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ORIGINAL RESEARCH

Factors associated with the knowledge and attitude towards Female Genital Mutilation among antenatal clinic attendees in Southern Nigeria

Obi AI*[1,2], Obarisiagbon OE[1], Igbinadolor OL[1], Fatai KM[1], Adesoye OO[3]

[1]Department of Community Health, University of Benin, Benin City, PMB 1154, Edo State
[2]Department of Community Health, University of Benin Teaching Hospital, Benin City, PMB 1111, Edo State
[3]Department of Community Medicine, Delta State University Teaching Hospital, Oghara, Delta State

*Correspondence: Dr. AI Obi, Department of Community Health, University of Benin, Benin City, PMB 1154, Edo State; Email: andrew.obi@cerhi.uniben.edu; ORCID – https:orcid.org/0000-0002-3701-1163

Abstract

Background: Female Genital Mutilation (FGM) remains a common cultural practice in Benin City, Edo State and by extension, Nigeria. The knowledge and attitude towards FGM may play significant roles in influencing this harmful socio-cultural practice.
Objective: To identify factors associated with knowledge and attitude towards female genital mutilation (FGM) among Antenatal Clinic (ANC) attendees in selected health facilities in Benin City, Edo State.
Methods: A facility-based, descriptive, cross-sectional study was conducted involving 400 pregnant women recruited by systematic sampling technique from selected health facilities in Benin City, Edo State. A pre-tested, interviewer-administered questionnaire was utilized for data collection from consenting pregnant women attending antenatal care clinics in selected public tertiary and secondary health facilities in the study area. Information related to socio-demographic characteristics, knowledge, and attitude towards FGM were collected.
Results: The mean age of the respondents was 30.3±4.8 years. All the respondents were aware of the term Female Genital Mutilation. Two hundred and forty-eight (62%) and 302 (75.5%) had good knowledge and negative attitude towards FGM respectively. Age group ($p = 0.005$), religion ($p = 0.007$) and educational status ($p < 0.001$) were identified as significant factors influencing knowledge of FGM while in relation to attitude towards FGM, knowledge of FGM ($p<0.001$) had significant influence.
Conclusion: This study identified a gap between knowledge and attitude towards FGM among the respondents. Good knowledge of FGM significantly influenced attitude towards FGM. There is a need to scale up health sensitization during ANC sessions to bridge the gap identified.

Keywords: Antenatal Clinic, Benin City, Female Genital Mutilation, Knowledge, Perception.

Introduction

Female Genital Mutilation (FGM) is inclusive of all procedures which involve the partial or complete removal of the female genitalia or any injury to the female genital organs, whether for cultural or any non-therapeutic reasons. [1] FGM occurs in over 28 countries globally, [2] with an estimated three million girls at risk of FGM annually and more than 130 million cases are reported worldwide. [3] In Nigeria, a national average of women

circumcision of 25% had been reported. [4] Despite global efforts towards ending FGM, it appears not to be on decline, [5], due to deep and varied socio-cultural reasons such as the preservation of group identity, female purity, maintenance of cleanliness, the assurance of the woman's marriageability, belief that the clitoris is toxic and may cause a baby's death while crossing through the vaginal (birth) canal.[2] Cutting the clitoris during female circumcision is believed to enhance a baby's chance of survival during childbirth hence, the perpetuation of FGM in those cultures.[2,6]

FGM is a violation of the fundamental human rights of the girl-child and women. [1-3] Perception has been cited in studies, to have a strong influence on people's belief system and inclination to health practices, especially with regards to several harmful practices such as FGM, which could have debilitating consequences on health and wellbeing. [7-10] FGM is often carried out by traditional practitioners/circumcisers, including traditional midwives and barbers, under unhygienic conditions and without anaesthesia, using scissors, razor blades and broken glass in some instances. The consequences include uncontrolled bleeding, risk of transmission of blood-borne infections such as Hepatitis B and C and Human Immunodeficiency Virus (HIV), severe pain, fever, wound sepsis, and death. [1, 11] Other long term complications such as dysmenorrhea, dyspareunia, recurrent vaginal and urological infections, depression amongst many others, depending on the extent of the injury, have been reported in the literature. [1, 11]

In spite of the numerous consequences that have been highlighted in the literature, FGM remains highly prevalent with an estimated 3 million girls in Africa at risk of FGM annually. In Nigeria, the prevalence of FGM in the literature (25-53.2%) tallies with high prevalence rates (31.3-36.2%) reported among pregnant women. [3,4,7,12,13] In Edo State, recent studies revealed the prevalence rates of FGM as 28.7-46.7%, [12,13] higher than the reported national average of 25% from the 2013 NDHS report. [4] This is possibly due to numerous socio-cultural and religious factors. Pregnant women are a potential resource to engage to bridge the gap between the older generation of mothers who have experienced FGM and future generation of women and the girl-child who may be at risk of FGM. It has been identified that the intention to circumcise a future unborn female child is a significant determinant for female circumcision among pregnant women in Edo State and parents are the major decision-makers in the perpetuation of this harmful socio-cultural act. [12,13] This study was conducted to identify factors influencing knowledge and attitude towards FGM, among antenatal clinic attendees, to reduce the prevalence of the condition.

