Journal of Community Medicine & Health Care

Open Access

Austin Publishing Group

Research Article

Prevalence and Predictors of Female Genital Cutting in Nigeria: an Analysis of 2013 Nigeria Demographic and Health Survey

Ossai EN[1]*, Aniwada EC[2], Nwobi EA[2] and Ezeoke UE[2]

[1]Department of Community Medicine, College of Health Sciences, Ebonyi State University Abakaliki, Nigeria

[2]Department of Community Medicine, College of Medicine, University of Nigeria, Enugu Campus

***Corresponding author:** Edmund Ndudi Ossai, Department of Community Medicine, College of Health Sciences, Ebonyi State University Abakaliki, Nigeria; Email: ossai_2@yahoo.co.uk

Received: July 04, 2018; **Accepted:** August 14, 2018; **Published:** August 21, 2018

Abstract

Background: Reproductive health is one of the prerequisites for sustainable development and female genital cutting is an essential component of reproductive health. Female genital cutting has a cultural significance as it manifests the sexuality of women and their reproductive role in the society. The study was aimed to determine the prevalence and predictors of female genital cutting in Nigeria.

Methods: This was a secondary data analysis using the 2013 Nigeria Demographic and Health Survey. Data on 84,320 respondents were extracted from 119,386 participants. This was based on respondents with complete data on outcome variable of interest. Chi-square test of statistical significance and multivariate analysis using binary logistic regression was used in the analysis and the level of statistical significance was determined by a p value of less than 0.05.

Result: The mean age of the respondents was 36.5±8.0 years. A minor proportion of the respondents, 23.9% want the practice of female genital cutting to continue. The prevalence of female genital cutting was 37.5%. Traditional circumcisers performed the majority of circumcisions, 75.1% and majority 73.3% were done during infancy. The predictors of female genital cutting including being of older age group, educational attainment, and geo-political zone, place of residence, religion and wealth index of the respondents.

Conclusion: The prevalence of female genital cutting in Nigeria is still high and majority of the procedure is performed by traditional circumcisers. There is the need for public education in discouraging the continued practice of female genital cutting and emphasis should be on the complications of the procedure and the perceived economic benefits. Education of the girl child is of immense importance in bringing the practice of female genital cutting to an end and should be encouraged.

Keywords: Prevalence; Predictors; Female genital cutting; Nigeria

Background

The World Health Organization, (WHO) defines female genital cutting as "all procedures that involves partial or total removal of the female external genitalia or other injury to the female genital organs for non-medical reasons [1]. WHO further classifies FGC into four types namely clitoridectomy, excision, infibulation and others [1]. Based on this classification, the stretching of the clitoris and the labia minora as practiced in countries like Malawi, Burundi, Rwanda, and Uganda and in some communities in Nigeria are not regarded as forms of female genital cutting. Thus female genital cutting is regarded as the non-therapeutic modification of external genitalia, indeed an ancient practice that is rooted in culture [2,3]. Presently, it is perceived as a form of discrimination against women based on inequalities between the sexes [1].

Female genital cutting is also referred to as female circumcision and female genital mutilation. It is practiced mainly in countries of Africa, Middle East and Asia. In Africa, it is practiced in 30 countries and these countries are mainly in the west, east and north east regions of the continent. Globally, an approximate 200 million women and girls have undergone the procedure and every year, about 3 million girls are at risk of being circumcised [1]. FGC is also practiced in Europe and North America but such cases are attributed to immigrant communities from countries where the prevalence is high [1].

The prevalence of FGC varies from one region to another. For example, African countries of Somalia, Egypt, Sierra Leone, Sudan, Mali, Eritrea and Ethiopia account for 70% of all global cases of FGC [3]. It has been found that the practice of female genital cutting is almost universal in Somalia (98%) and Guinea 97%, very high in Mali, 89%, Egypt and Sudan 87% and relatively low in Senegal 25% and with a 1% prevalence in Cameroon, it is almost non –existent in that country [4]. The worst forms of female genital cutting are observed in Sudan, Egypt, Mali, Ghana and Nigeria as the four known types of FGC are practiced in various zones of these countries [5]. Nigeria because of its large population and its wide acceptance of the practice

Citation: Ossai EN, Aniwada EC, Nwobi EA and Ezeoke UE. Prevalence and Predictors of Female Genital Cutting in Nigeria: an Analysis of 2013 Nigeria Demographic and Health Survey. J Community Med Health Care. 2018; 3(1): 1026.

of FGC has the highest absolute number of cases of FGC in the world [6]. In Nigeria, the prevalence of FGC is 25% and the prevalence in higher in the southern part of the country when compared with the north and also in the urban more than the rural areas [7].

