Female Genital Mutilation: Prevalence, Awareness and Attitude among Igbo Women of Child-Bearing Age in Nigeria

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Abstract

Background: To our knowledge, no studies have comprehensively evaluated the awareness, perceptions and attitudes of Igbo women of child-bearing age towards female genital mutilation (FGM) in south-eastern Nigeria.

Objective: To determine the prevalence, awareness and attitude towards the practice of FGM among Igbo women of child-bearing age in Nigeria.

Methods: The study was a cross-sectional study among...
Igbo women of child-bearing age. Females from 16 to 45 years were included. Interviewer administered semi-structured pretested validated questionnaires were employed. The results were collected and analyzed with the SPSS version 23. Univariate analysis was performed in order to determine independent risk factors that could possibly affect prevalent rates in the population. The level of significance was set at p<0.05.

Results: The study showed that out of 367 respondents interviewed, 49 had FGM, given a prevalence of 13.4%. However, majority (98.7%) were aware of FGM, and their major sources being from family (65.0%), friends (65.0%), and media (48.5%). However, 53.7% of the respondents noted that FGM is still being practiced. Up to 88.6% of the respondents were aware of the complications of FGM and the commonest complications expressed were severe pain during FGM (82.2%), and excessive bleeding (75.7%). Majority (91.3%) stated that it is a bad practice (91.3%) and a form of violence against women (85.8%) and 87.2% want the practice to be discontinued. Most of them (80.4%) stated that FGM has no benefit owing to the fact that it is associated with complications such as difficulty in labor (68.1%) and painful sexual intercourse (47.2%), while 13.6% were indifferent whether FGM should be criminalized. The prevalence of FGM was significantly higher in the older age group (RR=0.09; 95%CI=0.042-0.194; p<0.001) and parous women (RR=1.89; 95%CI=1.084-3.309; p=0.025) compared to the younger age group and nulliparous women respectively.

Conclusion: Despite the high awareness and negative attitude of the populace to the practice of FGM and its consequences, it has still continued to persist in Nigerian communities. The prevalence of FGM was 13.4% and the commonest reasons for its continued persistence included traditional norms, preventing promiscuity and pre-marital sex. More effective measures in addition to the ongoing mass education should be put in place to stop these practices.

Keywords: Clitoris; Cutting; External Genitalia; Female Genital Mutilation; Tradition

1. Introduction
The World Health Organization defined female genital mutilation (FGM) as all procedures which involve partial or total removal of the external female genitalia and / or injury to the female genital organs whether for cultural or any other non-therapeutic reasons [1]. Female genital mutilation is an unhealthy traditional practice inflicted on girls and women worldwide. It is widely recognized as a desecration of human rights which is deeply ingrained in cultural beliefs and perception over decades and generations with no easy task for change [2]. According to WHO’s latest data, 200 million women and girls in the planet earth are thought to have been subjected to the practice and more than three million are at risk of having it performed on them yearly [1]. FGM constitutes an extreme form of discrimination and violation of human rights of girls and women with health consequences now acknowledged and documented [3-7]. It is experienced in more than 28 African countries and some communities worldwide. Its encumbrance is felt more in countries like Nigeria, Egypt, Mali, Eritrea, Sudan, Central African Republic and Northern part Ghana where it has been in existence for ages [8,9]. The highest prevalence is seen in Somalia and Djibouti where FGM is almost the norm [8]. FGM is widely practiced in Nigeria, having the highest absolute number of cases of FGM worldwide and accounting for 25% of the estimated number of women
circumcised worldwide. In Nigeria, the topmost prevalence of FGM is seen in south-south region (77%), followed by southeast (68%) and southwest (65%) [2,9]. However, it is being practiced on a lesser degree in the north although unexpectedly tending to have a more extreme form [2, 9]. Nigeria has an estimated population of 200 million people in 2019, according to the latest census figures and projections from Trading Economics, with the women population forming 52% [2, 9, 10]. The Nigerian countrywide prevalence of FGM among the female population is 41% [2]. In most societies, FGM is considered a cultural tradition [11, 12, 13].

