



ORIGINAL ARTICLE

Prevalence of Female Genital Mutilation and its Determinants among Pregnant Women in Benin City, Nigeria

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ABSTRACT

Background: Female genital mutilation (FGM) is a harmful cultural practice perpetuating gender inequality and violence against women and the girl child. This study assessed prevalence and determinants of FGM among pregnant women in Benin City, Edo State with a view to mitigating the practice.

Methods: A facility-based descriptive, cross-sectional study involving 400 pregnant women attending antenatal clinics in selected health facilities in Benin City, Edo State. The respondents were selected using systematic sampling technique and data collection was by pretested structured interviewer-administered questionnaire. Data was analyzed using IBM SPSS version 21.0 statistical software with statistical significance set at $p < 0.05$ and 95% confidence interval.

Results: The mean age (SD) of respondents was 30.3 (4.8) years. The prevalence of FGM among respondents was 187 (46.7%) and 77 (19.4%) of them had their daughters circumcised. Seventy-six (98.7%) and 1 (1.3%) of the daughters circumcised had mothers who were previously and not previously circumcised, respectively. Significant association exists between FGM status of respondents and their daughters ($p < 0.001$) and in relation to their intention to circumcise future daughters ($p < 0.001$). Age group ($p = 0.004$), ethnicity ($p < 0.001$), educational status ($p = 0.004$) and knowledge of FGM ($p < 0.001$) were significant factors influencing FGM practice.

Conclusion: Female genital mutilation was common among respondents studied with significant association identified between the FGM status of respondents with that of their daughters and intention to circumcise future daughters. There is need to channel appropriate FGM preventive interventions involving critical stakeholders including pregnant women to curb this harmful socio-cultural practice.

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INTRODUCTION

Female genital mutilation (FGM) is the partial or total removal of the female external genitalia or any injury to the female genital organs, whether for cultural or any other non-therapeutic reason.¹⁻² FGM is a harmful

traditional practice inflicted on girls and women worldwide and now widely recognized as a violation of their human rights.¹⁻⁴ Over 200 million girls and women have undergone FGM and are living with the consequences in over 30 high prevalence countries, mainly in Africa, South Asia, and

the Middle East. It is estimated that 30 million girls under the age of 15 years will be at risk of FGM over the next decade and by 2050, this figure is projected to increase to nearly 500 million girls and women if appropriate interventions to address FGM are not implemented.²

It is estimated that 3 million girls in Africa are at risk of FGM annually and more worrisome is that the prevalence remains alarmingly high; in Nigeria the prevalence ranges from 25-53.2% with equally high rates (31.3-36.2%) reported among pregnant women.⁵⁻¹⁰ Although, the national prevalence of FGM in Nigeria stands at 25% on average among adult women, varying prevalence of 49% (South East), 47.5% (South West), 25.8% (South South), 20.7% (North West), 9.9% (North Central) and 2.9% (North East) are also reported across the respective geopolitical zones of the country.⁵ The prevalence of FGM is highest among females whose mothers were circumcised, with parents playing significant roles in perpetuating its occurrence, although 64% of women in Nigeria who have been circumcised wish that FGM should be discontinued.⁵⁻⁶

Female Genital Mutilation is a violation of the human rights (civil, cultural, economic, political and social) of girls and women. It is a practice influenced by deep cultural ties and widely accepted to guarantee a girl's proper marriage, family status, chastity, beauty and/or family honour in communities where it is practiced.¹⁻⁴ Previous studies reveal that although awareness of the FGM was high, the knowledge of health consequences of FGM was poor among adult population in developing countries like Nigeria.⁵⁻¹² Several literature have reported a wide range of consequences of FGM such as severe pain, bleeding, shock, difficulty in passing urine and faeces.³⁻⁴ Furthermore, infections such as

urinary tract infections, hepatitis B, C and human immunodeficiency virus infections (HIV); posttraumatic stress disorder, anxiety, depression, memory loss with eating and sleeping disorders have been reported.^{3-4,13-15} Other complications include low libido, apareunia or dyspareunia, chronic pain, dysmenorrhoea, gynaetresia, cryptomenorrhoea, vaginal fistulae, labial agglutination, hypertrophic scar/keloids, clitoridal retention cysts, dermoid cysts, vaginal lacerations during coitus, straining at micturition, genital tract lacerations, especially during vaginal delivery, obstructed labour, increased rate of caesarean delivery, postpartum haemorrhage and perinatal deaths depending on the type of FGM.¹⁵⁻¹⁸

