

*Original Research Article*

# Prevalence and Determinants of Female Genital Mutilation among Women in a Rural Settlement of Kano State Nigeria, 2016

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## Abstract

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**Female Genital Mutilation (FGM) is the surgical removal of part or all of the external female genital organs of a girl-child before sexual maturity. It's usually done without consent and awareness of the affected children. FGM affects more than 100 million women with about 3 million annual cases globally. FGM is common among the poorly educated, low socio-economic and low social-status communities. Prevalence of FGM in Nigeria is put at an average of 19%. This study was done to determine the prevalence and identify factors associated with FGM practices in rural settlements of Kano State. We did a cross-sectional descriptive study. We interviewed and administered a pre-tested semi-structured questionnaire to all married women in sampled households within the sampled rural settlements. We analyzed data using Epi-info-7 and Microsoft Excel-2016. A total of 289 mothers were interviewed, with a mean age of 33.23yrs (SD ±8.68yrs). Of the 289 respondents, 171(59.2%) had received FGM at childhood while 231(79.9%) had FGM done on their girl-child. Also, 281(97.2%) of the respondents are Muslims, while eight (2.8%) are Christians. Majority of respondents 161(55.71%) do not have formal education. Type-1 FGM (clitoridectomy) (91%) is the most common type of FGM performed, followed by Type-4 (unclassified) (9%). Most of the FGM (91%) were performed by traditional-shavers, while traditional birth attendants performed 9% of the FGM. Grandparents of the children are the decision makers in 63% of all the FGM, while the Fathers decide in 27.3% and mothers 9.7%. Upholding cultural norms (81.7%) is the main reason for FGM, followed by prevention of sexual promiscuity (18.3%). Excessive bleeding (67.8%) is the main complication experienced during the FGM, while 18.7% of the women have experienced sexual problems after marriage. The practice of female genital mutilation (FGM) is high in rural settlements of Kano State. These practices are driven mainly by cultural beliefs and low level maternal education.**

**Keywords:** Female Genital Mutilation, Kano State, Rural Settlements

## INTRODUCTION

Female Genital Mutilation (FGM) is any procedure involving partial or total removal of parts or all of the female genital organs for cultural or non-medical purposes

(Cameron and Harcourt, 2012; Slanger et al., 2002). WHO defines it as "all procedures involving partial or total removal of the external female genitalia or any injury to

them for socio-cultural and non-therapeutic reasons". Usually it is performed before 15 years of age and may be a form of violence against women since it is done often without their consent and awareness of possible complications (WHO, 2016). It is done by traditional practitioners and barbers often using unsterile tools in unhygienic places. More recently, some medical personnel are getting involved (Maurice, 2006).

FGM is associated with physical, obstetric and psychosexual complications include hemorrhage, shock, infections, fistulae, trauma to surrounding tissues and death. Later ones are dyspareunia, apareunia and anorgasmia (Berg et al., 2010; Elnashar and Abdelhady, 2007; Nwajei and Otono, 2003). Infections like human immunodeficiency virus (HIV) and hepatitis may occur. Circumcision is a likely cause of HIV reported in cohorts of male and female virgins in East Africa (WHO, 2016). It is also associated with postpartum hemorrhage, perineal tears and poor perinatal outcome (Slanger et al., 2002; WHO, 2016). This put extra burden on an already stressed health sector. Some complications are fatal and the economic cost through unquantifiable is high, since the home and society revolve around women (Eke and Nkanginieme, 1999). Male partners of women who had FGM also suffer from trauma to their penises, apareunia and psychosexual dysfunction (Almroth et al., 2001). Factors that affect FGM include culture, religion, ethnicity, illiteracy, and poverty.

FGM was classified by WHO according to the extent of the procedure (WHO, 2016; Maurice, 2006). The types are:

#### **Type I (Clitoridectomy)**

This is done by taking out the hood of the clitoris only and not touching any other parts.

#### **Type II (Excision)**

Removal of the whole clitoris and/or part of the Labia minora. This is the most widely form of female genital mutilation practiced.

#### **Type III (Infibulations)**

Surgical closure of the Labia majora. The genitals are sewn together leaving a small hole for urinating and for menstrual blood. Girls around the age of puberty are subjected to this type to ensure chastity.

#### **Type IV (Unclassified)**

Other procedures like pricking, piercing, incision of clitoris with or without scraping of tissues around introitus

("angurya") or incisions made into the vagina ("gishiri cuts" which is common in Hausas of Northern Nigeria).

