



## Perception and Attitudes of Female Genital Mutilation Among Reproductive-Age Women in Selected Primary Health Centres in Dekina Local Government Area, Kogi State, Nigeria

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### Abstract

Background: Female genital mutilation (FGM) remains a major public health and human rights concern despite ongoing global and national efforts to eliminate the practice. This study assessed perceptions and attitudes toward FGM among reproductive-age women attending selected primary health centres (PHCs) in Dekina Local Government Area (LGA), Kogi State, Nigeria. A descriptive cross-sectional study was conducted among 378 women aged 15–49 years attending selected PHCs. Data were collected using a structured questionnaire covering socio-demographic characteristics, awareness, knowledge, perceptions, attitudes, FGM experience, and exposure to health education. Associations with anti-FGM attitudes were examined using chi-square tests and multivariable logistic regression. Awareness of FGM was high (83.9%), but only 51.1% of respondents demonstrated good knowledge. Most respondents had favourable perceptions (86.5%) and anti-FGM attitudes (86.0%). Self-reported FGM prevalence was 31.0%, while 10.0% of respondents with daughters reported daughter cutting. Independent predictors of good anti-FGM attitude included good knowledge (AOR=4.18, 95% CI: 1.36–12.84), good perception (AOR=3.54, 95% CI: 1.60–7.82), awareness of legal prohibition (AOR=3.75, 95% CI: 1.27–11.07), and higher educational attainment (AOR=1.56, 95% CI: 1.06–2.29). Receipt of FGM health education was not significant after adjustment. Although attitudes toward FGM abandonment were largely positive, knowledge gaps and continued daughter cutting indicate that awareness alone is insufficient to eliminate the practice. Strengthening PHC-based counselling, legal awareness, and culturally sensitive community education may promote sustained FGM abandonment.

**Keywords:** Female genital mutilation, perception, attitude, reproductive-age women, primary health care, Nigeria.

### 1. Introduction

Female genital mutilation (FGM) involves the partial or total removal of the external female genitalia or other injury to the female genital organs for non-medical reasons (World Health

Organization [WHO], 2025). It has no health benefits and is associated with serious physical, psychological, sexual, and obstetric complications (WHO, 2025). Because it is often performed on girls without informed consent, FGM is recognised as a violation of human rights, bodily integrity, and the health of women and girls (WHO, 2025; United Nations Children's Fund [UNICEF], 2024). Globally, more than 230 million girls and women have undergone FGM, with the practice concentrated mainly in parts of Africa, the Middle East, and Asia, though migration has extended its occurrence to other regions (UNICEF, 2024; National Population Commission [NPC] & ICF, 2019). Eliminating FGM is part of Sustainable Development Goal target 5.3, which calls for the eradication of harmful practices (United Nations Statistics Division, 2024). Nigeria contributes substantially to the global burden of FGM due to its large population and the persistence of the practice across diverse ethnic and geographic settings (NPC & ICF, 2019; UNICEF, 2021). Although the Violence Against Persons (Prohibition) Act of 2015 prohibits FGM at the federal level, and Kogi State has adopted legal provisions against harmful practices, legal prohibition alone may not end FGM where it remains embedded in social norms related to chastity, marriageability, cleanliness, family honour, and control of female sexuality (Federal Republic of Nigeria, 2015; Kogi State Government, 2022; Mackie & LeJeune, 2009; Nzelu et al., 2025; Yaya & Ghose, 2018). Evidence shows that FGM is influenced by factors such as education, wealth, residence, ethnicity, religion, and family history (Ahinkorah et al., 2020; El-Dirani et al., 2022; Gbadebo et al., 2021). Intergenerational continuation remains a concern when women who have experienced FGM support or permit the practice for their daughters (Anyanwu et al., 2022; Oni & Okunlola, 2024). Therefore, understanding women's perceptions and attitudes is essential for designing effective interventions.

Primary health centres (PHCs) provide an important platform for FGM prevention because reproductive-age women frequently attend them for antenatal care, postnatal care, immunisation, family planning, and other services (WHO, 2010). PHC workers can provide counselling, discourage medicalisation, support survivors, and link families to community-based abandonment programmes (WHO, 2010; Waigwa et al., 2018; Doucet et al., 2017). This study assessed the perception and attitudes toward FGM among reproductive-age women attending selected PHCs in Dekina LGA, Kogi State, Nigeria, and examined factors associated with good anti-FGM attitudes.

### **1.1 Aim of the Study**

The aim of this study was to assess the perception and attitudes of female genital mutilation among reproductive-age women attending selected primary health centres in Dekina LGA, Kogi State, Nigeria.

## **2. Literature Review**

### **2.1 Global Burden and Health Consequences of FGM**

The World Health Organization classifies FGM into four types, ranging from partial removal of the clitoris to infibulation and other harmful genital procedures performed for non-medical reasons (WHO, 2025). FGM has no health benefits and is associated with numerous short- and long-term complications. Immediate effects include severe pain, bleeding, infection, shock, and, in some cases, death (WHO, 2025; Odukogbe et al., 2017). Long-term consequences include chronic pain, urinary and menstrual disorders, sexual dysfunction, psychological trauma, and adverse obstetric outcomes such as prolonged labour, caesarean delivery, stillbirth, and neonatal death (WHO Study Group on Female Genital Mutilation and Obstetric Outcome, 2006; Sylla et al., 2020; Lurie et al., 2020). Evidence from WHO studies demonstrates that the severity of

complications increases with the extent of cutting (WHO Study Group on Female Genital Mutilation and Obstetric Outcome, 2006).

