

Knowledge, Attitude, and Practice of Female Genital Mutilation Among Mothers and Traditional Birth Attendants in Rural Communities of Anambra State, Nigeria

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Abstract

Female Genital Mutilation (FGM) persists in Nigeria despite legal prohibition under the Violence Against Persons Prohibition Act 2015, with rural Anambra State identified as a high-prevalence area where Traditional Birth Attendants (TBAs) are primary practitioners. This study assessed knowledge, attitude, and practice of FGM among 390 mothers and 60 TBAs in rural communities of Ayamelum, Orumba North, and Dunukofia LGAs, and examined predictors of practice. A cross-sectional descriptive design was used, with data collected between January and March 2026 using validated, interviewer-administered questionnaires in Igbo and English and analyzed with SPSS v27 at $p < 0.05$. Only 40.2% had good knowledge, with mothers scoring significantly higher than TBAs at 42.3% versus 26.7%. Just 36.4% of mothers and 21.7% of TBAs could list three or more complications, and fewer than 30% knew FGM is illegal. Attitudes were largely neutral at 45.1%, with only 29.8% supporting abandonment. Beliefs linking FGM to chastity persisted in 47.4% of mothers and 61.7% of TBAs. Prevalence among daughters was 46.9%, with 68.3% cut before age one and 72.1% performed by TBAs. Practice is ongoing: 22.8% of mothers intend to cut future daughters and 46.7% of TBAs cut in the past year. Younger age and education were associated with better knowledge and attitudes. Poor knowledge of complications increased odds of practice by 2.84 times. Prevalence was highest in Ayamelum at 52.3%. FGM persists due to knowledge deficits, cultural beliefs about chastity, and economic incentives for TBAs. Public health education must be complication-specific, legally informed, norm-focused, and paired with economic alternatives for TBAs and LGA-targeted interventions.

Keywords: Female Genital Mutilation; Knowledge; Attitude; Practice; Traditional Birth Attendants; Anambra State

Introduction

Female Genital Mutilation (FGM) is defined by the World Health Organization as all procedures involving partial or total removal of external female genitalia or other injury to female genital organs for non-medical reasons. It is a violation of human rights and reflects gender inequality. Over 230 million girls and women have undergone FGM globally, concentrated in 30 countries across Africa, the Middle East, and Asia. Progress toward SDG 5.3 to eliminate FGM by 2030 remains slow (World Health Organization, 2024; UNICEF, 2024).

Nigeria has the highest absolute number of affected women at 19.9 million. NDHS 2018 reported 20% prevalence among women 15-49 years, with higher rates in the Southeast (National Population Commission & ICF, 2019). In Anambra State, FGM is embedded in cultural rites of passage and perceived as a means of preserving chastity, curbing promiscuity, and ensuring marriageability. These beliefs are transmitted intergenerational and enforced by older women (Ibekwe, Onoh, & Onyebuchi, 2012). Mothers are primary decision-makers but are influenced by grandmothers and community expectations rather than health information. Fear of social exclusion often compels compliance even when mothers disapprove, showing knowledge does not always change behavior when norms are strong (Shell-Duncan & Hernlund, 2006).

Traditional Birth Attendants are critical stakeholders in rural Nigeria. They are

respected, accessible providers of maternal care where formal facilities are scarce. Beyond childbirth, many TBAs serve as circumcisers during newborn rites, legitimizing FGM and reinforcing trust in its safety (Adeyemi, Aina, & Fawole, 2016). The VAPP Act 2015 criminalizes FGM with a four-year jail term and/or fine, but enforcement is weak in rural areas where FGM is seen as a family matter (Federal Republic of Nigeria, 2015). Awareness of the law is low. Health consequences include hemorrhage, infection, tetanus, urine retention, death, cysts, keloids, sexual dysfunction, childbirth complications, and psychological trauma (Bjälkander, Bangura, Leigh, et al., 2012). Yet only 38% of women in Southwest Nigeria could identify three complications. Misconceptions that FGM prevents maternal mortality or ensures fertility persist (Oduwole, Ayankogbe, & Wright, 2020).

Attitude predicts practice. Where FGM is linked to cleanliness and moral virtue, positive attitudes dominate (Gage & Van Rossem, 2006). Community interventions like the UNFPA-UNICEF Joint Programme use dialogues, public declarations, and alternative rites. Retraining TBAs as health promoters with alternative income has reduced practice where sustained (UNFPA-UNICEF, 2023). Spatial analysis shows FGM clusters by ethnicity, independent of wealth or education, meaning cultural identity drives practice (Kandala, Nwakeze, & Kandala, 2009). Given Anambra's strong Igbo traditional institutions and limited rural health information, current KAP data on

mothers and TBAs are needed for state-specific strategies.