The World Health Organization categorizes the FGM into four distinct classifications [1, 14, 15]. Three of the four categories are further broken down into subcategories that classify the specific type of mutilation that was performed. Type I is known as clitoridectomy and includes any procedure that totally removes the clitoris and/or the prepuce [14]. Type Ia is the removal of the clitoris hood or prepuce only while Type Ib includes the removal of both the clitoris and the prepuce [14]. Type II, or excision, is the partial or total removal of the labia minora unrelated to any mutilation performed on the labia majora. Type IIa includes the removal of the labia minora only. Type IIb is the removal of the labia minora and the partial or total removal of the clitoris [14]. Type IIc involves the removal or the clitoris, labia minora, and labia majora. Infibulation, or Type III, is the third category of mutilation procedures defined as the narrowing of the vaginal orifice with the sealing of the perineum by cutting and repositioning the labia minora and labia majora with or without the excision of the clitoris. Type IIIa references specifically procedures done with the removal and apposition of the labia minora, while Type IIIb includes procedures done with only the labia majora [14]. Type IV is a broad category that includes all other harmful techniques done devoid of medical purpose to the female genitals. This includes any cutting, herbal treatments, or burns that change or harm the patient’s body [1]. Despite all influence of medical innovation as well as earnest and conscientious activity such as awareness programs, public orientations, funding of researches, publication by the government and non-governmental organization and also private individual both at the national and international level to eradicate this bigoted practice, the phenomenon appears to still be in vogue till date [16]. In Nigeria there are still cases in which children at infancy and childhood age are being circumcised in isolation as a result of their cultural and religious beliefs, norms and myth and the likes. Despite the fact that the health risks associated with FGM are numerous, this harmful practice has continued unabated and the burden is high in low-income countries especially in Nigeria. There is need for creating awareness of the health risks to prevent the physical, and psychological sexual trauma that follows female genital mutilation. To our knowledge, no studies have comprehensively evaluated the awareness, perceptions and attitudes of FGM in south-eastern Nigeria. This study was aimed at determining the awareness, perception and attitude of Igbo women of child-bearing age towards the practice of FGM in south-east Nigeria.

2. Methods
This was a cross sectional descriptive and questionnaire-based study conducted between October 1, 2015 and April 30, 2016 in a rural community (Nanka, Orumba North Local Government Area, Anambra state, south-east Nigeria) among women of child bearing age. Females below the age of 16 years or above age of 45 years were excluded. A systematic
random sampling technique was used in selecting the women who participated in this study. Data collection involved house to house visitation and meeting at public places like markets, and churches. If the member of the household who was eligible to be a study subject was not present at the time of the visit, a second visit was arranged and the data were obtained. Using a semi structure interviewer administered questionnaire, data was obtained from 367 respondents after obtaining their consent. The questionnaire was in 4 sections. Section A had a questionnaire on socio-demographic data, section B had questions on awareness of FGM, and section C had questions on attitude towards FGM. Section D had questions on practice of FGM. The questionnaire was developed first in English and was then translated back into the vernacular (Igbo language), and the translated Igbo version was administered. The researcher or research assistants interviewed the women. The study was approved by the ethics committee of the Nnamdi Azikiwe University Teaching Hospital prior to commencement. All participants provided verbal informed consent and were assured of confidentiality. A distinct population proportion formula was used to determine the sample size assuming that 41% of Nigerian countrywide prevalence of FGM among the adult population (as reported in a previous study in Nigeria [2]), and with a 5% level of significance (α = 0.05) and a 7% margin of error (ω = 0.07). The ultimate sample size was adjusted to allow a nonresponse rate of 10%, and was calculated as 362. The data collected were checked on a daily basis for completeness and appropriateness. For the sake of confidentiality, any label identifying the respondent was avoided in the questionnaire. Thus, the data were made anonymous. The data collected were analyzed using the SPSS statistical package version 23.0 (SPSS Inc, Chicago, Illinois, USA). The Chi-square test or Fisher’s exact test was used for the comparisons of categorical variables. Univariate analysis was performed in order to determine the possible association between the prevalent rates of FGM in the population and age and parity. The level of significance was set at p<0.05.