## **2.2 FGM in Nigeria: Prevalence and Determinants**

Nigeria accounts for one of the largest populations of women and girls affected by FGM globally (UNICEF, 2021). Although national prevalence has declined over time, the practice remains common in certain regions and communities (NPC & ICF, 2019; Nnanatu et al., 2021). Research identifies several determinants of FGM, including ethnicity, religion, education, household wealth, place of residence, and family history (Ahinkorah et al., 2020; El-Dirani et al., 2022; Gbadebo et al., 2021). Recent studies also highlight the role of community norms and maternal FGM status in sustaining intergenerational transmission, despite evidence of a gradual decline across generations (Anyanwu et al., 2022; Nzelu et al., 2025; Oni & Okunlola, 2024).

## **2.3 Perception, Attitudes, and Behaviour Change**

Perceptions and attitudes play a critical role in FGM abandonment. Studies in Nigeria show that support for FGM is influenced by social norms, cultural expectations, marriageability concerns, and beliefs about female sexuality (Mackie & LeJeune, 2009; Yaya & Ghose, 2018; Nzelu et al., 2025). Women's empowerment has been associated with greater rejection of the practice (Leasure et al., 2022). Reviews of intervention programmes indicate that health education can improve knowledge and attitudes, but lasting behaviour change requires broader community engagement and shifts in social norms (Matanda et al., 2023; Waigwa et al., 2018).

## **2.4 Role of Primary Health Care in FGM Prevention**

Primary health care (PHC) facilities provide important opportunities for FGM prevention through health education, counselling, survivor support, and referral services (WHO, 2025; WHO, 2010). WHO strongly discourages the medicalisation of FGM and recommends that health workers promote prevention and abandonment (WHO, 2025). Evidence suggests that provider training and integration of FGM prevention into maternal and child health services can strengthen community efforts to eliminate the practice (Doucet et al., 2017; UNFPA & UNICEF, 2025; Landinfo, 2023). However, evidence on the utilization of PHCs for FGM prevention at local government level in Nigeria remains limited.

## **2.5 Theoretical Framework**

This study is guided by the Health Belief Model (HBM) and Social Norms Theory. The HBM proposes that behaviour is influenced by perceived risks, severity, benefits, barriers, and cues to action (Rosenstock, 1974). In the context of FGM, women are more likely to reject the practice when they understand its harms and receive appropriate health and legal information. Social Norms Theory emphasises that behaviour is shaped by community expectations and perceptions of what others approve or practice (Mackie & LeJeune, 2009; Cialdini et al., 1991). Together, these theories explain how individual knowledge and beliefs interact with social influences to shape attitudes toward FGM abandonment.

## **3. Materials and Methods**

### **3.1 Study Design**

A facility-based descriptive cross-sectional study design was employed. This design was appropriate for estimating awareness, knowledge, perception, attitudes, and associated factors at

a single point in time among reproductive-age women attending PHCs (Creswell & Creswell, 2018).

### **3.2 Study Area**

The study was conducted in selected primary health centres in Dekina Local Government Area of Kogi State, Nigeria. Dekina LGA is located in the eastern senatorial district of Kogi State and comprises urban, semi-urban, and rural communities. The LGA has a diverse population with the Igala as the predominant ethnic group. Primary health centres in the area provide maternal and child health services, antenatal care, postnatal care, immunisation, family planning, health education, and outpatient services.

### **3.3 Study Population**

The study population comprised a total of 971 reproductive-age women aged 15–49 years attending selected PHCs in Dekina LGA during the study period. From this population, a sample of 384 participants was selected using systematic random sampling

### **3.4 Eligibility Criteria**

Women were eligible if they were aged 15-49 years, attended one of the selected PHCs, were residents of Dekina LGA, and consented to participate. Women who were too ill to respond, declined participation, or submitted incomplete questionnaires were excluded.

### **3.5 Sample Size and Sampling Technique**

The sample size was calculated using the formula for descriptive studies:  $n = Z^2pq/d^2$ , where  $Z = 1.96$  at 95% confidence level,  $p = 0.50$  (prevalence of good anti-FGM attitude),  $q = 1-p$ , and  $d = 0.05$  (margin of error). However, 378 completed questionnaires were analysed after excluding incomplete responses. A multistage sampling technique was employed. First, three PHCs were selected from Dekina LGA using simple random sampling. Second, the total number of reproductive-age women attending the selected PHCs during the study period was determined. Third, proportionate allocation was used to distribute respondents across the selected PHCs. Finally, systematic random sampling was used to select eligible respondents at each PHC until the required sample size was achieved.

### **3.6 Study Instrument**

Data were collected using a structured, interviewer-administered questionnaire adapted from validated instruments used in previous FGM studies (NPC & ICF, 2019; Yaya & Ghose, 2018; Leasure et al., 2022). The questionnaire comprised seven sections: Section A covered socio-demographic characteristics (age, marital status, religion, education, occupation, ethnicity, parity, residence). Section B assessed awareness and sources of information about FGM. Section C measured knowledge of FGM (definition, health consequences, legal status, medical benefits) using 10 items scored as correct (1) or incorrect (0), with total scores categorised as poor (0-4), moderate (5-6), and good (7-10). Section D assessed perception using 12 Likert-scale items (strongly agree = 4 to strongly disagree = 1), with total scores categorised as poor (12-23), moderate (24-35), and good (36-48). Section E assessed attitude using 12 Likert-scale items similarly scored and categorised. Section F captured self-reported FGM experience, daughter cutting, and health problems. Section G assessed exposure to FGM health education and legal awareness.