The World Health Organization has been consistent in its opinion that there are no health benefits associated with FGC rather it interferes with the natural functions of the bodies of women and children [1]. Thus it has been regarded as the act of violence against women and girls that violate their human rights [1]. This has necessitated the postulation that African countries that invest in the reduction of the practice of FGC will recover a substantial portion of the investment by the savings from the prevention of obstetric complications [8]. Also, reproductive health is regarded as one of the prerequisites for sustainable development and FGC is an essential component of reproductive health. Cognizant of the harmful effects inherent in the practice of FGC, the global community in 2015 adopted the Sustainable Development Goals (SDGs) and one of its targets is to eliminate all harmful practices including FGC by the year 2030 [9]. This has been heralded as the greatest commitment of the International community towards ending the practice of FGC globally [4]. The aim of the study was to determine the prevalence and predictors of female genital cutting in Nigeria based on the data from the Demographic and Health survey of 2013.

Methods

Description of study area

Nigeria lies between latitudes 4°16' and 13°53' north and longitudes 2°40' and 14°41' east on the west coast of Africa and occupies approximately 923,768 square kilometers. It shares land borders with the Republic of Benin in the west, Chad and Cameroon in the east and Niger in the north while its coast in the south lies on the Gulf of Guinea on the Atlantic Ocean. Administratively, Nigeria is divided into 36 states and Abuja, the Federal Capital territory which serves as the second tier of Government The country has a total of 774 local government areas and they serve as the third tier of government. Politically, Nigeria is divided into six geo-political zones including north-west, north-east, north-central, south-east, south-west and south-south zones.

Nigeria is made up of several ethnic groups of which Hausa, Igbo and Yoruba are the major ones. It is the most populous country in Africa and accounts for approximately 47% of the population of West Africa [7]. Its population is estimated at 195,811,331 people based on latest estimates by the United Nations [10].The country has an abundance of natural resources and is Africa's biggest oil exporter and also has the largest natural gas reserves in the continent. There are widely varied regional health indices with southern region being better than the northern part of the country. Nigeria's urbanization growth rate is estimated at 5.3% per year [7].

Study design

This is a secondary data analysis involving the 2013 Nigeria Demographic and Health Survey (NDHS). This is the most recent Demographic and Health Survey carried out in Nigeria. It was a descriptive cross sectional survey executed by the National Population Commission (NPC). The main objective of the survey was to provide updated estimates of basic social, demographic, economic and health indicators for the country.

Study population

The 2013 NDHS is the fifth in Nigeria. The previous surveys were in 1990, 1999, 2003 and 2008. A nationally representative sample of 40,320 households from 904 primary sampling units was selected. All the women aged 15-49 years who were usual members of the selected households were eligible for individual interviews. In addition to the female survey, a male survey was conducted at the same time in every second household selected for the female survey. For the purpose of this study, only the women survey was included in the analysis of the data. Basic information was obtained from the women including that on female genital cutting.

In effect, the head of selected household answered questions on the household and provided a listing of household residents as well as visitors who slept over in the household the night before the survey. All women aged 15-49 years who were either permanent residents of the households or visitors who stayed over the night in the households on the night before the survey and all men aged 15-59 years who were either permanent residents of the households or visitors who stayed over the night in the households on the night before the survey were included in the study. The data used for this analysis was the one from the women.

Sampling technique and sample size

The Primary Sampling Unit used in the survey was defined on the basis of Enumeration Areas from the 2006 national population census. During the 2006 national population census, local government areas were divided into localities and each locality was further subdivided into census enumeration areas and then clusters for convenience. Household enumeration and mapping in the selected clusters was done to produce a list of households which made up the sampling frame. The final sample size was 36,800 households selected with a minimum target of 950 completed interviews for each state.

The sample for the 2013 NDHS was a stratified sample and it was selected independently in three stages from the sampling frame. Stratification was based on urban rural classifications. In the first stage, 893 localities were selected with probability proportional to size and with independent selection in each sampling stratum. In the second stage, one enumerated area was randomly selected from most of the selected localities with an equal probability selection.