Methods

The study was carried out in two selected health facilities in Benin City, Edo State. Benin City is the capital of Edo State and is located at 6.26º North latitude, 5.41ºEast longitude and 80 meters elevation above the sea level. Edo State has a projected population of 3,233,366 inhabitants based on the 2006 census. [14] There are about 34 public health facilities in Benin City. [15] The two health facilities selected included a tertiary (University of Benin Teaching Hospital) and a secondary public health facility (Stella Obasanjo Hospital) both located within Benin City; these facilities were selected due to their large antenatal clinic attendance.

A facility-based, descriptive, cross-sectional design was utilised for this study which was conducted between August 2016 and July 2017. The study population consisted of women of reproductive age (15-49 years) who were pregnant and attending antenatal clinics at the selected facilities. A minimum sample size of 400 (200 per health facility selected)

was calculated using the Cochrane formula, [16] based on a 46.8% prevalence rate of FGM among pregnant women from a previous study. [12] A systematic sampling technique was used to select the respondents based on the sample frame on each antenatal clinic day, the participants were continuously recruited daily till the sample size of two (200) hundred was reached for each facility.

Information was obtained from the respondents using semi-structured, interviewer-administered questionnaires. The questionnaire was structured into three sections, addressing socio-demographic characteristics, knowledge, and attitude towards FGM. A total of seven questions were used to compute the level of knowledge of FGM among antenatal attendees with a reliability (Cronbach's alpha) score of 0.88; a point score of one (1) was given for every correct response and zero (0) for all incorrect responses, giving a total point score of seven (7). The total point score for knowledge of FGM was converted to percentages. A total percentage score of 50.0% and above was graded as good knowledge of FGM, while a total score of less than 50.0% was graded as poor knowledge of FGM.

The attitude towards FGM was computed using seven questions with reliability (Cronbach's alpha) score of 0.76. Every appropriate response was given a point score of one (1) and every inappropriate response was scored zero (0), giving a total point score of seven (7). The total point score for attitude towards FGM was converted to percentages. A total percentage score of 50.0% and above was graded as a positive attitude, meaning the respondent is inclined (supports) towards FGM, while total percentage score of less than 50.0% was graded as a negative attitude, meaning the response is not inclined (does not support) towards FGM.

Ethical clearance to conduct this research was obtained from the University of Benin Teaching Hospital Ethics and Research Committee while institutional approval was obtained from the Head of Department, Obstetrics and Gynaecology, UBTH and Stella Obasanjo Hospital. Written informed consent was obtained from each respondent before conducting interviews.

The data collected was collated and screened for completeness after which they were entered into the IBM-SPSS version 21.0 statistical software for analysis with statistical significance set at $p < 0.050$ at 95% confidence interval.

Results

Four hundred pregnant women participated in this study. The mean age of the respondents was 30.3±4.8 years. The majority of the respondents, 243 (60.8%) had the tertiary level of education and more than four-fifth (380; 95.0%) was ever married. Over a third (141; 35.3%) of the respondents belonged to Benin ethnic group while greater than four-fifth (383; 95.8%) were Christians. Monogamy was more commonly practiced (358; 94.2%) among the respondents as shown in Table I.

All the respondents were aware of the term FGM but less than half (49.3%) knew FGM is outlawed in Nigeria. Over two-thirds (77.0%) knew FGM violates the rights of a child while slightly over a quarter (25.3%) disagreed it had any health benefits. The majority knew about the health dangers FGM poses. Overall, a greater proportion (62.0%) had good knowledge of FGM as shown in Table II. Concerning the factors associated with knowledge of FGM (Table III), the age group of respondents was significantly associated with the knowledge of FGM ($p = 0.005$). The knowledge increased with increasing age group; [120 (64.5%) in 20-29 years age group compared to 20 (90.0%) in 40-49 years age group], had good knowledge.