3. Results

Among 390 questionnaires administered, 367 (94.1%) were properly completed and used for analysis. The study showed that out of 367 respondents, 49 had FGM, given a prevalence of 13.4%. As shown in Table 1, of the 367 respondents, majority (33.8%) were between the age of 26 and 30 years. Majority (84.5%) were married. The entire women (367) were Igbo women and less than half of the respondents (45.5%) had tertiary Education, 34.9% were traders. Civil servants accounted for 29.7%. The majority, (99.5%) were Christians and more than half of the respondents (56.7%) had 1-4 children. The frequency distribution of responses by participants to questions on awareness of FGM is shown in Table 2. Considering participant’s awareness of the health risk associated with FGM, 98.9% have heard of FGM, and their sources being from family (65.0%), friends (65.0%), health personnel (30.9%), media (48.5%), religious teaching (7.4%), and women seminars (9.4%). Also, 88.6% of the respondents were aware that there could be complications like infections (46.5%), excessive bleeding (75.7%), severe pain during the procedure (82.2%), difficulty labor (52.3%), postpartum hemorrhage (19.7%), painful sexual intercourse (31.1%) and painful menstruation (17.8%). The frequency distribution on response of participants on attitude of FGM is shown in Table 3. Majority (85.8%) of the participants stated that FGM is a form of violence against women and 87.2% of the respondents do not want the practice to continue. Few participants (7.1%) suggested that the practice should continue that it
ensures female purity (11.5%), prevents promiscuity (11.5%), maintain custom (7.7%) and leads to sexual satisfaction by their husbands (0.9%). However, 80.3% stated that FGM has no benefit owing to the fact that it is associated with complications such as difficulty in labor (68.1%), painful sexual intercourse (47.2%), and increased risk of vaginal bleeding after delivery (27%). Some of the respondents (14.8%) opined that FGM should be criminalized but did not give reasons, 14.7% did not think it should be criminalized while 13.6% were indifferent. Table 4 shows the frequency distribution of the responses of participants to the practice of FGM. Up to 53.7% of respondents stated that FGM is still being practiced in their community, giving reasons which are as follows, tradition (57.4%), to prevent promiscuity (83.6%), to prevent pre-marital sex (20.8%), to ensure female purity (14.4%), to increase chances of marriage (2.0%). Three (1.5%) of the respondents stated that the reason is for women to satisfy their husbands sexually. The result also showed that 82.0% of FGM is done by traditional birth attendants using razor in 51.8% of cases, scissors in 27.7% of cases, knife in 57.8% of cases and in hot water 1.6% of cases. Majority (86.6%) of respondents reported that FGM is done within the age of 5 years after delivery. Most (86.6%) of respondents were not circumcised. As shown in Table 5, the prevalence of FGM was significantly higher in the older age group (p<0.001) and parous women (p=0.025) compared to the younger age group and nulliparous women respectively.

| Characteristics   | Frequency (n) | Percentage (%) |
|-------------------|--------------|----------------|
| **Age**           |              |                |
| 15-20             | 11           | 3.0            |
| 21-25             | 36           | 9.7            |
| 26-30             | 124          | 33.8           |
| 31-35             | 66           | 18.0           |
| 36-40             | 63           | 17.2           |
| 41-45             | 67           | 18.3           |
| **Marital Status**|              |                |
| Single            | 55           | 15.0           |
| Married           | 310          | 84.5           |
| Others            | 2 (divorced) | 0.5            |
| **Religion**      |              |                |
| Christian         | 365          | 99.5           |
| Muslim            | -            | -              |
| Others            | 2 (traditionalists) | 0.5 |
| **Ethnic Group**  |              |                |
| Igbo              | 367          | 100.0          |
| Others            | 0            | 0.0            |
Table 1: Socio-demographic characteristics of the respondents.

