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# An institutional survey of female genital mutilation in Lagos, South-West, Nigeria

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ABSTRACT

**Background:** Female genital mutilation (FGM) as a procedure can have serious physical and psychological health consequences in girls and women.
**Objectives:** To determine the prevalence of FGM and the socio-demographic factors which influence the practice among women in Lagos State.
**Methods:** This was a cross-sectional descriptive study carried out at the Lagos University Teaching Hospital (LUTH) with eligible participants recruited by consecutive sampling method. Relevant data were collected using a structured questionnaire and physical inspection of the external genitalia was performed on each respondent to confirm the presence and type of FGM. All quantitative data were entered in the computer and analysed using SPSS version 17 for windows. Descriptive statistics were computed for all relevant data.
**Results:** The prevalence of FGM in the study was 56.3% with the largest proportion of the respondents with FGM being women aged 60years and above. The Yoruba ethnic group had the lowest prevalence of FGM (44.2%), while the highest prevalence was found among the Ibos (93.1%) (*p=0.025*). An almost similar proportion of Christians (53.3%) and Muslims respondents (62.4%) had physical evidence of FGM (*p=0.074*). Higher levels of maternal education was significantly related to reduction in practice of FGM (*p=0.002*).
**Conclusion:** There is an urgent need for a better analysis and understanding of the socio-demographic mechanisms sustaining the practice of FGM in Nigeria.

***Keywords:*** *Complications, education, external genitalia, Ibo, prevalence, socio-demographic factors*

## INTRODUCTION

Female genital mutilation (FGM) constitutes all procedures which involve the partial or total removal of the female external genitalia or other injury to the female genital organs, whether for cultural or any other non-therapeutic reasons.[1] It can have serious physical and psychological health consequences on girls and women, and is of great concern especially in sub-Saharan Africa where it is commonly practised.[2] It is one of those practices that have persisted despite improvements in the education, health and economic status of the communities where it is practised.[3]

The World Health Organization (WHO) classifies FGM into four categories as follows: [2]

- *Type I: Partial or total removal of the clitoris and/or the prepuce (clitoridectomy).*
- *Type II: Partial or total removal of the clitoris and the labia minora, with or without excision of the labia majora (excision).*
- *Type III: Narrowing of the vaginal orifice with creation of a covering seal by cutting and appositioning the labia minora and/or the labia majora, with or without excision of the clitoris (infibulation).*
- *Type IV: All other harmful procedures to the female genitalia for non-medical purposes, for example: pricking, piercing, incising, scraping and cauterization.*

Types I and II are the most common types, constituting up to 80% of all procedures, while the type III (infibulation) constitutes approximately 15%.[4]

The 2008 Nigerian Demographic Health Survey (NDHS) revealed a national prevalence of 30% and Nigeria being the country with the largest population of women in Africa, it has the second largest number of women who have undergone the procedure.[4,5] Evidence also suggests that Nigeria accounts for the largest absolute number of female residents that have undergone the procedure.[6] The practice of FGM is found in most Nigerian communities as it cuts across different ethnic and religious groups with the prevalence and types varying from state to state and from one ethnic group to another. [5,7,8,9] According to the NDHS 2013, FGM is mainly practised in the southern parts of the country, especially among the Igbo and Yoruba ethnic groups.[10]

Immediate physical complications of FGM can include haemorrhage, shock, infection, tetanus and septicaemia, with any of these leading to death.[11] Longer-term complications include scarring with keloid formation, vulval epidermoid cysts, vulval abscesses, infertility, dysmenorrhoea, and recurrent urinary tract infections.[12,13] Research evidence also indicates that for women with FGM, maternal and some foetal complications occurred more significantly in them, compared with the women without. Some women with FGM will also need psychiatric as well as gynaecological care.[14,15,16]

Previous studies on FGM have mainly focused attention on the prevalence in the society by simple use of questionnaires and recognizing the limitations of data that depend entirely on self-report in a survey context is very important as a small proportion of women provide inaccurate answers.[3,18,19,20]This study, therefore, will aim to accurately determine the true prevalence of FGM using a more objective clinical approach of physical inspection among women in Lagos, Nigeria and also, assess the socio-demographic characteristics that influence the practice in these women.