### **3.7 Validity and Reliability**

The questionnaire was reviewed by a panel of three experts in maternal and child health nursing and public health for content validity. Face validity was established through pre-testing among 20 reproductive-age women at a PHC not selected for the main study. Internal consistency reliability was assessed using Cronbach's alpha, which yielded values of 0.78 for the knowledge scale, 0.82 for the perception scale, and 0.85 for the attitude scale, indicating acceptable reliability.

### **3.8 Data Collection Procedure**

Data were collected by four trained research assistants using the structured questionnaire. The research assistants were trained on the study objectives, ethical principles, questionnaire administration, and data recording. Data collection took place over a four-week period. Questionnaires were administered in English or Igala language depending on respondents' preference. Each interview lasted approximately 20-30 minutes.

### **3.9 Data Analysis**

Data were analysed using SPSS version 26.0. Descriptive statistics (frequencies, percentages, means, standard deviations) summarised socio-demographic characteristics and study variables. Chi-square tests assessed bivariate associations between selected independent variables and the dependent variable (good anti-FGM attitude). Variables with  $p < 0.20$  in bivariate analysis were entered into a multivariable logistic regression model to identify independent predictors of good anti-FGM attitude. Adjusted odds ratios (AOR) with 95% confidence intervals (CI) were reported. Statistical significance was set at  $p < 0.05$ .

### **3.10 Ethical Considerations**

Ethical approval was obtained from the Health Research Ethics Committee of the researchers' institution. Administrative permission was secured from the Kogi State Primary Health Care Development Agency and the Dekina LGA health authority. Written informed consent was obtained from all participants. For participants aged 15-17 years, assent was obtained in addition to parental consent. Confidentiality was ensured through anonymous data collection. Participants were informed of their right to withdraw from the study at any time without consequences.

## **4. Results**

This section presents findings on the perception and attitudes of FGM among reproductive-age women attending selected primary health centres in Dekina Local Government Area, Kogi State. Socio-demographic characteristics, awareness and knowledge, personal experience of FGM, and factors associated with anti-FGM attitude are presented.

### **4.1 Socio-Demographic Characteristics**

A total of 378 reproductive-age women were included in the analysis. The mean age was  $29.4 \pm 8.2$  years. The highest proportions were aged 25-29 years (23.8%) and 30-34 years (23.3%). The majority were married (71.7%), Christians (68.3%), and of Igala ethnicity (79.4%). Regarding education, 45.5% had secondary education, 22.8% had tertiary education, 22.0% had primary education, and 9.8% had no formal education. Trading was the most common occupation (27.5%), followed by farming (19.0%) and housewifery (17.2%). More than half (55.8%) had at least one female child. Residence was nearly evenly distributed between rural (49.2%), semi-urban (36.5%), and urban (14.3%) communities.

Variable	Category	n	%
Age group (years)	15-19	24	6.3
	20-24	72	19.0
	25-29	90	23.8
	30-34	88	23.3
	35-39	57	15.1
	40-44	29	7.7
	45-49	18	4.8
Marital status	Married	271	71.7
	Single	67	17.7
	Separated/Widowed/Divorced	40	10.6
Religion	Christianity	258	68.3
	Islam	116	30.7
Education	No formal education	37	9.8
	Primary	83	22.0
	Secondary	172	45.5
	Tertiary	86	22.8
Ethnicity	Igala	300	79.4
	Others	78	20.6
Residence	Rural	186	49.2
	Semi-urban	138	36.5
	Urban	54	14.3
Has female child	Yes	211	55.8
	No	167	44.2

**Table 1. Socio-demographic characteristics of respondents (n=378)**

#### 4.2 Awareness, Sources of Information, and Knowledge of FGM

Awareness of FGM was high: 83.9% had heard of FGM, and 66.1% correctly described it as the cutting or removal of part of the female genital organ. However, only 45.8% knew that FGM is prohibited by law. The mean knowledge score was  $5.75 \pm 2.84$  out of 10 (median = 7.00). Overall, 51.1% had good knowledge, 30.7% had moderate knowledge, and 18.3% had poor knowledge. Family members and health workers were the most common first sources of FGM information (20.4% each), followed by radio/television (12.4%). Traditional birth attendants (24.3%) and traditional circumcisers (22.0%) were the most frequently identified usual performers of FGM.

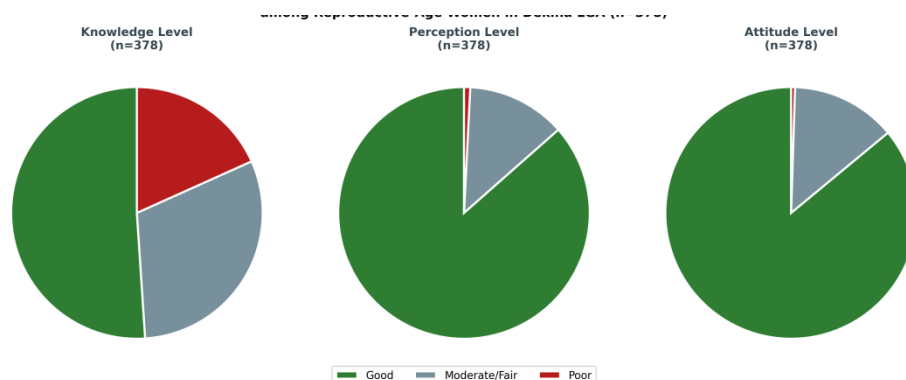
Indicator	n	%
Heard of FGM	317	83.9
Correctly described FGM	250	66.1
Knows someone who underwent FGM	211	55.8
Knows FGM causes health problems	237	62.7