This human right issue is not only peculiar to developing countries like Nigeria but also being reported in the Americas, including Europe, Australia and North America, which in the past few decades, have witnessed influx of migrants from countries where FGM practice remains dominant.^{2, 12} The act of FGM is often carried out by traditional circumcisers/cutters under unhygienic and painful circumstances without analgesia exposing women and the girl child.³⁻⁴ The practice of FGM remains perpetuated by families in several communities despite being aware of the potential harm it presents due to its deep cultural basis.¹⁻⁴ The sustained act of FGM especially in developing countries can be described as a sociocultural perpetuation of gender inequality and discrimination against women and the girl child, despite on-going global concerted efforts to eliminate FGM.¹⁹⁻²¹ It is hopeful that with global concerted effort and synergy, FGM will be eliminated to help actualize the sustainable development goal (SDG) 5. ²² Nigeria ratified the Maputo protocol and was one of the countries that sponsored the resolution at the 46th World Health Assembly in 1993 calling for the

eradication of FGM in all nations, but the only federal law against FGM was signed into law 22 years after.²³ Similar stringent anti-FGM laws exist in France, Canada, Belgium, Ghana, Sweden, and the United Kingdom.²⁴ The recent Federal law in Nigeria which was signed into law in May 2015 bans FGM and other harmful traditional practices (HTPs) especially against women and the girl child.²³ However, this violence against persons prohibition act (VAPP) applies only to the Federal Capital Territory (FCT) of Abuja and it is up to the discretion of each of the 36 states of Nigeria to domesticate the legislation in its territory.²³ In Edo State, a legislative bill against FGM has been in existence since late 1999, making it punishable under the law for any person or group of persons to be engaged in the act of FGM with a fine and/or 6 months imprisonment as penalty. Despite this legislative bill its enforcement has been poor.²⁵

Pregnant women are a potential resource that can be harnessed to help bridge the gap between the older generation of mothers who have experienced and were exposed to this harmful socio-cultural practice and future generation of women and the girl child who are at risk. This study will provide an opportunity to identify factors influencing FGM practice among this study population and aid development of intervention to tackle its occurrence. Therefore, this study assessed prevalence and determinants of FGM among pregnant women in Benin City, Edo State with a view to mitigating this harmful socio-cultural practice.

METHODOLOGY

Edo State is located in the south-south geopolitical zone of Nigeria, with Benin City as state capital. Benin City comprises three local government areas viz, Oredo, Egor and Ikpoba-Okha Local Government Areas,

respectively.²⁶ Benin City has a large proliferation of health facilities estimated at 129 health facilities. This study was conducted in two major health facilities in Benin City, Edo State chosen purposively due to their large antenatal clientele - University of Benin Teaching Hospital (UBTH), a tertiary health facility and Stella Obasanjo Hospital, a secondary health facility.²⁷⁻²⁸ The major ethnic groups include Benin, Esan, Etsako and other indigenous and non-indigenous tribes. The industrial undertakings in the State include farming, carving, saw milling, rubber processing, cement, textile production, brewing, flour milling, etc. ²⁶ The high literacy rate²⁹ (75.6%) in the State is supported by the large distribution of public and private primary, secondary and tertiary educational institutions.

A facility-based descriptive cross-sectional study design was utilized for this study, conducted between August 2016 and July 2017. The study population comprised women of reproductive age (15-49 years) who were currently pregnant and attending antenatal clinics in University of Benin Teaching Hospital (UBTH) and Stella Obasanjo Hospital Benin City, Edo State. A minimum sample size of 400 was calculated using Cochran formula³⁰ based on 31.3% prevalence of FGM among pregnant women from a previous study.⁸ The respondents were selected using systematic sampling technique based on average daily attendance of 100 antenatal clientele visiting each health facility and present prior to commencement of daily questionnaire administration till the required calculated sample size of study was achieved.

Pretesting of structured questionnaires was carried out among antenatal clientele at Ekiadolor Primary Health Care centre. The pretested structured questionnaires were interviewer administered to respondents in

ANC clinics at UBTH and Stella Obasanjo Hospital Benin. The questionnaire was structured into three sections addressing the socio-demographic characteristics, knowledge and practice of FGM. The level of knowledge of FGM among pregnant women was assessed based on a seven question score system developed and validated by the researcher with a Cronbach's alpha score of 0.88. A score of "1" was given to every correct response and a score of "0" for every incorrect response giving a total point score of "7". The total scores for the respondents was converted to percentages. A total percentage score of 50.0% and above was graded as good knowledge of FGM while total score less than 50.0% was graded as poor knowledge. The practice of FGM was ascertained by a single question on previous history of FGM.