Globally, FGM affects about 100 – 140 million women and additional 3 million undergo it annually (WHO, 2016; Maurice, 2006). It is practiced in forty low to medium income countries, twenty-eight in sub-Saharan African especially Egypt, Sudan, Somalia, East and West Africa (GSN et al., 2006). It is reported in Yemen and some parts of India (Bosch, 2001). Migration from these places has made FGM a topical issue even in developed world like Europe and America where there were attempts by immigrants from these countries to perpetuate it regardless of existing legislation (Cameron and Harcourt, 2012; Bosch, 2001). The exact number of women and girls living with FGM in Europe is unknown, but is estimated to be around 500 000, and 180 000 girls are estimated to be at risk of being subjected to the practice (Cameron and Harcourt, 2012). FGM is a preventable public health problem.

FGM prevalence is higher in rural than in urban areas for most African countries (Benin, Central Africa Republic, Cote d'ivoire, Kenya, Mauritania, Niger and Tanzania) (Eke and Nkanginieme, 1999; GSN et al., 2006). Urban and rural rates are either the same or differ only slightly in Eritrea, Guinea, and Mali (Eke and Nkanginieme, 1999; GSN et al., 2006). In three countries (Burkina Faso, Nigeria, and Sudan), FGM prevalence was substantially higher in urban than in rural areas (WHO, 2016; GSN et al., 2006). Most of the data on African countries is compiled from country specific Demographic Health Surveys (DHS) (Commission, 2013). In Tanzania, a high prevalence of FGM can be found in Arusha (81%), Dodoma (67%) and Mara (43%), while prevalence levels under 2% can be found in ten other regions (WHO, 2016; GSN et al., 2006; Winterbottom et al., 2009).

In Nigeria, the practice of FGM is widespread among tribes and religious groups where the milder forms are done except in the south-south region where infibulation – the total closure of the Vulva is done but usually after age five (Anuforo et al., 2004). It is done more among the poorly educated, low socio-economic and low social-status groups (Adeokun et al., 2006; Myers et al., 1985). Although, UNICEF gave the Nigerian national prevalence of 19% (UNICEF, 2005). The Demographic Health Survey of Nigeria found a prevalence of FGM of 61% among Yoruba, 45% among Igbo and 1.5% among Hausa-Fulani tribes, thus making it a greater problem in Southern Nigeria (Commission, 2013). NDHS found that the prevalence of circumcision among the youngest women was 13% compared to 28% among the oldest, indicating a fall (Commission, 2013). The age varies with tribes and the culture. However, among the tribes of Southwestern region of Nigeria, it is done at infancy usually before the first birthday (Slanger et al., 2002; Myers et al., 1985).

This study was done to identify factors responsible for the practice of female genital mutilation (FGM) among women in Dawakin Kudu Local Government Area (LGA) of

Kano State, to determine the prevalence of FGM and identify the health implications of FGM among women in Dawakin Kudu local government of Kano State, and to proffer solutions to reduce or eliminating the practice of FGM among settlements in Dawakin Kudu local government of Kano State.

## **METHODS**

### **Study Setting**

Kano State is in the north-western part of Nigeria. It has a population of 9,401,288 (projected from Nigeria 2006 census) and an area of 20,131 square kilometres with a population density of 467 inhabitants per square kilometre (Nigeria. NPCo. National Census Data, 2015). Kano State has 44 Local Government Areas (LGA). Kano State borders are Jigawa State to the northeast, Katsina State to the northwest, Kaduna State to the southwest and Bauchi State to the southeast.

Dawakin Kudu Local Government Area is situated in the Kano Central Senatorial District of Kano State. The town is about 28km south of Kano metropolis. It has an area of 384km<sup>2</sup> with population of 225,389 (Nigeria 2006 census). It has 33 villages and 15 wards (Nigeria. NPCo. National Census Data, 2015).

Dawakin Kudu town is a rural settlement located within Dawakin Kudu LGA, with majority of its populace practicing subsistence farming all year round. They also engaged in rearing, petty trading and semi-skilled manual occupation (more especially the women).

### **Study Population**

Women within sampled households in sampled settlements of sampled wards in Dawakin Kudu town of Dawakin Kudu LGA.

### **Study Design**

A Cross-Sectional Descriptive study was employed. We sampled a total of 289 eligible women who have children.

### **Sample Size Determination**

The minimum sample size was obtained using the formula for cross-sectional study designs and a prevalence of 23.3% which provided a minimum sample size of 300.

