calculated by collapsing multi-category variables into two groups to create 2x2 tables. OR = Odds Ratio; CI = Confidence Interval; p-values from chi-square tests.

Women aged 21–40 years were six times more likely to have a positive perception (OR = 6.11; 95% CI: 3.09–12.06) compared to those younger than 21 years or older than 40. Educational attainment was strongly associated with perception; women with at least secondary education had over twice the odds of positive perception (OR = 2.12; 95% CI: 1.21–3.71) compared to those with primary education or less.

Marital status showed no significant association with perception (OR = 1.10; 95% CI: 0.64–1.92, p 0.74). Religious affiliation demonstrated a strong influence; Muslim women had substantially higher odds of positive perception (OR = 4.20; 95% CI: 2.55–6.89) compared to women affiliated with Christianity or traditional religions. Occupational status also impacted perception; civil servants were nearly twice as likely to have a positive perception (OR = 1.86; 95% CI: 1.07–3.22) compared to farmers and housewives.

DISCUSSION

The findings of this study provide a comprehensive understanding of the knowledge, perceptions, and barriers related to cervical cancer and screening among women attending FMC Keffi, Nigeria. The high awareness level observed (85.4%) corroborates previous Nigerian studies, especially Abugu and Nwagu's study, reflecting the impact of health education in tertiary care settings.[7] However, the 14.6% level of unawareness indicates ongoing gaps consistent with heterogeneous awareness reported by Gitonga et al.[8] Most participants (82.3%) acknowledged the importance of screening, critical for early detection as emphasized in the literature, though varied understanding of screening initiation age suggests persistent knowledge disparities, not only in Nigeria and other low- and middle-income countries, but across some parts of the globe.[9,10]

The majority's recognition of cervical cancer's preventability (80.2%) and treatability, and identification of key risk factors such as HPV infection (44.8%) and multiple sexual partners (32.3%), align with global evidence underscoring the necessity of comprehensive education.[11] Positive attitudes toward screening (65.9% strongly agreed it facilitates early detection) support previous studies linking favourable perception to higher screening intent. However, several misconceptions remain problematic, including mistaken beliefs about discontinuing screening after childbearing or HPV vaccination, a challenge noted in similar African and international contexts.[12]

Barriers identified in this study include fear of pain (32.3%), time constraints (39.6%), embarrassment (29.4%), and anxiety over potential diagnosis (30.5%). These barriers reflect prevalent themes in sub-Saharan Africa that discourage screening uptake.[13] Financial concerns (31.0% perceiving Pap smears as costly) further compound these barriers, consistent with studies highlighting socioeconomic obstacles in underserved populations.[7] Importantly, willingness to screen rises substantially with proper information

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(36.2%), emphasizing the critical role of targeted health education and counselling.[14]

Knowledge gaps also extend to treatment perceptions. While 29.9% acknowledged referral of invasive cervical cancer to tertiary centres, myths about treatment limitations and side effects persisted, underscoring the need for clear patient education and support to improve treatment adherence and outcomes. Recognizing the treatability of early-detected cervical cancer by 39.1% shows promise but also highlights the opportunity to enhance awareness further.[12,15]

Educational attainment emerged from the study as a consistent predictor of knowledge (OR = 7.72; 95% CI: 4.37–13.64, p<0.001) and perception (OR = 2.12; 95% CI: 1.21–3.71, p<0.001) cervical cancer screening, consistent with wider Nigerian data identifying education as a critical factor in cervical cancer prevention. Additionally, the significant association between religion and knowledge of cervical cancer screening (OR = 21.60; 95% CI: 11.56–40.34) indicates how socio-cultural and religious influences shape attitudes and healthcare seeking behaviours, suggesting that interventions must be culturally sensitive and include community leaders and male partners to address stigma and misinformation.[16]

CONCLUSION

This study found high awareness and positive attitudes toward cervical cancer and its screening among women attending FMC Keffi. A majority of respondents demonstrated good knowledge of cervical cancer causes and transmission, with 85.4% having prior awareness and 90.6% showing good knowledge overall. Most women recognized the necessity of screening, its preventability, and treatability. However, misconceptions and barriers, such as beliefs that screening is unnecessary without symptoms, financial constraints, and emotional concerns, were common.

Socio-demographic factors, including age, education, and marital status, were significantly associated with knowledge and perception levels, highlighting target areas for intervention, such as tailoring awareness programs to demographic characteristics to improve screening uptake. Targeted interventions addressing less educated, younger or unmarried women, and specific ethnic or occupational groups may enhance knowledge and positive perception, ultimately fostering better cervical cancer prevention outcomes.

This study demonstrates substantial awareness and generally positive perceptions of cervical cancer screening among women at FMC Keffi. However, persistent misconceptions, fear, cost concerns, and cultural factors hinder optimal screening uptake. To bridge the gap between knowledge and practice, multifaceted interventions are required. These should include comprehensive community-based education tailored to women with lower educational levels (such as the use local language adage, local celebrities, and dramas), engaging religious and traditional leaders, and addressing emotional and financial barriers. Integrating cervical cancer education into routine healthcare and empowering healthcare workers to provide clear counselling are essential to promote screening adherence and early treatment.

Addressing these challenges can significantly reduce cervical cancer morbidity and mortality in this setting and similar Nigerian context, advancing progress toward the WHO's global cervical cancer elimination targets. Future research should explore intervention efficacy and health system strengthening to enhance the accessibility, affordability, and acceptability of cervical cancer screening services.

Some of the limitations of this study include hospital-based design, self-reported data, possible selection bias, and the long waiting associated with participation.

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