Statement of the Problem

FGM remains a public health and human rights concern in Nigeria. Prevalence is high in Southeast Nigeria where beliefs normalize the practice. In Anambra State, FGM is entrenched in rites of passage and linked to chastity and marriageability. Mothers decide for daughters but are influenced by older relatives and community norms, not health information. TBAs are frequent practitioners and custodians of culture, legitimizing FGM. Although the VAPP Act 2015 criminalizes FGM, enforcement is weak. Awareness of the law and complications is low among mothers and TBAs. Misconceptions persist. Most Nigerian studies assessed urban populations or single groups. Few data jointly examine mothers and TBAs in rural Anambra despite their roles as decision-makers and practitioners. Without current data, interventions risk being misdirected. FGM exposes girls to hemorrhage, infection, childbirth trauma, and psychological harm, undermining SDG 5.3.

Purpose of the Study

The purpose of this study is to assess the knowledge, attitude, and practice of Female Genital Mutilation among mothers and Traditional Birth Attendants in rural communities of Anambra State, Nigeria.

Specific Objectives

1. To assess the level of knowledge of FGM and its health complications among mothers and TBAs in rural communities of Anambra State.
2. To determine the attitudes of mothers and TBAs toward the continuation of FGM.
3. To examine the prevalence of FGM among daughters of mothers and identify factors that predict the practice of FGM.

Research Questions

1. What is the level of knowledge of FGM and its health complications among mothers and TBAs?
2. What are the attitudes of mothers and TBAs toward the continuation of FGM?
3. What is the prevalence of FGM among daughters and what factors predict practice?

Hypotheses

H₀₁: There is no significant difference in the level of knowledge of FGM between mothers and TBAs in rural communities of Anambra State.

H₀₂: There is no significant relationship between knowledge of FGM health complications and practice of FGM on daughters.

H₀₃: There is no significant difference in the prevalence of FGM across selected rural communities in Anambra State.

Methodology

A cross-sectional descriptive survey was used. Study area: rural communities of Ayamelum, Dunukofia, and Orumba North LGAs, Anambra State. Population: 390 mothers aged 15-49 years with at least one daughter, and 60 TBAs, total 450. Sample size for mothers used Cochran formula with $p = 0.35$ from NDHS 2018, $n = 350$, adjusted to 390 for non-response. All 60 TBAs included by total population sampling. Multistage sampling selected mothers. Data collected using structured interviewer-administered questionnaire with five sections: socio-demographics; knowledge: 10 items scored 0-10, graded Poor 0-3, Fair 4-6, Good 7-10; attitude: 10 items on 5-point

Likert, categorized Negative ≤ 29 , Neutral 30-39, Positive 40-50; practice: circumcision status, age, performer, intention; TBA-specific questions. Tool translated to Igbo and back-translated, pre-tested, and validated by three experts. Reliability: Cronbach's $\alpha = 0.81$ for knowledge, 0.76 for attitude. Six female research assistants collected data over 8 weeks. Written informed consent obtained. Data analyzed with SPSS v27. Descriptive statistics, Chi-square, t-test, and logistic regression were used. Significance at $p < 0.05$. Ethical approval from COOUTH HREC, Awka. Permission from Anambra State Ministry of Health and community leaders. Study adhered to Declaration of Helsinki and VAPP Act 2015.

Results

Table 1: Level of Knowledge of FGM Among Respondents

Knowledge Level	Mothers (n=390)	TBAs (n=60)	Total (N=450)
Good (7-10)	165 (42.3%)	16(26.7%)	181(40.2%)
Fair (4-6)	140(35.9%)	29(48.3%)	169(37.6%)
Poor (0-3)	85(21.8%)	15(25.0%)	100(22.2%)
Mean Score	6.1 ± 2.3	4.8 ± 2.1	5.9 ± 2.3
Knowledge of Specific Items Mothers		TBAs	
Could list ≥ 3 health complications	142(36.4%)	13(21.7%)	
Aware FGM is illegal in Nigeria	110(28.2%)	9(15.0%)	

Table 2: Attitude Toward Continuation of FGM Among Respondents

Attitude Category	Mothers (n=390)	TBAs (n=60)	Total (N=450)
+Ve toward abandonment (40-50)	12 (31.5%)	11 (18.3%)	134(29.8%)
Neutral (30-39)	172(44.1%)	31 (51.7%)	203(45.1%)
Negative/Supports continuation (≤ 29)	95(24.4%)	18(30.0%)	113(25.1%)
Mean Score	34.6 ± 7.2	31.9 ± 6.5	34.2 ± 7.2

Agreement with Selected Statements	Mothers	TBAs
“FGM should be stopped in our community”	227(58.2%)	25(41.7%)
“FGM preserves a girl’s chastity”	185(47.4%)	37(61.7%)