In the third stage of selection, a fixed number of 45 households were selected in every urban and rural cluster through equal probability systematic sampling based on the newly updated household listing. The total number of households sampled was 40,680 including 16,740 from the urban and 23,940 from the rural area.

Study instrument

Data collected for the 2013 NDHS involved the use of questionnaires (household questionnaire, women's questionnaire and the men's questionnaire). It was pretested and a standard protocol observed in administering them. These questionnaires were adapted to collect information on relevant demographic, social, economic factors and health status/indicators as well as information on female circumcision from eligible members of the selected households. The questionnaires were interviewer administered through face to face interview for all eligible participants.

Table 1: Socio-demographic characteristics of respondents.

Variable	Frequency (n=84320)	Percent (%)
Age of respondents		
Mean (±SD)	36.5±8.0	
Age of respondents in groups		
<30 years	17605	20.9
30-34 years	14746	17.5
35-39 years	17909	21.2
40-44 years	15656	18.6
≥45 years	18404	21.8
Number of living children		
No child	378	0.4
1-4 children	38759	46
≥5 children	45183	53.6
Educational attainment of respondents		
No formal education	39759	47.2
Primary education	19945	23.7
Secondary education	19114	22.7
Tertiary education	5502	6.5
Geo-political zone		
North central	6646	7.9
North east	13283	15.8
North west	29824	35.4
South east	10219	12.1
South south	12198	14.5
South west	12150	14.4
Gender of household head		
Male	72240	85.7
Female	12080	14.3
Place of residence		
Urban	32081	38
Rural	52239	62
Religion		
Christianity	35806	42.5
Islam	47602	56.5
Traditional religion	912	1.1
Wealth index		
Poorest	18684	22.2
Poorer	17544	20.8
Middle	16268	19.3
Richer	17488	20.7
Richest	14336	17

Data management

The female dataset - Statistical Package for Social Sciences file format was used in the study and this was obtained from the National Population Commission. Female genital cutting was measured in the 2013 NDHS by the question, 'Respondent circumcised?' and was coded as 1 for Yes and zero as No and this was the outcome variable. Also, don't know was classified as No and missing values were interpreted as No information.

For this outcome variable, a total of 84,320 respondents were selected and this represent the number of respondents with the outcome variable of interest and also complete independent variables including age, religion, socio-economic status, no of living children, place of residence, geo-political zone, educational attainment and gender of household head.

Data analysis was done using IBM Statistical Package for Social Sciences (SPSS) version 22. Frequency tables and cross tabulations were generated. Chi square test of statistical significance and multivariate analysis using binary logistic regression were used in the analysis and the level of statistical significance was determined by a p value of less than 0.05.

Multivariate analysis using binary logistic regression was used to determine the predictors of female circumcision of the respondent. Variables that had a p value of <0.20 on bivariate analysis using the Chi square test of statistical significance were entered into the logistic regression model to determine the predictors of the respondent being circumcised. Logistic regression models were reported using adjusted odds ratio, confidence interval at 95% and level of significance was determined by a p value of <0.05.

For the purpose of determining the factors associated with the circumcision of the respondent, wealth index was recoded from five categories into three including rich, middle and poor categories. Also, the age of respondents was categorized into two using the mean age of the respondents and religion was categorized into three including Christianity, Islam and Traditional religion.

Ethical approval

Permission to use the data was obtained from ORC Macro International, the agency responsible for the worldwide Demographic and Health Surveys. The NDHS 2013 was approved by the Nigerian National Health Research Ethics Committee.

Limitations of the Study

The use of primary data collected directly by the researcher would have been more appropriate and representative when compared to use of secondary data. Also, there could have been changes in data or findings due to time difference between when the data was collected and now that it was analyzed. Also, emphasis in this analysis was on respondents who had complete information concerning both the outcome variable of interest and the relevant socio-demographic characteristics thus limiting the number of respondents used in the analysis. Suffice it to say that the NDHS data is representative of the whole country which could have been difficult to achieve on an individual level and the sample size was large even when respondents with incomplete information were excluded hence assigning credibility to the results obtained.

Results

Table 1 shows the socio-demographic characteristics of the respondents. The mean age of the respondents was 36.5±8.0 years. The

Table 2: Attitude to female genital cutting.