### **Sampling Technique**

A multi stage sampling technique was used for the study.

Firstly, one ward was randomly selected out of the fifteen wards of the LGA. In the second stage, five settlements were selected from the selected ward using simple random sampling. In the third stage, the required number of women (respondents) was systematically selected from households in the sampled settlements.

### **Study Instrument**

A pretested interviewer administered questionnaires were administered to obtain demographic information and possible risk factors associated with FGM in the sampled settlements.

### **Data Collection**

A pre-tested semi-structured interviewer administered questionnaire was used to collect data from each of the selected respondent. The questionnaire was designed in 4 sections. Sections 1 obtained information on socio-demographic variables such as age, sex, ethnicity, religion, marital status, level of education etc. of respondents. Section 2 obtained information about the practice of FGM in the community. Section 3 obtained information about the effects of FGM on the respondents. Section 4 obtained information on the ways of eliminating the FGM from the community.

### **Data Analysis**

We collected and analyzed data using Microsoft Excel 2016 and Epi Info7.2. Absolute numbers and simple percentages were used to describe categorical variables. Quantitative variables were described using measuring of central tendency (mean, median and standard deviation). Chi-square test was used to assess the significance of associations between categorical variables. A p-value of <0.05 was considered significant at 95% confidence intervals.

### **Ethical Consideration**

Ethical approval was obtained from Kano State Ministry of Health Ethical review committee (Ref: MOH/Off/797/T.I/58). Permission to conduct the study was also obtained from the chairman of Dawakin Kudu Local Government. Informed consent was obtained from the Village Head and each of the respondents before administering questionnaires.

**Table 1.** Socio-demographic characteristics of respondents, Dawakin Kudu town, Dawakin Kudu LGA Kano State, 2016.

<b>Age Group (yrs)</b>	<b>Frequency</b>	<b>Percentage</b>
10 - 19	8	2.77
20 - 39	210	72.66
40 - 59	69	23.88
60 - 79	2	0.69
<b>Educational Level</b>		
Non-Formal	161	55.71
Primary	66	22.83
Secondary	46	15.93
Tertiary	16	5.53
<b>Religion</b>		
Islam	281	97.20
Christianity	8	2.80
Others	0	0.00
<b>Marital Status</b>		
Married	221	76.47
Divorced	25	8.65
Separated	14	4.84
Widowed	29	10.04
<b>Ethnicity</b>		
Hausa	231	79.93
Fulani	50	17.30
Igbo	8	2.77

## RESULTS

A total of 289 mothers were interviewed, with a median age of 35years (age range 14 – 67years) and mean age of 33.23yrs (SD  $\pm$ 8.68yrs). The highest proportion of respondents (72.66%) were in the 20-39years age group, followed by the 40-59years age group (23.88%). A majority (55,71%) have non-formal (Qur'anic) education, 22.83% have primary education, 15.93% have secondary education while only 5.53% have tertiary level education. Islam (97.20%) is the religion of most of the respondents, while Christianity is the religion of only 2.80% of the respondents. Of the 289 respondents interviewed, 221(76.47%) were married, 25(8.65%) were divorced, 14(4.84%) were separated, and 29(10.04%) were widowed. Hausa with 79.93% constitute the major ethnic group of the respondents, followed by Fulani with 17.30% and Igbo with 2.77% (Table 1).

All respondents were aware of female genital mutilation and what it entails. More than half of the respondents 171(59.20%) had received FGM at childhood, while 118(40.80%) have not had FGM before. Also 231(79.9%) of the respondents have given their daughters FGM, while only 58(20.10%) did not give FGM to their own children. Type-1 FGM (Clitoridectomy) (91%) constitute the major type of FGM given to children at the settlements, while

Type-4 FGM constitute the rest. Traditional barbers were the major performers of FGM at the settlements with 91%, followed by the traditional birth attendants with 9%. Decision making for performing FGM in a child at the settlements lies in majority of cases (62.98%) on the hands of the grandparents of the children, followed by the fathers of the children (27.34%), and then the mothers with 9.68%. Upholding cultural traditions (81.66%) was the major reason FGM was performed on the children, while preserving sexual morality constitute the rest. Among the respondents who had FGM at childhood, 67.82% experienced complication such as excessive bleeding, while 18.68% of them have experienced sexual problems and 9.68% had obstructed labor (Table 2).