Data gathered was collated and screened for completeness after which they were serially entered into IBM SPSS version 21.0 software for analysis with statistical significance set at $p < 0.05$ and 95% confidence interval. Ethical approval was obtained from the Ethics and Research Committee of College of Medical Sciences, University of Benin, Benin City. Approval to conduct study was obtained from Departments of Obstetrics and Gynecology, University of Benin Teaching Hospital and Stella-Obasanjo Hospital Benin prior to commencement of the study. Finally, individual informed consent was also obtained from each respondent prior to questionnaire administration.

RESULTS

Four hundred pregnant women with mean age (SD) of 30.3 (4.8) years were studied. More than half of the respondents, 243 (60.8%) had tertiary level of education and greater than four-fifth 377 (94.4%) were married. Over a quarter, 141 (35.3%) were Benin and 383

(95.8%) were Christians. Three hundred and eighty (95.0%) of them were ever married of which 358 (94.2%) were in monogamous setting while 370 (92.5%) of total respondents studied had at most 4 children (Table 1)

Table 1: Socio-demographic Characteristics of respondents

Variable	Frequency (%)
Age (years)	
20-29	178 (44.5)
30-39	192 (48.0)
40-49	30 (7.5)
Mean age(SD)	30.3 (4.8)
Educational Status	
No Formal Education	1 (0.2)
Primary Completed	79 (19.8)
Secondary Completed	77 (19.2)
Tertiary Completed	243 (60.8)
Marital Status	
Never Married*	20 (5.0)
Ever Married**	380 (95.0)
Ethnic Group	
Benin	141 (35.3)
Igbo	82 (20.5)
Esan	52 (13.0)
Yoruba	47 (11.8)
Urhobo	30 (7.5)
Etsako	28 (7.0)
Others	20 (5.0)
Religion	
Christianity	383 (95.8)
Islam	15 (3.8)
African Traditional Religion	2 (0.5)
Marriage Type (n=380)	
Monogamy	358 (94.2)
Polygamy	22 (5.8)
Parity	
≤4	370 (92.4)
>4	30 (7.6)
Total	400 (100.0)
Never married*- Single 20 (5.0%); Ever married** - widow 3 (0.8%) and married 377 (94.2%)	

In relation to the level of knowledge of FGM (Table 2), all respondents studied were aware of the term FGM, 248 (62.0%) had good knowledge while 152 (38.0%) had poor knowledge of FGM. Table 3 shows that 187 (46.8%) of pregnant women were circumcised with 77 (19.4%) of their daughters also circumcised. Traditional female circumcisers 68 (88.3%) were the major practitioners. The respondents and their spouses 73 (94.8%) were the major decision makers for their daughters' circumcision. Among circumcised respondents studied, 76 (40.3%) and 96 (51.3%) of them, respectively had circumcised their daughters and were willing to circumcise their future daughters.

Table 2: Knowledge of Female Genital Mutilation (FGM) among respondents

Variable	Frequency (%)
Awareness of FGM	
Yes	400 (100.0)
No	0 (0.0)
Knowledge of Definition of FGM	
Correct	333 (83.3)
Incorrect	67 (16.7)
Awareness of FGM as a crime in Nigeria	
Yes	197 (49.0)
No	203 (50.3)
Awareness of any law against FGM in Nigeria	
Yes	192 (48.0)
No	208 (52.0)
Is female genital mutilation a violation of the rights of the girl child?	
Yes	308 (77.0)
No	92 (23.0)
Awareness of health dangers of FGM	
Yes	143 (35.8)
No	257 (64.2)
Awareness of health dangers of FGM	
Yes	317 (79.3)
No	83 (20.7)
Overall level of knowledge of FGM	
Good knowledge	248 (62.0)
Poor knowledge	152 (38.0)
Total	400 (100.0)