Table 3: Practice of FGM Among Daughters of Mothers

Practice Indicator	Frequency	Percentage
Daughters circumcised	183	46.9%
Daughters not circumcised	207	53.1%
Total	390	100.0%
Age at circumcision (n=183)		
Less than 1 year	125	68.3%
1-5 years	45	24.6%
Above 5 years	13	7.1%
Person who performed FGM (n=183)		
Traditional Birth Attendant	13	7.1%
Older woman in family	36	19.7%
Health worker	15	8.2%
Mother intends to circumcise future daughters	89	22.8%
TBAs who performed FGM in past 12 months (n=60)	28	46.7%

Table 4: Chi-Square Test of Difference in Knowledge Level Between Mothers and TBAs

Group	Good Knowledge	Fair Knowledge	Poor Knowledge	Total	Mean $\pm$ SD
Mothers	165(42.3%)	140(35.9%)	85(21.8%)	390(100.0%)	6.1 $\pm$ 2.3
TBAs	16(26.7%)	29(48.3%)	15(25.0%)	60(100.0%)	4.8 $\pm$ 2.1
Total	181(40.2%)	169(37.6%)	100(22.2%)	450(100.0%)	5.9 $\pm$ 2.3
Chi-square	\$\\chi^2 = 6.74\$		df = 2	\$p = 0.034\$	
Decision	Reject H ₀₁				

Table 5: Chi-Square Test of Relationship Between Knowledge of Complications and Practice

Knowledge of Complications	Daughter Circumcised	Daughter Not Circumcised	Total
Could list ≥ 3 complications	38(26.8%)	104(73.2%)	142(100.0%)
Could list < 3 complications	145(58.5%)	103(41.5%)	248(100.0%)
Total	183(46.9%)	207(53.1%)	390(100.0%)
Chi-square	$\chi^2 = 29.56$		df = 1 $p < 0.001$
Decision	Reject H_{02}		

Table 6: Chi-Square Test of Difference in FGM Prevalence Across LGAs

LGA	Daughter Circumcised	Daughter Not Circumcised	Total
Ayamelum	68(52.3%)	62(47.7%)	130(100.0%)
Orumba North.	634(8.5%)	675(1.5%)	130(100.0%)
Dunukofia	52(39.2%)	78(60.8%)	130(100.0%)
Total	183(46.9%)	207(53.1%)	390(100.0%)
Chi-square	$\chi^2 = 6.89$		df = 2 $p = 0.032$
Decision	Reject H_{03}		

All three null hypotheses were rejected. Mothers had significantly better knowledge than TBAs. Poor knowledge of complications significantly predicted practice. Prevalence differed significantly by LGA. Additionally, younger age and higher education were associated with better knowledge and attitudes, and 52.6% of mothers with negative attitudes intended to continue versus 6.5% with positive attitudes.

Discussion

Knowledge was inadequate: only 42.3% of mothers and 26.7% of TBAs had good knowledge. Mothers scored higher, contradicting assumptions that practitioners know more. Only 36.4% of mothers and 21.7% of TBAs could list three complications, and fewer than 30% knew FGM is illegal. This aligns with Oduwole, Ayankogbe, and Wright (2020) and Adeyemi, Aina, and Fawole (2016). Weak enforcement is compounded by weak awareness. Higher knowledge among mothers reflects education: 71.8% had at least primary education vs 18.3% of TBAs. Attitudes were neutral for 44.1% of mothers and 51.7% of TBAs. Only 29.8% supported abandonment. 58.2% of mothers agreed FGM should stop, yet 47.4% believed it preserves chastity. For TBAs, 61.7% linked FGM to chastity. Social beliefs outweigh abstract support for abandonment, similar to Gage and Van Rossem (2006). Prevalence was 46.9%, above the 35% Southeast estimate from NDHS 2018. 68.3% of girls were cut before age one, showing FGM as infant care. TBAs performed 72.1% of cases, confirming their role. Medicalization was 8.2%. 22.8% of

mothers intend to cut future daughters and 46.7% of TBAs cut in the past year, showing FGM is active. Figures match Ibekwe, Onoh, and Onyebuchi (2012). Abandonment strategies excluding TBAs will fail. Age and education were key correlates. Mothers 15-29 years had more positive attitudes than those 40-49 years, supporting Shell-Duncan and Hernlund (2006). Mothers with secondary education were 3.2 times more likely to have good knowledge, aligning with NDHS 2018. Knowledge of complications was protective: 26.8% of mothers who knew three or more complications had circumcised daughters vs 58.5% with poor knowledge. Poor knowledge increased odds of practice by 2.84 times. However, attitude was strongest: only 6.5% with positive attitudes intended to continue vs 52.6% with negative attitudes. Prevalence differed by LGA: 52.3% in Ayamelum to 39.2% in Dunukofia. Knowledge and attitude were lowest in Ayamelum. This clustering supports Kandala, Nwakeze, and Kandala (2009) that FGM is driven by community-level factors. Uniform interventions will be inefficient.