Variable	Frequency (n=84320)	Percent (%)
Female circumcision to continue or be stopped		
Continued	20193	23.9
Depends	8036	9.5
Stopped	55353	65.7
No information	738	0.9
Female circumcision required by religion		
Yes	13614	16.1
No	69959	83
No information	747	0.9

highest proportion of the respondents, 47.2% had no formal education while the least proportion, 6.5% had attained tertiary education. Among the six geo-political zones, the highest participation, 35.4% was from the north-west geo-political zone while the least, 7.9% was from the north-central zone. Majority of the respondents, 62.0% were rural inhabitants.

Table 2 shows the attitude to female genital cutting among the respondents. Less than a quarter of the respondents, 23.9% preferred the continuation of the practice of female genital cutting while majority of the respondents, 65.7% wanted the practice to be stopped. Also, majority of the respondents, 83% were of the opinion that female circumcision is not a religious requirement.

Table 3 shows the prevalence of female genital cutting in Nigeria. More than one third of the respondents, 37.5% were circumcised. Among those who were circumcised, majority, 67.5% had flesh removed from the genital area. Majority of the cases of female circumcision, 75.1% were done by traditional circumcisers. Majority of the female circumcisions, 73.3% were done during infancy

Table 4 shows the factors associated with female genital cutting in Nigeria. Respondents who were less than 38 years old were 1.3 times less likely to be circumcised when compared with those who were 38 years and above, (95% CI: 0.74-0.79). Also, the respondents who had primary education were 1.5 times more likely to be circumcised when compared with those who had tertiary education. (95% CI: 1.42-1.63). Similarly, the respondents who live in the urban area were 1.3 times more likely to be circumcised when compared with those who reside in the rural area, (95% CI: 1.25-1.35). The respondents who were Christians were twice less likely to be circumcised when compared with those who practiced traditional religion. (95% CI: 0.37-0.51). The respondents who were classified as poor in the wealth index were 1.3 times more likely to be circumcised when compared with the people who were rich. (95% CI: 1.27-1.41).

Table 3: Prevalence of female genital cutting.

Variable	Frequency (n=84320)	Percent (%)
Respondent circumcised		
Yes	31662	37.5
No	52658	62.5
Flesh removed from genital area	**n=31662**	
Yes	21371	67.5
No	10050	31.7
No information	241	0.8
Genital area nicked without removal of flesh	**n=10050**	
Yes	1939	19.3
No	8111	80.7
Genital area sewn closed		
Yes	1776	5.6
No	2881	91.2
No information	1005	3.2
Person who performed the circumcision		
Doctor	473	1.5
Trained Nurse/midwife	2195	6.9
Other health professional	74	0.2
Traditional "Circumciser"	23776	75.1
Traditional birth attendant	2715	8.6
Other traditional practitioners	82	0.3
Don't know	1791	6.7
No information	556	1.8
Age at circumcision		
Infancy	23204	73.3
Under 5 years	763	2.4
5 -17 years	5121	16.2
18 years and above	1931	6.1
Don't know	428	1.4
No information	215	0.7

Discussion

From the results of this study, less than a quarter of the respondents, 23.9% wanted the discontinuation of female circumcision. In a six wave analysis of the Egyptian Demographic and Health Survey between 1995 and 2014, the proportion of ever married women who believed that the practice of FGC should be stopped increased from 13.9% in 1999 to 31.4% in 2014 [11]. This was attributed to the fact that the message that FGC should be stopped have permeated to all corners of the Egyptian society even though the study also concluded that poorly educated rural women were least likely to oppose the practice [11]. In a study among pregnant women in Owo, Nigeria, less than half of the respondents, 49.2% wanted the practice of FGC to be stopped [12]. However in a study in Abakaliki, southeast Nigeria, majority of the women who participated in the study, 82% did not support the practice of FGC even though they did nothing in that respect [13].

The campaign for the discontinuation of the practice must have received widespread acceptance. For example in a study among adult females in eastern Ethiopia, a higher proportion of the respondents (62.7%) had positive attitude towards the discontinuation of the practice of female genital cutting [14]. Similarly, in a study among school boys and girls in two districts of eastern Ethiopia, majority of the respondents 86% condemned the practice of genital cutting of women [15]. Surprisingly, a higher proportion of the male respondents that participated in the study expressed their preference

Table 4: Factors associated with female genital cutting among the respondents.