Indicator	n	%
Knows FGM is prohibited by law	173	45.8
Believes FGM has no medical benefit	232	61.4
Received FGM health education	183	48.4
Knowledge: Good	193	51.1
Knowledge: Moderate	116	30.7
Knowledge: Poor	69	18.3

**Table 2. Awareness and knowledge indicators among respondents (n=378)**

#### 4.3 Knowledge, Perception, and Attitude Score Distribution

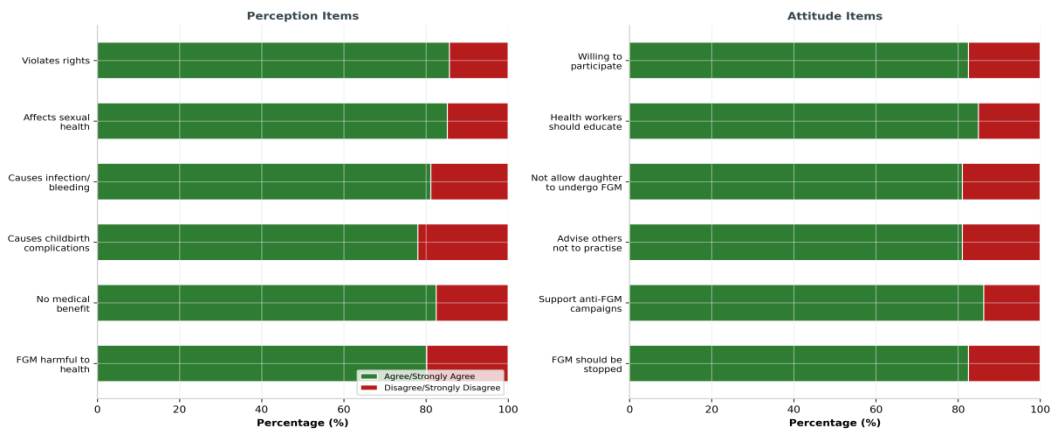
Respondents demonstrated a predominantly negative perception of FGM. The mean perception score was  $38.64 \pm 4.85$  out of 48 (median = 40.00), with 86.5% classified as having good perception, 12.7% moderate, and 0.8% poor. The mean attitude score was  $39.21 \pm 4.80$  out of 48 (median = 41.00), with 86.0% demonstrating good anti-FGM attitude, 13.5% fair, and 0.5% poor. While awareness was high (83.9%) and perception and attitude were predominantly favourable, the gap between awareness and detailed knowledge (51.1% good knowledge) suggests that awareness does not automatically translate into comprehensive understanding.



**Figure 1. Distribution of Knowledge, Perception, and Attitude Levels toward FGM (n=378)**

#### 4.4 Item-Level Perception and Attitude toward FGM

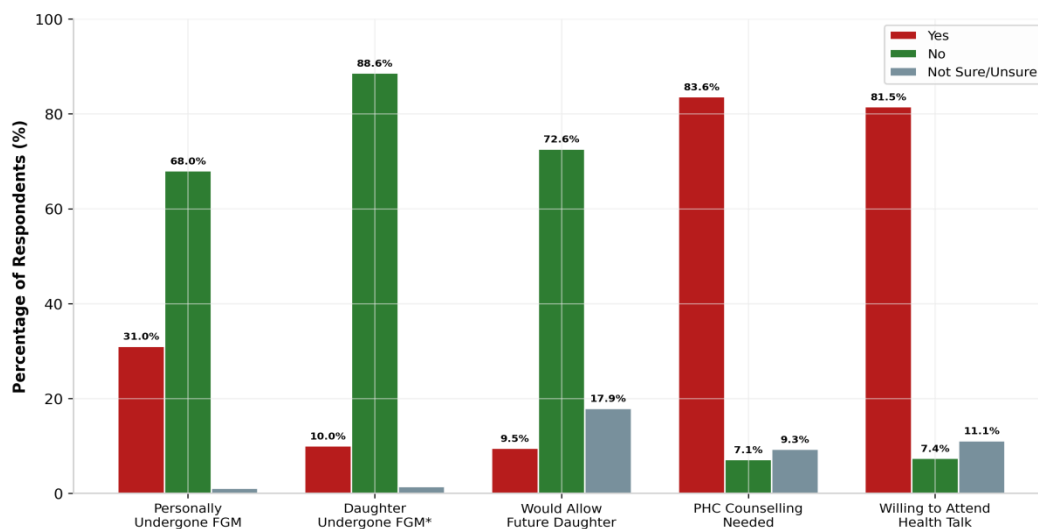
Item-level analysis showed strong agreement with statements supporting FGM abandonment. Between 78.0% and 85.7% of respondents agreed that FGM is harmful, has no medical benefit, causes complications, affects sexual health, and violates rights. However, culturally supportive beliefs persisted among a minority: 22.8% agreed FGM is necessary for culture, 19.6% agreed it controls promiscuity, 16.9% agreed uncircumcised girls are not respected, and 20.1% agreed it is required by religion. Attitude items showed similarly positive patterns, with 82.5%-86.5% agreeing with abandonment-supporting statements. Notably, 17.2% agreed FGM should continue as tradition, and 19.6% would circumcise a daughter if family members insisted, revealing the persistent influence of family pressure.