METHODOLOGY

This was a cross-sectional descriptive study carried out among women attending the gynaecological out-patient clinic of LUTH, a 900-bed tertiary hospital situated in the centre of the Lagos mainland. The gynaecological out-patient clinics are run four days in a week with an average clinic attendance of 60 women per day presenting with all forms of gynaecological conditions. Ethical approval was obtained from the Hospital's Health Research and Ethics Committee.

The minimum sample size (N) of 240 was calculated using the statistical formula by Fisher.[21] All consenting women were recruited by consecutive sampling method over a period of 3months and a structured-questionnaire was used to collect information on the socio-demographic characteristics of the recruited women. Non-consenting women and those who are not Nigerian nationals or Nigerians residing outside the country were excluded from the study. Also, excluded were those aged below 16years and those women who had undergone major vaginal surgical procedures such as vaginoplasty.

Physical inspection of the external genitalia was performed on each respondent to confirm the presence of genital mutilation and to determine the type. This was

performed by simple inspection of the vulva and perineum, followed by parting of the labia to inspect the vaginal introitus. These findings were also recorded in the questionnaires.

All quantitative data were analysed using SPSS version 17 for windows.[22] Descriptive statistics were then computed for all relevant data. The socio-demographic risk factors for FGM were obtained using multivariate logistic regression analysis involving crude odd ratio (OR) and confidence interval (CI). Logistic regression models were adjusted for these socio-demographic factors. Association between socio-demographic factors and FGM were tested using chi-square, and statistical significance was $p<0.05$.

RESULTS

A total of 254 women who gave their full consents for participation were recruited for the study. The age range of the participants was 17 to 72years with a mean age of 39.58±3.7years. The self-reported prevalence of FGM in our study was 49.4% while the true prevalence was 56.3% giving an accuracy rate of 83.9% for self-reported prevalence.

Table 1. Socio-demographic distribution of respondents (*n=254*)

| Characteristics | FGM N (%) | No FGM N (%) | Crude odd ratio | 95% Confidence Interval |
|---|---|---|---|---|
| **Age (in years)** | | | | |
| **<20** | 2 (14.3) | 12 (85.7) | 0.34 | **0.02-7.33** |
| **20-29** | 11 (20.4) | 43 (79.6) | 0.29 | **0.11-6.97** |
| **30-39** | 40 (44.0) | 41 (56.0) | 1.00 | **Ref** |
| **40-49** | 54 (85.7) | 9 (14.3) | 1.23 | **1.12-9.65** |
| **50-59** | 26 (86.7) | 4 (13.3) | 2.46 | **1.07-8.88** |
| **≥60** | 10 (90.9) | 1 (9.1) | 2.71 | **1.03-10.79** |
| **Mean ± SD** | 48.12±3.5 | 31.04±4.0 | | |
| ***P-value** | | | | **0.018** |
| **Ethnic group** | | | | |
| **Yoruba** | 46 (44.2) | 58 (55.8) | 1.00 | **Ref** |
| **Ibo** | 27 (93.1) | 2 (6.9) | 2.55 | **0.33-11.85** |
| **Hausa** | 45 (52.3) | 41 (47.7) | 1.24 | **0.97-6.82** |
| **Others** | 25 (71.4) | 10 (28.6) | 0.76 | **0.08-9.42** |
| ****P-value*** | | | | **0.045** |
| **Religion** | | | | |
| **Christianity** | 88 (53.0) | 78 (47.0) | 1.00 | **Ref** |