| Characteristic          | Frequency (n) | Percentage |
|-------------------------|---------------|------------|
| Educational Status      |               |            |
| No Formal education     | 43            | 11.7       |
| Primary                 | 53            | 14.7       |
| Secondary               | 104           | 28.3       |
| Tertiary                | 167           | 45.3       |
| Occupation              |               |            |
| Trader                  | 128           | 32.6       |
| Civil servant           | 79            | 21.5       |
| Student                 | 51            | 13.8       |
| Farmer                  | 78            | 21.2       |
| Unemployed              | 40            | 10.9       |
| Parity                  |               |            |
| 0                       | 64            | 17.4       |
| 1-4                     | 208           | 56.7       |
| >5                      | 95            | 25.9       |

| Have you heard of FGM   |               |            |
| Yes                     | 363           | 98.9       |
| No                      | 4             | 1.1        |
| Total                   | 367           | 100.0      |

| If YES, from what source? |               |            |
| Family                   |               |            |
| Yes                      | 236           | 65.0       |
| No                       | 127           | 35.0       |
| Total                    | 363           | 100.0      |

| Friends                  |               |            |
| Yes                      | 236           | 65.0       |
| No                       | 127           | 35.0       |
| Total                    | 363           | 100.0      |

| Health personnel         |               |            |
| Yes                      | 112           | 30.9       |
| No                       | 251           | 69.1       |
| Total                    | 363           | 100.0      |
| Media         | Yes | No  | Total |
|--------------|-----|-----|-------|
| Yes          | 176 |     | 48.5  |
| No           | 187 |     | 51.5  |
| Total        | 363 |     | 100.0 |

| Religious teaching | Yes | No  | Total |
|--------------------|-----|-----|-------|
| Yes                | 27  |     | 7.4   |
| No                 | 336 |     | 92.6  |
| Total              | 363 |     | 100.0 |

| Women seminar     | Yes | No  | Total |
|-------------------|-----|-----|-------|
| Yes               | 34  |     | 9.4   |
| No                | 329 |     | 90.6  |
| Total             | 363 |     | 100.0 |

| Are you aware of the complication | Yes | No  | Total |
|----------------------------------|-----|-----|-------|
| Yes                              | 325 |     | 88.6  |
| No                               | 42  |     | 11.4  |
| Total                            | 367 |     | 100.0 |

| IF YES, what are the complications? | Infections | Excessive bleeding | Severe pain during FGM | Difficulty labor | Post-partum hemorrhage |
|-------------------------------------|------------|--------------------|-------------------------|------------------|------------------------|
| Infections                          | Yes        | 151                | 246                     | 267              | 64                     |
|                                    | No         | 174                | 79                      | 58               | 261                    |
|                                    | Total      | 325                | 325                     | 325              | 325                   |
| Excessive bleeding                 | Yes        | 46.5               | 75.7                    | 82.2             | 19.7                   |
|                                    | No         | 53.5               | 24.3                    | 17.8             | 80.3                   |
|                                    | Total      | 100.0              | 100.0                   | 100.0            | 100.0                  |
| Severe pain during FGM             | Yes        | 82.2               | 17.8                    | 19.7             | 80.3                   |
|                                    | No         | 17.8               | 82.2                    | 19.7             | 80.3                   |
|                                    | Total      | 100.0              | 100.0                   | 100.0            | 100.0                  |
| Difficulty labor                   | Yes        | 52.3               | 47.7                    | 19.7             | 80.3                   |
|                                    | No         | 47.7               | 52.3                    | 19.7             | 80.3                   |
|                                    | Total      | 100.0              | 100.0                   | 100.0            | 100.0                  |
| Post-partum hemorrhage             | Yes        | 19.7               | 19.7                    | 19.7             | 19.7                   |
|                                    | No         | 80.3               | 80.3                    | 80.3             | 80.3                   |
|                                    | Total      | 100.0              | 100.0                   | 100.0            | 100.0                  |
| Characteristics                      | Frequency (n) | Percentage |
|-------------------------------------|---------------|------------|
| **Total**                           | 325           | 100.0      |
| **Painful sexual intercourse**      |               |            |
| Yes                                 | 101           | 31.1       |
| No                                  | 224           | 68.9       |
| Total                               | 325           | 100.0      |
| **Painful menstruation**            |               |            |
| Yes                                 | 58            | 17.8       |
| No                                  | 267           | 82.2       |
| Total                               | 325           | 100.0      |