**Figure 2. Item-Level Perception and Attitude toward FGM Abandonment (n=378)**

#### 4.5 FGM Experience, Daughter Cutting, and Prevention Indicators

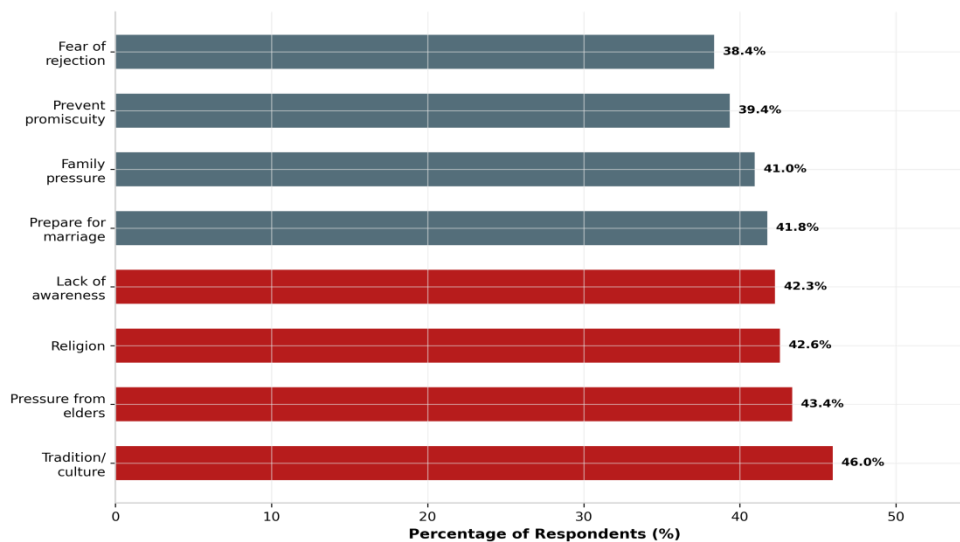
Self-reported personal experience of FGM was 31.0% (n=117). Among those who had undergone FGM, 58.1% reported it occurred before age 5, and 37.6% reported subsequent health problems including difficulty passing urine, bleeding, infection, pain during intercourse, and psychological trauma. Among 211 respondents with at least one female child, 10.0% (n=21) reported that a daughter had undergone FGM. Among respondents for whom the future-daughter question was applicable, 9.5% said they would allow daughter FGM in future, while 72.6% would not and 17.9% were unsure. A high proportion (83.6%) stated that counselling on FGM is needed at PHCs, and 81.5% were willing to attend health talks on FGM.



**Figure 3. FGM Experience, Daughter Cutting, and Prevention-Related Indicators (n=378)**

#### 4.6 Perceived Reasons for FGM Practice

Multiple-response analysis revealed that tradition or culture was the most frequently identified reason for practising FGM (46.0%), followed by pressure from elders (43.4%), religion (42.6%), lack of awareness (42.3%), preparation for marriage (41.8%), family pressure (41.0%), prevention of promiscuity (39.4%), and fear of rejection (38.4%). Grandmothers were identified as the main decision influencers by 31.2% of respondents, followed by traditional birth attendants (18.5%) and mothers (13.8%). Community sensitisation (55.3%), involvement of men (52.9%), and religious education (52.6%) were the most frequently suggested strategies for stopping FGM.



**Figure 4. Perceived Reasons for Practising FGM (Multiple Responses, n=378)**

#### 4.7 Bivariate Associations with Good Anti-FGM Attitude

Chi-square analysis showed that good anti-FGM attitude was significantly associated with education level ( $p = 0.002$ ), having heard of FGM ( $p < 0.001$ ), knowledge level ( $p < 0.001$ ), perception level ( $p < 0.001$ ), legal awareness ( $p < 0.001$ ), and receipt of FGM health education ( $p < 0.001$ ). Age group, marital status, religion, occupation, number of children, having a female child, place of residence, and personal FGM experience were not statistically significant. Good attitude increased with education: 73.0% among those with no formal education versus 94.2% among those with tertiary education. Among respondents aware of the legal prohibition, 97.1% had good attitude compared with 82.4% among those unaware.