| | | | | |
|---|---|---|---|---|
| **Islam** | 51 (62.2) | 31 (37.8) | 1.11 | **0.22-10.36** |
| **Others** | 4 (66.7) | 2 (33.3) | 1.34 | **1.07-7.64** |
| ***P-value** | | | | **0.881** |
| **Mother's Education** | | | | |
| **Uneducated** | 26 (68.4) | 12 (31.6) | 14.00 | **6.41-37.85** |
| **Primary** | 94 (65.3) | 50 (34.7) | 11.27 | **7.09-44.32** |
| **Secondary** | 22 (42.3) | 30 (57.7) | 8.75 | **5.03-22.77** |
| **Tertiary** | 1 (5.9) | 16 (94.1) | 1.00 | **Ref** |
| **Postgraduate** | 0 (0.0) | 3 (100.0) | 0.15 | **0.01-3.44** |
| ***p-value** | | | | **0.019** |
| **Total** | **143 (56.3)** | **111 (43.7)** | | |

As shown in Table 1, the highest prevalence of FGM was seen in women aged 60years and above (90.9%; OR-2.71; 95% CI-1.03-10.79) while the lowest was in those less than 20years of age (14.3%; OR-0.34; 95% CI-0.02-7.33). The Yoruba ethnic group has the lowest prevalence of FGM (44.2%), while the highest prevalence was found among Ibos (93.1%, OR-2.55; 95% CI-0.33-11.85). Evidence of FGM was also found in 53.3% of the Christian respondents, while an almost similar proportion of the Muslim respondents (62.4%; *p=0.881*) also, had the procedure. A larger proportion of respondents whose mothers had no formal education (68.4%) or only primary education (65.3%) had physical evidence of FGM compared to the few cases seen among those whose mothers had higher levels of education (*p=0.019*).

Table 2 shows that majority of our respondents with FGM (51.0%) had it performed on them during their childhood years, while only a small proportion (0.7%) had it done on them at their first pregnancies. A good proportion (15.4%) did not know when the procedure was carried out.

Table 2.Phase of life at which FGM was performed

| Phase of life | Number | Percentage (%) |
|---|---|---|
| **Childhood** | 73 | **51.0** |
| **Adolescence** | 39 | **27.3** |
| **At marriage** | 8 | **5.6** |
| **At first pregnancy** | 1 | **0.7** |
| **Not known** | 22 | **15.4** |
| **Total** | **143** | **100** |

Table 3. Reasons proffered for the practice of FGM by the respondents who had FGM

| Reasons | Number | Percentage (%) |
|---|---|---|
| **Rite of passage** | 9 | **6.0** |
| **Reduce sexual promiscuity** | 18 | **12.7** |
| **Tradition/culture** | 55 | **38.6** |
| **Religious rite** | 20 | **14.3** |
| **Improve sexual desires** | 12 | **8.4** |
| **Others** | 10 | **6.8** |
| **Do not know** | 19 | **13.2** |
| **Total** | **143** | **100** |

In Table 3, the largest proportion of the respondents with FGM (38.6%) believed they had the procedure done on them for traditional or cultural reasons while 13.2% did not know the reason behind the practice.

Table 4. Complications experienced by respondents who had FGM based on the type of FGM (n=46)

| Complications | Types of FGM | | | Total (%) |
|---|---|---|---|---|
| | Type I | Type II | Type III | |
| | N (%) | N (%) | N (%) | N (%) |
| **Heavy bleeding** | 1 (4.8) | 8 (38.1) | 12 (57.1) | **21 (45.0)** |
| **Difficult micturition** | 2 (28.6) | 4 (57.1) | 1 (14.3) | **7 (15.2)** |
| **Wound infection** | 1 (25.0) | 0 (0.0) | 3 (75.0) | **4 (8.7)** |
| **Painful intercourse** | 0 (0.0) | 5 (41.7) | 7 (58.3) | **12 (26.1)** |
| **HIV transmission** | 0 (0.0) | 1 (100.0) | 0 (0.0) | **1 (2.2)** |
| **VVF** | 0 (0.0) | 0 (0.0) | 1 (100.0) | **1 (2.2)** |
| **Total** | **4 (8.7)** | **18 (39.1)** | **24 (52.2)** | **46 (100)** |

Table 4 shows that 46 (32.2%) of the respondents with FGM had one form of complication or another following the procedure and there was also an increase in the complication rate based on the severity of the FGM.