**Table 2:** Frequency distribution of responses by participants to questions on awareness.

| Characteristics                                | Frequency (n) | Percentage |
|------------------------------------------------|---------------|------------|
| **Is FGM a good practice**                     |               |            |
| Yes                                            | 19            | 5.7        |
| No                                             | 337           | 91.3       |
| I don’t know                                   | 10            | 3.0        |
| Total                                          | 367           | 100.0      |
| **Is FGM a form of violence against women**    |               |            |
| Yes                                            | 315           | 85.8       |
| No                                             | 41            | 11.2       |
| I don’t know                                   | 10            | 3.0        |
| Total                                          | 367           | 100.0      |
| **Do you think the practice should be continued** |           |            |
| Yes                                            | 26            | 7.1        |
| No                                             | 320           | 87.2       |
| I don’t know                                   | 21            | 5.7        |
| Total                                          | 367           | 100.0      |
| **If YES, why?**                               |               |            |
| To ensure female purity                        |               |            |
| Yes                                            | 3             | 11.5       |
| No                                             | 23            | 88.5       |
| Total                                          | 26            | 100.0      |
| To prevent promiscuity                         |               |            |
| Yes                                            | 3             | 11.5       |
| No                                             | 23            | 88.5       |
|                          | Total |   |   |
|--------------------------|-------|---|---|
| **To maintain certain customs** |       |   |   |
| Yes                      | 2     |   | 7.7 |
| No                       | 24    |   | 92.3 |
| Total                    | 26    |   | 100.0 |
| **To prevent premarital sex** |       |   |   |
| Yes                      | 2     |   | 7.7 |
| No                       | 24    |   | 92.3 |
| Total                    | 26    |   | 100.0 |
| **No reason**            |       |   |   |
| Yes                      | 1     |   | 3.8 |
| No                       | 25    |   | 96.2 |
| Total                    | 26    |   | 100.0 |
| **IF NO, why?**          |       |   |   |
| **It has no benefit**    |       |   |   |
| Yes                      | 257   |   | 80.3 |
| No                       | 63    |   | 19.7 |
| Total                    | 320   |   | 100.0 |
| **It increases difficulty in labor** |       |   |   |
| Yes                      | 218   |   | 68.1 |
| No                       | 102   |   | 31.9 |
| Total                    | 320   |   | 100.0 |
| **Brings about painful sexual intercourse** |       |   |   |
| Yes                      | 151   |   | 47.2 |
| No                       | 169   |   | 52.8 |
| Total                    | 320   |   | 100.0 |
| **Increases risk of vaginal bleeding after delivery** |       |   |   |
| Yes                      | 87    |   | 27.2 |
| No                       | 233   |   | 72.8 |
| Total                    | 320   |   | 100.0 |
| **No reason**            |       |   |   |
| Yes                      | 47    |   | 14.7 |
| No                       | 273   |   | 85.3 |
| Total                    | 320   |   | 100.0 |
| **OTHERS (SPECIFY)**     |       |   |   |
| Increases sexual satisfaction of their husbands |       |   |   |