Variable	Respondent Circumcised (n=84320)		p value*	AOR (95% CI)**
	Yes N (%)	No N (%)		
Age of respondents in groups				
<38 years	14584 (33.0)	29553 (67.0)	<0.001	0.76 (0.74- 0.79)
≥38 years	17078 (42.5)	23105 (57.5)		1
Number of living children				
No child	123 (32.5)	255 (67.5)	0.081	0.79 (0.63- 1.01)
1-4 children	14494 (37.4)	24265 (62.6)		0.95 (0.92- 0.98)
≥5 children	17045 (37.7)	28138 (62.3)		1
Educational attainment of respondents				
No formal education	10501 (26.4)	29258 (73.6)	<0.001	1.46 (1.35- 1.58)
Primary education	9422 (47.2)	10523 (52.8)		1.52 (1.42- 1.63)
Secondary education	9588 (50.2)	9526 (49.8)		1.43 (1.34- 1.53)
Tertiary education	2151 (39.1)	3351 (60.9)		1
Geo-political zone				
North central	2249 (33.8)	4397 (66.2)	<0.001	0.22 (0.21-0.23)
North east	912 (6.9)	12371 (93.1)		0.02(0.02-0.03)
North west	7871 (26.4)	21953 (73.6)		0.12 (0.11- 0.13)
South east	7035 (68.8)	3184 (31.2)		1.05 (0.99-1.12)
South south	5343 (43.8)	6855 (56.2)		0.42 (0.40- 0.45)
South west	8252 (67.9)	3898 (32.1)		1
Region				
North	11032 (22.2)	38721 (77.8)	<0.001	NA
South	20630 (59.7)	13937 (40.3)		
Place of residence				
Urban	15572 (48.5)	16509 (51.5)	<0.001	1.30 (1.25-1.35)
Rural	16090 (30.8)	36149 (69.2)		1
Gender of household head				
Male	25607 (35.4)	46633 (64.6)	<0.001	1.0 (0.96-1.05)
Female	6055 (50.1)	6025 (49.9)		1
Religion				
Christianity	18246 (51.0)	17560 (49.0)	<0.001	0.43 (0.37-0.51)
Islam	12860 (27.0)	34742 (73.0)		0.64 (0.55- 0.76)
Traditional religion	556 (61.0)	356 (39.0)		1
Wealth index				
Poor	9978 (27.5)	26250 (72.5)	<0.001	1.34 (1.27-1.41)
Middle	6838 (42.0)	9430 (58.0)		1.19 (1.34-1.25)
Rich	14846 (46.7)	16978 (53.3)		1

*p value on bivariate analysis.
**Adjusted odds ratio, 95% confidence interval.

to marrying uncircumcised girls [15]. This increase in the proportion of respondents who want the discontinuation of the practice of FGC could be attributed to the information that there is no medical benefit associated with the practice of genital cutting of women, [1] coupled with the fact that the practice is associated with several complications [1].

A minor proportion of the respondents, 16.1% perceived female circumcision as a religious requirement. In a study in Bale region of Ethiopia, one third of the respondents considered female genital cutting as a religious rite [16]. And in another study involving Iraqi Kurdish women, 38.9% of the respondents perceived the practice as a religious requirement [17]. However, in an Egyptian survey among physicians, a minor proportion, 18% approved of the practice of

FGC and this was based mainly that it was a religious requirement [18]. Thus the study concluded that medical practitioners do confuse the status of female genital cutting as a religious requirement and as a result the researchers recommended the introduction of female genital cutting in medical education curriculum at the undergraduate level and that training programmes for physicians should have both religious and cultural dimensions [18].

From a review of the 2003 Demographic and Health Survey of Burkina Faso, there were different policy implications for the different religious groups in the quest to reduce the practice of female genital cutting. The study was of the opinion that efforts to reduce female genital cutting among Christians should be focused on education while for women who are Muslims and traditional adherents, the study advocated the involvement of religious groups and leaders in matters related to female genital cutting in a bid to reduce the practice [19]. In Nigeria, female genital cutting is practiced in all parts of country irrespective of religious affiliations. The prevalence of the practice is however lowest among Muslim women and highest among women who are traditionalists [7]. Even though the practitioners of FGC associate the practice of female genital cutting to religion, [1] the practice has been in existence before the great holy books of Bible and the Koran, [20] hence it has been in existence before the advent of Christianity and Islam [21].

The prevalence of FGC from the results of this study was 37.5% and this was higher than the 25% reported from the actual survey [7]. The difference could be attributed to the criteria used in the selection of respondents for this analysis. These proportions are lower than that obtained from a study in the Bale district of Ethiopia, where 78.5% of the women have had some form of circumcision [16]. There were also variations in the prevalence of female genital cutting from studies in different parts of Nigeria. For example, from a study in Abakaliki, southeast Nigeria, an approximate half of the respondents have had genital cutting, [13] while in a study in Lagos, southwest Nigeria, 56.3% of the respondents have experienced female genital cutting [22].