DISCUSSION

The study population comprised mostly of young people, with a mean age 39.58±3.7years, indicating that their attitude were less likely to be influenced by old tradition. The prevalence rate of FGM in this study was 56.3%. This was quite similar to the WHO and UNICEF figures quoted for Nigeria, but higher than the prevalence reported in other questionnaire-based surveys.[3,4,7,20,23] These are likely underestimated figures as most women are usually not aware that they had the procedure done during their childhood or may just decide to give culturally acceptable answers to the interviewers. Studies conducted in Nigeria and Burkina Faso revealed self-reported prevalence rates of 76.0% and 68.1%, respectively which is quite higher than the finding from our study.[24,25] Our assessment of the prevalence of FGM, however, confirmed the findings from previous studies where the self-report prevalent rates were found to be lower than the actual rate.[18,19,26]

In this study, we found a lower FGM prevalence among the younger age groups compared to the older ones like other previous studies especially among those aged 40years and above.[24,26] This might be an indication of a decline in the practice of FGM in the past 20years compared to 60years ago, possibly due to the increasing public campaign and awareness that is encouraging more of the younger generation of parents to stop the practice. More studies, however, are needed to authenticate this.

It was not surprising that the respondents in this study cut across the major ethnic groups and religions in the country because Lagos, being a metropolitan state, is inhabited by people of all ethnic groups and religions. Unlike our findings, it was generally observed in other studies that FGM is more prevalent in the southern parts of Nigeria.[10,23]

This finding maybe due to the increasing level of formal education and awareness of the dangers of FGM in these parts, or, because the sample population used for the study, comprised predominantly of the Yoruba and Ibo ethnic groups, rather than a reflection of the actual national prevalence.

Religious background did not play any significant role in the practice of FGM as noted in this study because the proportion of Christians with FGM was not largely different from that of the Muslims. This indicates that the practice cuts across religious boundaries and that the attribution of the practice to the Islamic faith alone may not necessarily be true.[3,17,27] Educational level was, however, found to be significantly related to the practice of FGM as the literacy level among mothers of respondents without FGM in our study is fairly higher compared to those who had undergone the procedure as noted also in other previous studies.[2,3,27]

Most of the respondents had FGM in their childhood years, correlating the report from other studies, where most FGM were performed in childhood and puberty.[3,28,29] The practice of FGM at such a young age, when girls have no say whatsoever in the decision making process may underscores the need for a more aggressive involvement of relevant government agencies to protect these children.

The major reason attributed to the practice of FGM in this study was tradition/culture which further buttressed the influence of tradition and superstition on the practice as reported by various studies within and outside Nigeria.[17,20,28,30,31] The number of respondents with reported complications after the procedure in our study (32.2%) was far less than that recorded in another study in Sierra Leone (85.5%) and this may be attributed to the increasing medicalization of the practice in Nigeria as a way of mitigating its complications; however, there are similarities in the common complications reported by the respondents in this study and other previous studies.[2,3,24,29,30,31,32,33,34] The major limitation to this study is that it is hospital based and the findings may not be representative of the general population.

## CONCLUSION

Unlike various other studies, where information on FGM status were self-reported, considering the likelihood of women to give culturally acceptable answers to the interviewer, this study went a step further to validate it through physical inspection of each of the respondent.

## RECOMMENDATION

As a result of the significant variation between the true and self-reported prevalence of FGM, future researchers should be wary of the self-report method. It is also recommended that the socio-demographic mechanisms sustaining this practice need to be better analysed and understood, using in-depth qualitative studies to find out why families and communities choose to continue the practice before any meaningful change can be made and sustained.

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