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| Characteristics                                      | Frequency (n) | Percentage |
|-----------------------------------------------------|---------------|------------|
| **Should FGM be criminalized**                      |               |            |
| Yes                                                 | 263           | 71.6       |
| No                                                  | 54            | 14.7       |
| I don’t know                                         | 50            | 13.6       |
| Total                                               | 367           | 100.0      |
| **Is FGM practiced in your community**              |               |            |
| No                                                   | 40            | 10.9       |
| Yes                                                  | 197           | 53.7       |
| I don’t know                                         | 130           | 35.4       |
| Total                                                | 367           | 100.0      |
| **If YES, WHY**                                     |               |            |
| **Tradition**                                        |               |            |
| Yes                                                  | 113           | 57.4       |
| No                                                   | 84            | 42.6       |
| Total                                                | 197           | 100.0      |
| **To prevent promiscuity**                          |               |            |
| Yes                                                  | 165           | 83.6       |
| No                                                   | 32            | 16.4       |
| Total                                                | 197           | 100.0      |
| **To prevent premarital sex**                       |               |            |
| Yes                                                  | 41            | 20.8       |
| No                                                   | 156           | 79.2       |
| Total                                                | 197           | 100.0      |
| **To ensure female purity**                         |               |            |
| Yes                                                  | 28            | 14.4       |
| No                                                   | 169           | 85.6       |
| Total                                                | 197           | 100        |
| **To increase chance of marriage**                  |               |            |
| Yes                                                  | 4             | 2.0        |

Table 3: Frequency distribution on response of participants on attitude of FGM.
|                      | Yes                        | No                        | Total |
|----------------------|---------------------------|---------------------------|-------|
| No                   | 193                       | 98.0                      | 197   |
| Total                |                           |                           | 100.0 |
| **Others**           |                           |                           |       |
| Yes                  | 3 (to sexually satisfy their husband) | 1.5               |       |
| No                   | 194                       | 98.5                      | 197   |
| Total                |                           |                           | 100.0 |
| **Who performs the practice** |                     |                           |       |
| Traditional birth attendant (TBA) | 301                     | 82                        |       |
| Village women other than TBA      | 58                       | 15.8                      |       |
| Health professional                          | 8                        | 2.2                       |       |
| Total                | 367                       | 100                       |       |
| **INSTRUMENT USED**  |                           |                           |       |
| **Razor**            |                           |                           |       |
| Yes                  | 190                       | 51.8                      |       |
| No                   | 177                       | 48.2                      |       |
| Total                | 367                       | 100                       |       |
| **Scissors**         |                           |                           |       |
| Yes                  | 100                       | 27.7                      |       |
| No                   | 267                       | 72.3                      |       |
| Total                | 367                       | 100                       |       |
| **Knife**            |                           |                           |       |
| Yes                  | 212                       | 57.8                      |       |
| No                   | 155                       | 42.2                      |       |
| Total                | 367                       | 100.0                     |       |
| **Others**           |                           |                           |       |
| Yes                  | 6 (hot water)             | 1.6                       |       |
| No                   | 361                       | 98.4                      |       |
| Total                | 367                       | 100.0                     |       |
| **At what age is FGM done** |                     |                           |       |
| At birth             | 62                        | 16.9                      |       |
| 0 – 5 years          | 253                       | 68.9                      |       |
| 6 –10 years          | 52                        | 14.2                      |       |
| 11 – 15 years        |                           |                           |       |
| >15 years            |                           |                           |       |
| Total                | 367                       | 100.0                     |       |
| **Were you circumcised** |                     |                           |       |

| Variables/subgroup | FGM Group (N=49) | No FGM group (N=318) | RR (95% CI)                  | P-value |
|--------------------|-----------------|----------------------|-----------------------------|---------|
| Age Range          |                 |                      |                             |         |
| 15-35 years        | 7 (14.3)        | 230 (72.3)           | 0.09 (0.042-0.194)          | <0.001  |
| 36-45 years        | 43 (87.7)       | 88 (27.7)            |                             |         |
| Parity             |                 |                      |                             |         |
| Nulliparous        | 14 (49.0)       | 50 (12.6)            | 1.89 (1.084-3.309)          | 0.025   |
| Parous             | 35 (51.0)       | 268 (87.4)           |                             |         |