When respondents were asked about the rights and violation of the girl-child with regards FGM, about 29.07% of respondents agreed that performing FGM in a girl-child violates her rights, while 11.75% did not agree, and 59.17% are indifferent. Also 54.67% of the respondents want FGM practices to be discontinued in their households, while 45.33% want it to continue. When respondents were asked on ways they think FGM practices can be eliminated from the society, 56.06% said public awareness campaigns, 28.72% suggested female education, while 15.22% said economic empowerment of women.

**Table 2.** Knowledge, Experience, and Practices of Female Genital Mutilation among respondents from Dawakin Kudu town of Dawakin Kudu LGA, Kano State 2016.

<b>Awareness of FGM</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	289	100
No	0	0
<b>Had FGM at Childhood</b>		
Yes	171	59.20
No	118	40.80
<b>Have given FGM to own Child</b>		
Yes	231	79.90
No	58	20.10
<b>Type of FGM given to child</b>		
Type-1 (clitoridectomy)	263	91.00
Type-2 (excision)	0	0.00
Type-3 (infibulation)	0	0.00
Type-4 (unclassified)	26	9.00
<b>Person who performed FGM</b>		
Traditional barber	263	91.00
Health care provider	0	0.00
Traditional birth attender	26	9.00
Self	0	0.00
<b>Decision for FGM on Child</b>		
Father	79	27.34
Mother	28	9.68
Grandparents	182	62.98
<b>Reasons for FGM in Child</b>		
Upholding cultural tradition	236	81.66
Preserving sexual morality	53	18.34
<b>Complications experienced</b>		
Excessive bleeding	196	67.82
Sexual problems	54	18.68
Obstructed labour	28	9.68

This study found a statistically significant association between education and FGM (Chi-square:19.939, DF=3, P-value=0.000), and between tribe and FGM (Chi-square:18.219, DF = 2, P-value = 0.000). There was no statistically significant association between Religion and FGM practices (Chi-Square:0.125, DF=1, P-Value=0.724).

## DISCUSSION

Our study found the prevalence of practice of female genital mutilation (FGM) in the rural area of Kano State to be very high. Though the prevalence is slightly lower than those found in similar studies at Sudan and Egypt (Tag-Eldin et al., 2008), these differences may be due to sociodemographic differences between these areas and the study area. The prevalence is much higher than the FGM prevalence reported in a Demographic Health Survey (DHS) study for Nigeria in 2013 (Slanger et al.,

2002; Commission, 2013). The DHS study puts the prevalence of FGM practices to be higher in the South-west and South-Eastern part of Nigeria (Slanger et al., 2002; Commission, 2013). The very high prevalence recorded in this study can only translate the fact that FGM practices is on the increase in the Northern part of Nigeria.

Traditional barbers and traditional birth attendants performed most FGM activities in the study area. This finding is similar to studies done in different regions and district of Ethiopia in which traditional circumcisers and traditional birth attenders were the major performers of FGM (Yirga et al., 2012).

All respondents have knowledge of FGM, and almost all have knowledge of health-related complications of FGM practices. Despite that, a majority of mothers still circumcised their daughters. The same findings were observed from studies conducted in Sierra Leone (Bjälkander et al., 2012), Northern Iraq (Freymeyer and Johnson, 2007), and in Ethiopia (Yirga et al., 2012). The

fact that the decision influence of mothers in respect of their children is very low in this study area, may have affected the mothers' choice of performing FGM on the girl-child.

Educational status and ethnicity has shown statistically significant association with FGM practices in this study. Individuals with primary level of educational and above were less likely to practice FGM than those who had no formal education. This finding is in line with other studies done in Ethiopia (Yirga et al., 2012). This buttress the fact that education (especially girl-child education) have a role in the practices of FGM in most communities.

We recommended public health awareness across all settlements on the dangers associated with FGM practices, economic empowerment, promoting and encouraging girl-child education, through coordinated efforts from the government agencies, non-governmental organizations, community and religious organizations on the fight against FGM.

## CONCLUSION

Female Genital Mutilation (FGM) is a growing, albeit unnoticed public health problem, especially in rural settlements of sub-Saharan Africa. With its cumulative physical and psychological trauma, the wellbeing of maternal and girl-child health in this region are of serious concern. There should be concerted effort among all stakeholders in this African sub-region in other to tackle this menace before it gets to an epidemic proportion.

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## Conflict of Interest

The authors declared no conflict of interest.

## Authors Contributions

All authors participated fully in conducting the study, and collation and analysis of data.

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