Table 3: Female genital mutilation practices among respondents

Variable	Frequency (%)
Practice of FGM (n=400)	
Yes	187 (46.8)
No	213 (53.2)
Do you have a daughter who was circumcised? (n=400)	
Yes	77 (19.4)
No	323 (80.6)
Who carried out the circumcision? (n=77)	
Traditional female circumciser	68 (88.3)
Traditional Birth Attendant	3 (3.9)
Doctor	4 (5.2)
Nurse	2 (2.6)
Who were the decision makers for the circumcision? (n=77)	
Self only	2 (2.6)
Spouse only	2 (2.6)
Self and spouse	73 (94.8)

Table 4 shows that a significant association exist between the circumcision status of pregnant women and that of their daughters as 76 (40.3%) of those who had been circumcised compared with 1 (0.5%) of those who had not been circumcised had circumcised their daughter, ($p < 0.001$). This association was also identified in relation to intention to circumcise their daughters in the future. Ninety-six (51.3%) of those who had been circumcised compared with 8 (3.8%) of those who had not been circumcised intended to circumcise future daughters, ($p < 0.001$).

In relation to determinants of FGM practices (Table 5), 71 (38.2%) respondents in 20-29 years age group compared to 10 (33.3%) in 40-49 years age group were circumcised ($p = 0.004$). Furthermore, 89 (3.1%) of Benin respondents compared to 12 (40.0%) of Urhobo respondents were circumcised ($p < 0.001$); 46 (58.2%) of respondents with primary completed level of education

compared to 99 (40.7%) with tertiary completed level of education were circumcised (p=0.004). One hundred and two (67.1%) of respondents with poor level of knowledge on FGM compared to 85 (34.3%)

with good level of knowledge on FGM were circumcised (p<0.001). Parity (p=0.250), religion (p=0.188) and marital status (p=0.124) were not identified as significant determinants of female genital mutilation.

Table 4: Relationship between respondents' circumcision status with that of their daughters and their intention to circumcise future daughters

Variable	FGM status of respondents		Test Statistic	p-value
	Circumcised (n=187)	Not circumcised (n=213)		
Daughters' circumcision status				
Circumcised	76 (40.3)	1 (0.5)	x ² =103.381	< 0.001
Not Circumcised	111 (59.7)	212 (99.5)		
Intention to circumcise future daughters				
Intended	96 (51.3)	8 (3.8)	x ² =71.956	< 0.001
Not Intended	91 (48.7)	205 (96.2)		

Table 5: Determinants of FGM practices among respondents

Variable	Practice of FGM		Test statistic	p-value
	Yes n (%)	No n (%)		
Age group (years)				
20-29	71 (38.2)	115 (61.8)	x ² = 11.030	0.004
30-39	106 (55.2)	86 (44.8)		
40-49	10 (33.3)	12 (66.7)		
Ethnic group				
Benin	89 (63.1)	52 (36.9)	x ² = 30.301	<0.001
Igbo	18 (34.6)	34 (65.4)		
Esan	35 (42.7)	47 (57.3)		
Yoruba	22 (46.8)	25 (53.2)		
Urhobo	12 (40.0)	18 (60.0)		
Others*	11 (22.9)	37 (77.1)		
Educational Status				
Non formal Education	0 (0.0)	1 (100.0)	x ² = 13.210	0.004
Primary	46 (58.2)	33 (41.8)		
Secondary	42 (54.5)	35 (45.5)		
Tertiary	99 (40.7)	144 (59.3)		
Religion				
Christianity	177 (46.2)	206 (53.8)	x ² = 3.346	0.188
Islam	8 (53.3)	7 (46.7)		
ATR	2 (1.3)	0 (0.0)		
Parity				
≤4	176 (47.6)	194 (52.4)	x ² =1.325	0.250
>4	11 (36.7)	19 (63.3)		
Marital Status				
Never married*	6 (30.0)	14 (70.0)	x ² = 2.367	0.125
Ever married*	181(47.6)	199 (52.4)		
Overall level of Knowledge of FGM				
Poor	102 (67.1)	50 (32.9)	x ² = 40.702	<0.001
Good	85 (34.3)	163 (65.7)		