4. Discussion

This present study evaluated the prevalence, awareness and attitude of Igbo women of child bearing age in Nigeria towards the practice of female genital mutilation (FGM). In this study, the prevalence of FGM was 13.4% and the 98.9% of respondents have heard of FGM their sources being from family (65.0%), friends (65.0%), health personnel (30.9%), media (48.5%), religious teaching (7.4%) and women seminars (9.4%). Additionally, 86.6% of the respondents are aware of the complications which are as follows; infection (46.5%), excessive bleeding (75.7%), severe pain during FGM (82.2%), difficulty labor (52.3%), postpartum hemorrhage (19.7%), painful sexual intercourse (31.1%), and painful menstruation (17.8%). The women were aware of the health risks enumerated and their consequences. The present study has revealed the prevalence of FGM was 13.4%. This finding is lower than the WHO general rate of 41% for Nigerian population. In Nigeria, the peak prevalence of FGM is seen in south-south region (77%), followed by southeast (68%) and southwest (65%) [2, 9]. The prevalence of 13.4% seen in this study could signify a falling trend in the society. In similar Nigerian study by Johnson and Okon, 98.6% of respondents were aware of the practice of FGM [17]. In another similar study, Dattijo et al [18] showed that 94.6% were aware of FGM of which mass media was their main source of information unlike in my study where family was their main source of information [18]. Contrariwise, a similar community based cross-sectional study in Ethiopia by Yirga et al revealed a lower awareness rate of 38.5% [19]. This disparity in awareness rate may be due to differences in religious orientation of the two populations. The result from the Nigerian study done by Johnson and Okon among Ayadehe women in Itu, Nigeria reported that the health complications experienced by women following FGM were excruciating pains (36.6%), severe bleeding (15.8%), painful urination (26.7%) as against severe pains (81.4%), severe bleeding (75.8%) recorded in our present study[18]. In a qualitative study conducted in Monrovia, Liberia by Tarr-Atitia et al among twenty
midwives on FGM revealed that sexual impairment and intrapartum vulvo-perineal laceration with ensuing hemorrhage were defined as frequent FGM-attributable complications [20]. In a study done by Nwaokoro et al in Awka, Nigeria, 68.2% of respondents perceived that FGM is a bad practice and the practice should be abolished [21]. This concurs with our findings where 91.8% of respondents stated that FGM is a bad practice, with majority (85.8%) stating that it is a form of violence against women and 87.2% of respondents want the practice to be discontinued. In another study in Ethiopia by Belda and Tololu, 12.8% of respondents desire that the practice of FGM should continue, even though 87.2% of them do not want their daughters to be circumcised [22]. However, in our findings, 7.1% of respondents desire that the practice should be continued because of the following reasons; it ensures female purity (11.5%), it prevents promiscuity (11.5%) and maintenance of custom (7.7%). Nonetheless, the result from the study done by Dattijo et al showed that the majority (83.8%) of the respondents wanted the practice to be discontinued, while 31.1% reported to have a plan to circumcise their daughters citing tradition, marriage prospects and faithfulness to their husbands as their reasons [18]. There are many reasons for the practice of FGM, and it is often described as a means to safeguard against premarital sexual activity and, as such, prevent female promiscuity and preserve virginity. This is seen in the present study as up to 53.7% of the respondent stated that FGM was practiced because of traditional belief (57.4%), and for prevention of promiscuity (83.6%). In a previous study by Yirga et al, the main reason for the practice of FGM was reduction of female sexual hyperactivity as the authors reported in 60.3% of cases [19]. Similarly, in one prior World Health Organization study in Egypt, 33.4% of subjects perceived the practice of FGM to be a religious tradition [23]. Apart from the notable traditional reason for FGM, our findings have revealed that other reasons the respondents thought about reasons for persistence of practice of FGM was to prevent promiscuity (83.6%), to prevent premarital sex (20.8%), to ensure female purity (14.4%), to