Conclusion

Knowledge of FGM is inadequate, attitudes are ambivalent, and practice remains high at 46.9% in rural Anambra. TBAs are main practitioners and have poorer knowledge and more negative attitudes than mothers. Younger age and education are protective, while poor knowledge of complications and negative attitudes are strong predictors of practice. Prevalence clusters by community, with Ayamelum highest. FGM persists due to knowledge deficits, ambivalent attitudes

reinforced by cultural beliefs, economic incentives for TBAs, and weak legal awareness. Mothers and TBAs are the critical dyad sustaining practice. The large neutral group and generational shift among younger mothers indicate communities are not uniformly resistant. Sustained abandonment requires multi-component interventions improving knowledge of health and legal consequences, transforming attitudes through dialogue and norm change, providing economic alternatives for TBAs, and prioritizing high-prevalence areas.

Implication to Public Health Education

1. Content must move beyond definitions to complications and law: Knowledge of complications and legality was poor. Campaigns must be explicit about hemorrhage, infection, tetanus, prolonged labor, fistula, sexual dysfunction, and trauma, using local case stories. The VAPP Act must be simplified into Igbo with penalties emphasized.

2. Segment audiences and tailor messages: Mothers had higher knowledge than TBAs; younger mothers more positive than older. TBAs need basic health literacy first, then FGM content with hands-on training and alternative livelihoods. Mothers 15-29 years need reinforcement in antenatal clinics; women 40-49 years and grandmothers need values-clarification. Engage men, rulers, and religious leaders separately.

3. Shift focus from knowledge to attitude and norm change: Attitude predicted intention better than knowledge. Use social norms approaches: community dialogues, public

declarations, testimonials from uncut girls, and influencers to delink FGM from chastity and marriageability. Promote “rite of passage without cutting.”

4. Use appropriate channels and communicators: 81.7% of TBAs had no formal education, so print alone will fail. Use oral, visual, participatory education in Igbo during markets, village meetings, and churches. Use female LGA educators. Integrate FGM education into antenatal, immunization, and child welfare clinics. Target the perinatal period since 68.3% of girls are cut before age one.

5. Target geographically by burden: Ayamelum had worst indicators. Concentrate resources in Ayamelum and Orumba North. Use Dunukofia as a positive deviance model.

6. Link education to services and enforcement: Back education with referral systems for complications and visible enforcement. Train health workers to report and counsel without stigma. Publicize hotlines.

7. Monitor attitudinal and behavioral change: 44.1% of mothers and 51.7% of TBAs were neutral. Evaluate shifts in attitude and intention, not just knowledge. Use indicators like % of TBAs pledging to stop and % of mothers refusing cutting for newborns.

Recommendations

For Anambra State Ministry of Health and SPHCDA:

1) Integrate FGM education into maternal and child health services with structured

counseling at antenatal, postnatal, and immunization contacts. Provide job aids in Igbo.

2) Adopt “TBA as Community Health Promoter” model. Retrain TBAs in Ayamelum, Orumba North, and Dunukofia on safe motherhood, infection prevention, and FGM complications. Provide certification, stipends, and roles as birth registration agents.

3) Conduct LGA-specific campaigns prioritizing Ayamelum. Use Dunukofia champions in neighboring LGAs. 4) Strengthen surveillance. Mandate reporting of FGM complications via DHIS-2. Establish confidential hotline to improve VAPP Act enforcement.

For Local Government Authorities and Community Leaders:

1) Facilitate public declarations of abandonment by traditional rulers, religious leaders, and women’s groups delinking FGM from chastity.

2) Enact community by-laws complementing VAPP Act with sanctions for parents and practitioners.

3) Engage grandmothers via intergenerational dialogues, as women 40-49 years had most negative attitudes.

For NGOs and Development Partners:

1) Implement community-led social norms interventions like Tostan or UNICEF joint

programme, focusing on the 45.1% neutral group.

2) Produce Igbo IEC materials on complications like fistula and maternal death.

3) Support economic empowerment for TBAs: skills in soap making, poultry, or trading for those signing abandonment pledges. 4) Train young female peer educators, as women 15-29 had most positive attitudes.

For Health Workers and Training Institutions:

1) Update curricula in Schools of Nursing/Midwifery to include FGM complications, counseling, and legal aspects.

2) Build skills for non-judgmental counseling to reduce bias and improve disclosure.

For Research and Academia:

1) Conduct longitudinal and qualitative studies on behavior change and meanings of chastity. 2) Evaluate TBA retraining, dialogues, and legal literacy via cluster randomized trials.

For Media and Religious Institutions:

1) Mainstream abandonment messages on Igbo radio with survivors, experts, and leaders stating FGM has no religious backing.

2) Use sermons and faith platforms to include FGM in health talks.

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