There has been a postulation that the reliability of reported forms of FGC is low, with the notion that the extent of female genital cutting is under reported [23]. However, in a study in Tanzania, there was a reported inconsistency between self-reported and clinically determined FGC in more than one fifth of the respondents. This is a pointer that the women and clinicians may be reporting the circumcision status of women incorrectly [24]. Estimates from UNICEF have it that the prevalence of female genital cutting in Nigeria is 25% [4]. and this is lower than that obtained for Somalia (98% of women), Guinea 97%, Djibouti 93% Mali 89% and Egypt 87% and lower should be higher than that for Togo 5%, Niger 2%, and Cameroun and Uganda,1% [4].Thus, it has been observed that even though there has been a decline in the prevalence of FGC in the last three years, not all countries are involved and for those who are involved, the decline is not uniform [4]. Also, the progress in the decline of FGC is acknowledged as being insufficient when related to increasing population growth with the possibility that if the trend continues that the number of girls and women undergoing FGC may rise in the next fifteen years [4].

The results of the study revealed that majority, (75.1%) of the circumcision were done by traditional circumcisers. There has been a similar observation before now, [25] and it is also in tandem with the positions of the World Health Organization and UNICEF that majority of circumcisions are done by traditional circumcisers [1,4]. The results also revealed that doctors and other health professionals also perform female circumcision, (8.6%) in Nigeria. In Egypt, over a ten year period, it was observed that the prevalence of practice of female genital cutting among daughters decreased from 88% in 1995 to 70% in 2005 [18]. Even though this was an encouraging result, it was however observed that over the same period, there was an increase in the proportion of female genital cutting performed by medical personnel from 55% to 75% [18].

In a study in Benin, Nigeria, A minor proportion of the nurses 2.8% perceived female genital cutting as a good practice and will want to continue with the practice [26]. There is a record that in Indonesia, more than 50% of girls has the procedure performed by trained medical personnel [4]. The World Health Organization is not in support of the medicalization of female genital cutting, even though the intention maybe to minimize the adverse effects of the procedure. This is based on the fact that it is considered as a practice that ought to be eradicated [25]. Furthermore, the WHO had already classified female genital cutting as a violation of the rights of women and girls, [1]. And the practice is also condemned in several countries. There have also been suggestions that physicians have an important role to play in eliminating FGC by educating the populace hence no need for their involvement in performing the procedure [25,27].

Majority of the respondents, 73.3% were circumcised during the infant period. This is similar to the findings from the World Health Organization and the UNICEF [1,4].Previously, it has been observed that it is performed on newborns, at menarche and prior to marriage [21]. In some cultures it is believed that female children may not be given out in marriage if it was not performed [28].

From the results of this study, the respondents who were of younger age group were 1.3 times less likely to be circumcised; this is similar to the result of a study among respondents in West Africa where being of older age was associated with increased odds for FGC [29]. Also, in a study among Iranian mothers, those of older age group demonstrated a greater intention to have FGC performed for their daughters [30]. While in a study in Nnewi, Nigeria, the prevalence of FGC increased with increasing age [31]. This could be an indication of decreasing prevalence of female genital cutting in the coming generations of mothers and daughters.

Education was a strong predictor of female genital cutting with those who have attained tertiary education being less likely to have female genital cutting performed when compared to the other levels of education. In a study in Lagos, Nigeria it was found that higher levels of maternal education were significantly associated with reduction in practice of female genital cutting [22]. Also, education plays an important role in the mother's decision not to circumcise her daughter [32,33]. It has already been observed that female education is one of the factors responsible for the decline so far recorded in the prevalence of female genital cutting in certain societies [34]. And female education is considered paramount in the campaign and advocacy against FGC as it was found that its prevalence decreased with increased level of education [31]. Furthermore, an educational

intervention programme has been found to be successful in improving knowledge, change beliefs and attitude of women towards female genital cutting [35].