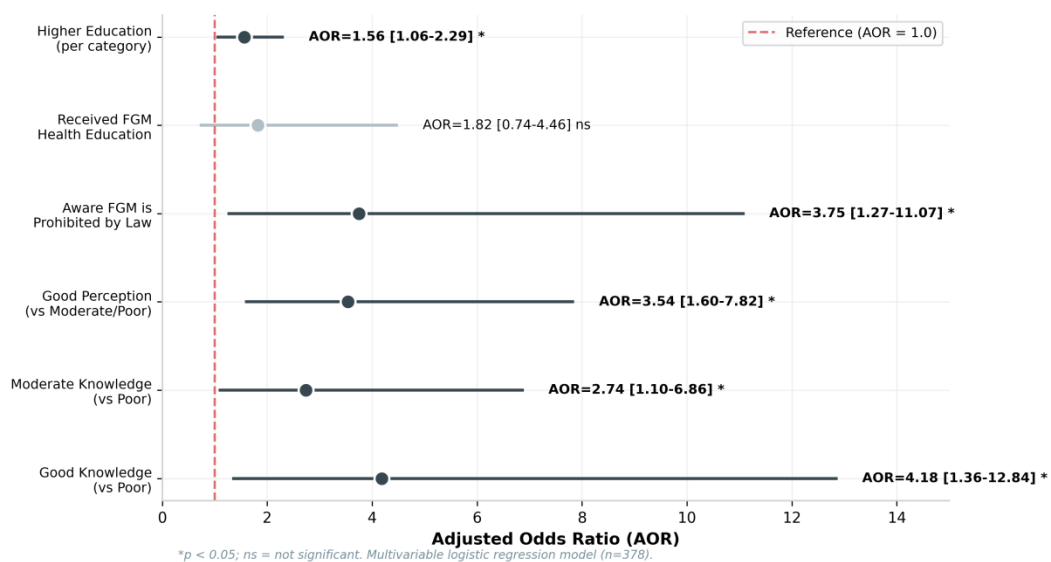
**Table 3. Bivariate associations with good anti-FGM attitude (n=378)**

Predictor	Chi-square	df	p-value	
Age group	4.49	6	0.611	
Marital status	6.27	4	0.180	
Religion	0.69	3	0.875	
Education level	14.86	3	0.002	Significant
Occupation	2.92	6	0.819	
Heard of FGM	78.11	1	<0.001	Significant
Knowledge level	82.32	2	<0.001	Significant
Perception level	73.15	2	<0.001	Significant
Legal awareness	43.93	2	<0.001	Significant
Received FGM health education	20.19	1	<0.001	Significant
Personally undergone FGM	1.84	2	0.398	

#### 4.8 Multivariable Predictors of Good Anti-FGM Attitude

In the multivariable logistic regression model, four variables remained independently associated with good anti-FGM attitude after mutual adjustment. Respondents with good knowledge had 4.18 times higher odds of good anti-FGM attitude compared with those with poor knowledge (AOR = 4.18; 95% CI: 1.36-12.84; p = 0.013). Moderate knowledge was also independently associated (AOR = 2.74; 95% CI: 1.10-6.86; p = 0.031). Good perception increased the odds of good anti-FGM attitude (AOR = 3.54; 95% CI: 1.60-7.82; p = 0.002). Legal awareness was significant: respondents aware that FGM is prohibited by law had higher odds of good attitude (AOR = 3.75; 95% CI: 1.27-11.07; p = 0.017). Higher education was also significant (AOR = 1.56 per category; 95% CI: 1.06-2.29; p = 0.024). Receipt of FGM health education, significant at bivariate level, was attenuated after adjustment (AOR = 1.82; 95% CI: 0.74-4.46; p = 0.193), suggesting its effect operates partly through knowledge, perception, legal awareness, and education.

**Figure 5. Multivariable Predictors of Good Anti-FGM Attitude (Adjusted Odds Ratios with 95% Confidence Intervals)**



**Table 4. Multivariable logistic regression predictors of good anti-FGM attitude (n=378)**

Predictor	AOR	95% CI	p-value
Good knowledge (vs poor)	4.18	1.36-12.84	0.013
Moderate knowledge (vs poor)	2.74	1.10-6.86	0.031
Good perception (vs moderate/poor)	3.54	1.60-7.82	0.002
Aware FGM prohibited by law	3.75	1.27-11.07	0.017
Received FGM health education	1.82	0.74-4.46	0.193
Education (per higher category)	1.56	1.06-2.29	0.024

#### 5. Discussion

This study assessed perceptions and attitudes toward female genital mutilation (FGM) among reproductive-age women attending selected PHCs in Dekina LGA, Kogi State. Findings showed high awareness (83.9%) but moderate knowledge (51.1%), alongside generally favourable perceptions (86.5%) and attitudes (86.0%) toward FGM abandonment. However, residual support for the practice and the persistence of daughter cutting (10.0%) indicate that FGM remains a public health concern. Good knowledge, positive perception, legal awareness, and higher education were significant predictors of anti-FGM attitudes.

### **5.1 Awareness and Knowledge**

Although awareness of FGM was high, only about half of respondents demonstrated good knowledge, highlighting a gap between awareness and comprehensive understanding of the practice and its consequences. Legal awareness was particularly low (45.8%), despite being a strong predictor of anti-FGM attitudes. These findings suggest that health education should focus not only on awareness but also on the health risks, legal implications, and human rights dimensions of FGM.

### **5.2 Perception and Attitude**

Most respondents supported the abandonment of FGM, reflecting changing social norms. Nevertheless, a notable minority continued to endorse cultural and religious justifications for the practice. Nearly one-fifth indicated they might circumcise a daughter if pressured by family members, emphasizing the influence of collective family and community norms on decision-making.

### **5.3 FGM Experience and Intergenerational Transmission**

The prevalence of self-reported FGM (31.0%) was considerably higher than daughter cutting (10.0%), suggesting a decline in the practice across generations. However, the persistence of daughter cutting and uncertainty among some respondents regarding future intentions indicate that intergenerational transmission has not been fully interrupted and requires continued prevention efforts.

### **5.4 Predictors of Anti-FGM Attitude**

Good knowledge, favourable perception, legal awareness, and higher education independently predicted positive attitudes toward FGM abandonment. Knowledge was the strongest predictor, followed by legal awareness and perception. These findings support behavioural theories suggesting that understanding health risks, recognising harm, and awareness of legal sanctions promote rejection of harmful practices. Education likely contributes by improving access to information, critical thinking, and empowerment.