DISCUSSION

This study identified that all respondent studied were aware of the term “FGM” and about two-third of them had good knowledge of FGM. This is in line with findings from previous studies in Edo State (2015, 2016),^{6, 11} Kano (2003),⁷ Jos (2010)⁸ and the 2013 Nigeria Demographic Health Survey.⁵ This high level of awareness and knowledge on FGM could be attributed to the urban location of the study area and the increasing sensitization campaigns against FGM and other harmful cultural practices in the study area. Findings from this study revealed that four-fifth of study participants had completed at least secondary level of education and could have been exposed to additional information on FGM through the formal educational platform. The level of knowledge reported in this study could be attributed to exposure of respondents to growing body of evidence reporting the negative health consequences associated with FGM. Female Genital Mutilation (FGM) has been reported to having no health benefits but rather associated with short term and long term negative consequences.^{3-4, 13-16, 19-21}

The prevalence of FGM was high (46.8%) among pregnant women studied with over one-third of their daughters also circumcised. This finding is higher compared to NDHS report of 2013 (25%)⁵ and other studies in Edo State (28.7%)⁶, Kano (31.3%)⁷ and Jos (36.2%)⁸. This raises very serious concern with regard to a possible rise in the occurrence of FGM or increased reporting by respondents due to better awareness from growing sensitization campaign against this harmful traditional practices in public domains. This relative increase could also be associated to the fact that FGM is deeply rooted in culture in the people studied. This stance on cultural basis for FGM have been reported in literature¹⁻⁴

Furthermore, this high prevalence of FGM raises a lot of questions on the effectiveness and level of enforcement of the recent violence against persons prohibition act (VAPP) of 2015²³ and existing FGM legislation in Edo State^{6,25} in tackling FGM. This study further revealed that pregnant women and their spouses were key decision makers encouraging the circumcision of their daughters. More concerted and coordinated efforts are therefore needed to curb this growing public health challenge in Nigeria, through constructive engagement of pregnant women and their spouses; by including FGM and other harmful cultural practices sensitization into antenatal care (ANC) health education sessions, to enable them imbibe better behavioral changes against this harmful cultural practice.

It was also identified in this study that FGM status of pregnant women was significantly associated with circumcision status of their daughters and their intention to circumcise their future daughters. By implication, if significant progress is to be made towards elimination of FGM, pregnant women must be adequately engaged, as a vital link to halting this wicked act against women and the girl child that is supported and encouraged by women. This observation is very encouraging and if harnessed in the near future could help curb the promotion of this harmful traditional practice. Pregnant women to a large extent provide a very useful resource to be harnessed to help eliminate FGM in Nigeria. This finding has also been reported in literature that FGM is common practice and have been transferred from generation to generation in communities where the practice is prevalent or have been imported into.^{1-4,10,17-18,31-32}

This study also identified that the occurrence of FGM was significantly higher among older respondents than younger ones. This is similar

to findings from a study conducted in Okada, Edo State¹¹, Southern Iran³¹ and Eastern Ethiopia³². This could be due to growing enlightenment, human rights sensitization against FGM and other harmful cultural practices among the younger women compared to the older women. Furthermore, educational status of pregnant women was a significant factor influencing the occurrence of FGM; this finding is similar to finding from a recent study in southern Iran³¹ and Eastern Ethiopia,³² but in contrast to findings from another study in Okada, Edo State⁶. This findings further strengthen the important role education can play in information building, enlightenment on rights and privileges of women and the girl child in tackling FGM and other harmful traditional practices in Nigeria and other parts of the world.

Finally, the prevalence of FGM was significantly lower among pregnant women who had good level of knowledge of FGM compared to those who had poor knowledge. This further strengthen the very significant role knowledge of health intervention and public health issues can have in promoting health practices especially in relation to curtailing harmful health practices. A well-coordinated health education intervention involving all relevant stakeholders especially pregnant women using the antenatal care (ANC) as a valuable platform is urgently required to tackle FGM and other harmful cultural practices affecting women and the girl child. This will help protect their fundamental human rights, health and actualize the Sustainable Development Goal (SDG) 5.

Limitations of study

The findings of this study were based on self-report, so it was not possible to validate the claims made by respondents in the course of questionnaire administration. Also recall bias

might influence the validity of the findings. Finally, qualitative research such as in-depth interviews and focused group discussions would have enriched research findings.

Conclusion

Female genital mutilation is common among pregnant women in Benin City, Edo State, with significant association identified between the FGM status of respondents, their daughters and intention to circumcise future daughters. There is need to channel appropriate FGM preventive measures and health education interventions to critical stakeholders especially pregnant women during antenatal care (ANC) sessions to curb this harmful socio-cultural practice in our communities.

Competing interest: We wish to state that this study is free of any competing interest and was fully sponsored by the authors.

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