Respondents who reside in the urban areas were 1.2 times more likely to be circumcised when compared with those who were rural inhabitants. Perhaps, since female genital cutting is said to be rooted in culture, one would have expected the prevalence to be more in the rural area. It has already been observed that prevalence of FGC in Nigeria is more in the urban when compared with the rural areas [7]. This could however be as a result of urbanization and this finding was contrary to that from a study in eastern Ethiopia where rural dwellers were more likely to be circumcised [14]. Also, in a study in Iran, it was found that mothers in the rural area feel more social pressure to permit the practice of female genital mutilation among their daughters [30]. And in Ethiopia, it was found that the odds of favoring the continuation of the practice of female genital mutilation were more among rural dwellers [36].

Also, from the results of this study, there was an increased likelihood of been circumcised among respondents who were poor or in the middle wealth index when compared with those who were in the rich wealth index. This is similar to the finding from a study in Ethiopia where it was found that being wealthy was associated with decreased odds of the woman's support of the continuation of female genital cutting [37]. In Egypt, it was also found that being in the lowest wealth quintile was a predictor of the intention to continue the practice of female genital cutting among the women [38].

Conclusion

The prevalence of female genital cutting in Nigeria is still high and majority of the procedure is performed by traditional circumcisers. There is the need for public education in discouraging the continued practice of female genital cutting and emphasis should be on the complications of the procedure and the perceived economic benefits. Education of the girl child is of immense importance in bringing the practice of female genital cutting to an end and should be supported and promoted by all including individuals, communities, agencies and governments.

Acknowledgement

The Authors express their appreciation to ORC Macro International for giving them access to the NDHS data.

References

1. World Health Organization. Fact sheet on Female genital mutilation. 2018.
2. World Health Organization. Eliminating female genital mutilation: an interagency statement. Geneva WHO. 2008.
3. UNICEF. Female genital mutilation/cutting: a statistical overview and exploration of the dynamics of change New York. UNICEF. ISBN: 978-92-806-4703-7. 2013.
4. UNICEF. Female genital cutting/cutting: a global concern. 2016.
5. Odoi AT. Female genital cutting. In; Kwawukume EY and Emuveyan EE. (Eds). Comprehensive gynecology in the tropics. Accra: Graphics packaging ltd. 2005; 268-278.
6. UNICEF. Children's and women's right in Nigeria: a wake-up call. Situation assessment and analysis. Harmful traditional practice. (FGM) NPC Abuja, UNICEF, Nigeria. 2001; 195-200.
7. National Population Commission, (NPC), ICF International. Nigeria Demographic and Health Survey 2013. Abuja, Nigeria, Rockville, Maryland, USA. NPC and ICF International. 2014.
8. Adam T, Bathija H, Bishai D, Bonnenfant YT, Darwish M, Huntington D, et al. Estimating the obstetric costs of female genital mutilation in six African countries. Bull World Health Organ. 2010; 88: 281-288.
9. United Nations Sustainable Development Goals. 2018.
10. Worldometers. Nigerian population. 2018.
11. Van Rossen R, Meekers D, Gage AJ. Trends in attitudes towards female genital mutilation among ever-married Egyptian women, evidence from the Demographic and Health Surveys, 1995-2014: paths of change. International Journal for Equity in Health. 2016; 15: 31-45.
12. Omolase CO, Akinsanya OO, Faturoti SO, Omotayo RS, Omolase BO. Attitudes towards female genital cutting among pregnant women in Owo, Nigeria. South African Family Practice. 2012; 54: 363-366.
13. Ibekwe PC, Onoh RC, Onyebuchi AK, Ezeonu PO, Ibekwe RO. Female genital mutilation in southeast Nigeria: survey on the current knowledge and practice. Journal of Public Health and Epidemiology. 2012; 4: 117-122.
14. Gebremariam K, Assefa D, Weldegebreal F. Prevalence and associated factors of female genital cutting among young adult females in Jigjiga district, eastern Ethiopia: a cross-sectional study mixed study. Int J Womens Health. 2016; 8: 357-365.
15. Abathun AD, Gele AA, Sundby J. Attitude towards the practice of female genital cutting among school boys and girls in Somali and Harari regions, eastern Ethiopia. Obstetrics and Gynecology International. 2017.
16. Bogale D, Markos D, Kaso M. Prevalence of female genital mutilation and its effects on women's health in Bale zone, Ethiopia: a cross-sectional study. BMC Public Health. 2014; 1076-1084.
17. Yasimi BA, Al-Tawil NG, Shabila NP, Al-Hadith TS. Female genital mutilation among Iraqi Kurdish women: a cross sectional study from Erbil city. BMC Public Health. 2013; 13: 809-817.
18. Refaat A. Medicalization of female genital cutting in Egypt. Eastern Mediterranean Health Journal. 2009; 15: 1379-1388.
19. Karmaker B, Kandara N, Chung D, Clarker A. Factors associated with female genital mutilation in Burkina Faso and its policy implications. Journal for Equity in Health. 2011; 10: 20-29.
20. Mathews B. Female genital mutilation: Australian law, policy and practical challenges for doctors. Med J Aust. 2011; 194: 139-141.
21. Nour NM. Female genital cutting: a persisting practice. Rev Obstet Gynecol. 2008; 1: 135-139.
22. Okunade KS, Okunowo AA, Omisakin SI, Ajepe G. An institutional survey of female genital mutilation in Lagos, southwest Nigeria. Orient Journal of Medicine. 2016; 28: 28-35.
23. Elmusharaf S, Elhadi N, Almroth L. Reliability of self-reported form of female genital mutilation and WHO classification: cross-sectional study. BMJ. 2006.
24. Klouman E, Manongi R, Klepp K. Self-reported and observed female genital cutting in rural Tanzania: associated demographic factors, HIV and sexually transmitted infections. Tropical Medicine and International Health. 2005; 10: 105-115.
25. Cook R, Dickens BM, Fathalla MF. Female genital cutting (mutilation/circumcision): ethical and legal dimensions. Int J Gynecol Obstet. 2002; 79: 281-287.
26. Onuh SO, Igberase GO, Umeora JO, Okogbenin SA, Otoide VO, Gharoro EP. Female genital mutilation: knowledge, attitude and practice among nurses. Journal of National Medical Association. 2006; 98: 409-415.
27. World Health Organization. Female genital mutilation: report of a WHO technical working group. Geneva WHO. 1995.
28. Onadeko MO, Adekunle LV. Female circumcision in Nigeria: a fact or a farce? J Trop Pediatr. 1985; 31: 180-184.