### **5.5 Implications for Primary Health Care**

The high demand for FGM counselling and health education within PHCs demonstrates the potential of primary healthcare facilities as platforms for prevention. Integrating structured FGM counselling into routine maternal and child health services, including information on health consequences, legal provisions, and available support services, could strengthen community efforts to eliminate the practice.

## 6. Conclusion

This study found high awareness of FGM and generally favourable anti-FGM perception and attitudes among reproductive-age women attending selected PHCs in Dekina LGA. However, significant knowledge gaps, self-reported FGM experience (31.0%), reported daughter cutting (10.0%), and residual support for continuation among a minority indicate that awareness alone is insufficient for sustained behaviour change. Good knowledge (AOR = 4.18), good perception (AOR = 3.54), legal awareness (AOR = 3.75), and higher education (AOR = 1.56) were independently associated with good anti-FGM attitude. These findings underscore the importance of comprehensive, multi-component interventions that address cognitive, normative, and structural factors simultaneously. Primary health centres should be strengthened as prevention platforms through structured counselling, legal literacy, community mobilisation, and survivor-centred care.

## 7. Implications

### 7.1 Policy Implications

The association between legal awareness and anti-FGM attitudes highlights the need to strengthen legal literacy and enforcement of anti-FGM laws. Policymakers should increase community awareness of existing legislation, while ensuring effective implementation of the Violence Against Persons Prohibition framework in Kogi State. Integrating FGM prevention into primary health care policies and programmes would promote sustainable funding and institutional support for prevention efforts.

### 7.2 Practice Implications

The findings support the routine integration of FGM counselling into antenatal, postnatal, family planning, immunisation, and child welfare services at PHCs. Counselling should address health consequences, legal issues, cultural misconceptions, and available support services. Training health workers, community health workers, and traditional birth attendants as anti-FGM advocates could strengthen community outreach. The high demand for PHC-based counselling and health talks further underscores the potential of PHCs as platforms for FGM prevention.

### 7.3 Research Implications

Future studies should use longitudinal and qualitative approaches to examine changes in attitudes and behaviours related to FGM, particularly daughter cutting. Research exploring family decision-making processes, community norms, and the roles of influential actors would provide deeper insights. Intervention studies assessing the effectiveness of PHC-based counselling, community education, and legal awareness programmes are also needed to guide evidence-based practice and policy.

## References

- Ahinkorah, B. O., Hagan, J. E., Jr., Ameyaw, E. K., Seidu, A.-A., & Schack, T. (2020). Socio-economic and demographic determinants of female genital mutilation in sub-Saharan Africa: Analysis of data from demographic and health surveys. *Reproductive Health*, 17, Article 162. <https://doi.org/10.1186/s12978-020-01018-5>
- Anyanwu, C. E., Torpey, K., Abiodun, O. P., & Ighodalo, M. (2022). Variations in the prevalence of female genital mutilation among reproductive-aged women in Nigeria across three

- generations. *International Journal of Maternal and Child Health and AIDS*, 11(2), Article e548. <https://doi.org/10.21106/ijmacha.548>
- Berg, R. C., & Denison, E. (2013). A tradition in transition: Factors perpetuating and hindering the continuance of female genital mutilation/cutting. *Health Care for Women International*, 34(10), 837–859. <https://doi.org/10.1080/07399332.2013.824963>
- Cialdini, R. B., Kallgren, C. A., & Reno, R. R. (1991). A focus theory of normative conduct: A theoretical refinement and reevaluation of the role of norms in human behavior. *Advances in Experimental Social Psychology*, 24, 201–234. [https://doi.org/10.1016/S0065-2601\(08\)60330-5](https://doi.org/10.1016/S0065-2601(08)60330-5)
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Doucet, M. H., Pallitto, C., & Groleau, D. (2017). Understanding the motivations of health-care providers in performing female genital mutilation: An integrative review of the literature. *Reproductive Health*, 14, Article 46. <https://doi.org/10.1186/s12978-017-0313-3>
- El-Dirani, Z., Farouki, L., Akl, C., Ali, U., Al-Masri, H., & McCall, S. J. (2022). Factors associated with female genital mutilation: A systematic review and synthesis of national, regional and community-based studies. *BMJ Sexual & Reproductive Health*, 48(3), 169–178. <https://doi.org/10.1136/bmjsex-2021-201262>
- Federal Republic of Nigeria. (2015). *Violence Against Persons (Prohibition) Act, 2015*. Federal Government of Nigeria.
- Gbadebo, B. M., Salawu, M. M., Afolabi, R. F., Ojo, O. A., & Olowookere, S. A. (2021). Cohort analysis of the state of female genital cutting in Nigeria: Prevalence, daughter circumcision and attitude towards its discontinuation. *BMC Women's Health*, 21, Article 182. <https://doi.org/10.1186/s12905-021-01323-6>
- Kogi State Government. (2022). *Violence Against Persons Prohibition Law*. Kogi State Government.
- Landinfo. (2023). *Nigeria: Female genital mutilation*. Norwegian Country of Origin Information Centre.
- Leasure, E., Roth, C., Yegon, E., & Bukania, E. (2022). Women's empowerment and attitudes towards female genital mutilation abandonment in Nigeria: A cross-sectional analysis of the Nigeria Demographic Health Survey. *African Journal of Reproductive Health*, 26(12s), 127–137. <https://doi.org/10.29063/ajrh2022/v26i12s.16>
- Lurie, J. M., Weidman, A., Huynh, S., Delgado, D., & Obedin-Maliver, J. (2020). Painful gynecologic and obstetric complications of female genital mutilation/cutting: A systematic review and meta-analysis. *PLoS Medicine*, 17(3), Article e1003088. <https://doi.org/10.1371/journal.pmed.1003088>
- Mackie, G., & LeJeune, J. (2009). *Social dynamics of abandonment of harmful practices: A new look at the theory* (Innocenti Working Paper No. 2009-06). UNICEF Innocenti Research Centre.
- Matanda, D., Groce-Galis, M., Gay, J., & Keesbury, J. (2023). Effectiveness of interventions designed to prevent or respond to female genital mutilation: A review of evidence. *PLOS Global Public Health*, 3(1), Article e0001355. <https://doi.org/10.1371/journal.pgph.0001355>