increase the chance of marriage (2.0%) and to satisfy respective husbands (1.5%). In a recent Ghanaian study by Sakeh et al it was revealed that easy movement of women across borders, belief that FGM will preserve virginity and reduce promiscuity, male dominance and lack of female autonomy ensures continuation of the FGM practice [24]. This is in tandem with the findings of our index study. The greater number of respondents (82.0%) believes that the traditional birth attendants performed FGM. However, they revealed that traditional birth attendants perform this practice using razor in 51.8% of cases, scissors in 27.7% of cases, knife in 57.8% of cases and hot water in 1.6% of cases. Similarly, according to Banda report, 90% of FGM performed in Guinea and Eritrea is done by traditional/ local healers [25]. Thus, the use of these unhygienic procedures in the community may increase the risk of infection and later reproductive complications in women after undergoing FGM. Many respondents stated that it is done from birth to 5 years in 68.9% of cases and 13.4% were circumcised. These findings were similar to the WHO report in other African countries [26]. When FGM procedure is being performed, 50% of females cut in regions of Ethiopia, Mali, and Mauritania were under 5 years of age, whereas 76% of those in Yemen were performed when they were not more than two weeks of age [26]. Nonetheless, if the procedure is done during childhood, it leaves a scar that narrows the female genitalia and complicates childbirth, causing injury, and has a negative impact on sexuality at a later age [27]. Since the practice is often done under forceful and aggressive
moments, and performed without the consent of the victim, it is unethical, and even more so when performed on young girls who are put through enormous suffering. The present study has shown that the prevalence of FGM was significantly higher in the older age group (p<0.001) and parous women (p=0.025) compared to the younger age group and nulliparous women. This finding is understandable and it appears to be dissimilar to previous report in India by Tag-Eldin et al [23]. This finding signifies abating prevalence in the community since the older age groups have high frequency of it. Age too is a function of parity. Ordinarily, older age are commonly seen in parous women. The present study has some limitations. There could be recall bias on some of the women interviewed because of the cross-sectional design of the study. The only one rural community setting employed in the study is also a limitation because multi-settings could have increased the reliability of findings. The strength of the study is that this is an updated data on the awareness and attitudes of FGM in Nigeria.

5. Conclusion
This study showed that despite the high awareness and negative attitude of the populace to the practice of female genital mutilation and its consequences, FGM has continued to persist in Nigerian communities. The prevalence of FGM was 13.4%. The reasons for its continued persistence include, traditional norms, preventing promiscuity and pre-marital sex, enhancement of female purity, increase chances of marriage and sexual satisfaction. More effective measures like legislation, in addition to the ongoing mass education should be put in place to stop these obnoxious practices. The practice of FGM is a violation of human rights and has to be stopped altogether. Integrated efforts by policy-makers, the Ministry of Health, and international organizations are needed all over the country. It might continue to be a challenge in public health practice, but educating women is likely to have the most impact.

Author’s Contribution
NBO, CAE and CEN contributed to the study conceptualization and methodology; NBO conducted the field work, ensured completion of the participants data and extracted the required data; OSU, CCO, and GUE analyzed the data and drafted the original manuscript; EAE, CCO, JCA and EAE worked with NBO on formal analysis; NBO, CAE, CEN, CBO and EAE contributed to the project administration, writing (review and editing), data visualization, and supervision. All authors have seen and approved their contributions and the final version of the manuscript.

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Conflict of Interest
Authors declare no conflict of interest.

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