29. Sipsma HL, Chen PG, Ofori-Atta A, Ilozumba UO, Karfo K, Bradley EH. Female genital cutting: current practices and beliefs in western Africa. Bull World Health Organ. 2012; 90: 120-127.

30. Pashaei T, Ponnet K, Moeeni M, Khazaree-pool M, Mailess F. Daughters at risk of female genital mutilation: examining the determinants of mothers' intentions to allow their daughters to undergo female genital mutilation. PLoS ONE. 2016; 11.

31. Igwegbe AO, Egbuonu I. The prevalence and practice of female genital mutilation in Nnewi, Nigeria: the impact of female education. Journal of Obstetrics and Gynaecology. 2000; 20: 520-522.

32. Kandara N, Nwakeze N, Kandara SNI. Spatial distribution of female genital mutilation in Nigeria. Am J Med Hyg. 2009; 81: 784-792.

33. Alo OA, Gbadebo B. Intergenerational attitude changes regarding female genital cutting in Nigeria. Journal of Women's health. 2011; 20: 1655-1661.

34. Adedokun LA, Oduwole M, Oronsaye F, Gbogboade AO, Aliyu N, Adekunle W, et al. Trends in female circumcision between1993 and 2003 in Osun and Ogun states, Nigeria: a cohort analysis. African Journal of Reproductive Health. 2006; 10: 48-56.

35. Ekwueme OC, Ezegwui HU, Ezeoke U. Dispelling the myths and beliefs toward female genital cutting of woman assessing general outpatient services at a tertiary health institution in Enugu state, Nigeria. East Afr J Public Health. 2010; 7: 64-67.

36. Masho SW, Matthews L. Factors determining whether Ethiopian women support the continuation of female genital mutilation. International Journal of Gynaecology and Obstetrics. 2009; 107: 232-235.

37. Setegn T, Lakew Y, Deribe K. Geographical variation and factors associated with female genital mutilation among reproductive age women in Ethiopia: a national population based study. PLos One. 2016; 11.

38. Afifi M. Wealth index association with gender issues and the reproductive health of Egyptian women. 2009; 11: 29-36.

J Community Med Health Care - Volume 3 Issue 1 - 2018
Submit your Manuscript | www.austinpublishinggroup.com

Citation: Ossai EN, Aniwada EC, Nwobi EA and Ezeoke UE. Prevalence and Predictors of Female Genital Cutting in Nigeria: an Analysis of 2013 Nigeria Demographic and Health Survey. J Community Med Health Care. 2018; 3(1): 1026.