- National Population Commission [NPC] [Nigeria], & ICF. (2019). *Nigeria Demographic and Health Survey 2018*. NPC and ICF. <https://dhsprogram.com/pubs/pdf/FR359/FR359.pdf>
- Nnanatu, C. C., Atilola, G., Komba, P., & Mberu, B. (2021). Evaluating changes in the prevalence of female genital mutilation/cutting among 0-14 years old girls in Nigeria using data from multiple surveys: A novel Bayesian hierarchical spatio-temporal model. *PLoS ONE*, *16*(2), Article e0246661. <https://doi.org/10.1371/journal.pone.0246661>
- Nzelu, C. E., Nzelu, U. M., Ugwunze, A. R., & Azodoh, N. (2025). The determinants of female genital mutilation among daughters in Nigeria. *PLOS Global Public Health*, *5*(4), Article e0004413. <https://doi.org/10.1371/journal.pgph.0004413>
- Odukogbe, A. A., Afolabi, B. B., Bello, O. O., & Adeyanju, A. S. (2017). Female genital mutilation/cutting in Africa. *Translational Andrology and Urology*, *6*(2), 138–148. <https://doi.org/10.21037/tau.2017.03.35>
- Okeke, T. C., Anyaehie, U. S. B., & Ezenyeaku, C. C. K. (2012). An overview of female genital mutilation in Nigeria. *Annals of Medical and Health Sciences Research*, *2*(1), 70–73. <https://doi.org/10.4103/2141-9248.96942>
- Oni, T. O., & Okunlola, D. A. (2024). Contextual determinants of generational continuation of female genital mutilation among women of reproductive age in Nigeria: Analysis of the 2018 Demographic and Health Survey. *Reproductive Health*, *21*, Article 39. <https://doi.org/10.1186/s12978-024-01722-2>
- Rosenstock, I. M. (1974). The health belief model and preventive health behavior. *Health Education Monographs*, *2*(4), 354–386. <https://doi.org/10.1177/109019817400200405>
- Sylla, F., Moreau, C., & Andro, A. (2020). A systematic review and meta-analysis of the consequences of female genital mutilation on maternal and perinatal health outcomes in European and African countries. *BMJ Global Health*, *5*, Article e003307. <https://doi.org/10.1136/bmjgh-2020-003307>
- United Nations Children's Fund [UNICEF]. (2021). *Female genital mutilation in Nigeria: Country profile*. UNICEF.
- United Nations Children's Fund [UNICEF]. (2024). *Female genital mutilation: A global concern—2024 update*. UNICEF.
- United Nations Population Fund [UNFPA], & United Nations Children's Fund [UNICEF]. (2025). *Joint Programme on the Elimination of Female Genital Mutilation: 2024 annual report*. UNFPA and UNICEF.
- United Nations Population Fund [UNFPA]. (2024). *Female genital mutilation dashboard: Nigeria*. UNFPA.
- United Nations Statistics Division. (2024). *SDG indicator 5.3.2: Proportion of girls and women aged 15-49 years who have undergone female genital mutilation/cutting*. UNSD.
- Waigwa, S., Doos, L., Bradbury-Jones, C., & Taylor, J. (2018). Effectiveness of health education as an intervention designed to prevent female genital mutilation/cutting (FGM/C): A systematic review. *Reproductive Health*, *15*, Article 62. <https://doi.org/10.1186/s12978-018-0535-5>
- World Health Organization [WHO]. (2010). *Global strategy to stop health-care providers from performing female genital mutilation*. WHO.

- World Health Organization [WHO]. (2025). *Female genital mutilation: Fact sheet*. WHO. <https://www.who.int/news-room/fact-sheets/detail/female-genital-mutilation>
- World Health Organization [WHO]. (2025). *WHO guideline on the prevention of female genital mutilation and clinical management of complications*. WHO.
- WHO Study Group on Female Genital Mutilation and Obstetric Outcome. (2006). Female genital mutilation and obstetric outcome: WHO collaborative prospective study in six African countries. *The Lancet*, 367(9525), 1835–1841. [https://doi.org/10.1016/S0140-6736\(06\)68805-3](https://doi.org/10.1016/S0140-6736(06)68805-3)
- Yaya, S., & Ghose, B. (2018). Female genital mutilation in Nigeria: A persisting challenge for women's rights. *Social Sciences*, 7(12), 244. <https://doi.org/10.3390/socsci7120244>