Table I: Socio-demographic characteristics of respondents

Variables	Frequency	Percentage
Age group (years)		
20-29	178	44.5
30-39	192	48.0
40-49	30	7.5
Mean age (SD)	**30.3±4.8 years**	
Educational Status		
No formal and Primary	80	20.0
Secondary	77	19.3
Tertiary	243	60.7
Marital Status		
Never married*	20	5.0
Ever married*	380	95.0
Ethnic Groups		
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
Traditional Religion	2	0.5
Marriage type		
Monogamy	358	94.2
Polygamy	26	5.8
Parity		
≤4	370	92.4
>4	30	7.6

Never married*. Single 20 (5.0%); Ever married
Widow 3 (0.8%) and married 377 (94.2%)

Thirty-one (40.3%) of the respondents with completed secondary level of education compared with those with completed tertiary level of education (180; 74.1%), had good knowledge (p<0.001). Ethnic group (p = 0.115), parity (p = 0.271) and marital status (p = 0.438) were not significantly associated with the knowledge of FGM.

In terms of the attitude towards FGM, 302 (75.5%) of the respondents had a negative attitude towards (did not support) FGM compared to 98 (24.5%) that had a positive attitude towards (supported) FGM as shown in Table IV. Table V shows the factors associated with the attitude of the respondents towards FGM. Knowledge of FGM was the only factor significantly associated with an attitude towards FGM: 219 (88.3%) respondents with good knowledge had a negative attitude towards FGM compared to 83 (54.6%) with poor knowledge (p<0.001). Age group (p = 0.318), ethnicity (p = 0.059), religion (p = 0.070), marital status (p = 0.070), parity (p = 0.070) were not significantly associated with attitude towards FGM.

Table II: Knowledge of Female Genital Mutilation among respondents

Variables	Frequency	Percentages
Awareness of FGM		
Yes	400	100.0
No	0	0.0
Awareness of FGM as a crime in Nigeria		
Yes	197	49.3
No	203	50.8
Awareness of any law against female genital mutilation in Nigeria		
Yes	192	48.0
No	208	52.0
Awareness of health benefits		
Yes	299	74.7
No	101	25.3
Awareness of health dangers of FGM		
Yes	317	79.3
No	83	20.8
Awareness if FGM is a violation of the rights of the girl-child		
Yes	308	77.0
No	92	23.0
Overall level of knowledge of FGM		
Good knowledge	248	62.0
Poor knowledge	152	38.0

Discussion

A remarkably high proportion of the respondents were of Benin extraction, possibly a reflection of the location of the study. The level of awareness of FGM among the respondents was high and they also had good knowledge of FGM as a harmful cultural practice. This high level of awareness and knowledge of FGM among respondents could be attributed to the urban setting of the study area and the observation that the majority of them had completed tertiary level of education. This implies that increasing the level of and support for, formal education is an important factor to consider in raising awareness and knowledge on FGM in the study area. These findings are similar to the reports from a study in Osun State, south-west Nigeria. [17] The high level of awareness and knowledge of FGM could also be attributed to the high prevalence of FGM as cultural practice in the study population. A recent study also identified FGM as a common cultural practice in Edo State. [12]

Furthermore, the present study identified the age group in years among antenatal attendees, as significantly associated with knowledge of FGM. As people get older, it is plausible that they could be exposed to both formal and informal education and this plays a vital role in shaping their knowledge about health and other socio-cultural issues. This, to a large extent, can affect their critical thinking and engagement capacity, including their level of objectivity concerning varying subject matters such as FGM and other harmful cultural practices. The present study also revealed that older respondents had a better knowledge of FGM compared to younger respondents; this implies that the knowledge about FGM increases with age.

Table III: Determinants of knowledge of Female Genital Mutilation among respondents

Variables	Knowledge				Statistics	*P* values
	Good	(%)	Poor	(%)		
Age group (years)						
20-29	120	64.5	66	35.5	$\chi^2 = 16.234$	0.005
30-39	108	56.3	84	43.7		
40-49	20	90.9	2	9.1		
Ethnic groups						
Benin	77	54.6	64	45.4	$\chi^2 = 8.866$	0.115
Esan	31	59.6	21	40.4		
Igbo	58	70.7	24	29.3		
Yoruba	27	57.4	20	42.6		
Urhobo	21	70.0	9	30.0		
Others	34	70.8	14	29.2		
Educational status						
None formal/ primary	37	46.3	43	53.7	FE = 39.193	<0.001
Secondary	31	40.3	46	59.7		
Tertiary	180	74.1	63	25.9		
Religion						
Christianity	243	63.4	140	36.6	$\chi^2 = 8.411$	0.015
Islam	4	26.7	11	73.3		
Traditional Religion	1	50.0	1	50.0		
Marital status						
Never married	17	85.0	3	15.0	$\chi^2 = 0.601$	0.438
Ever married	295	77.6	85	22.4		
Parity						
≤4	291	99.0	3	31.0	$\chi^2 = 1.210$	0.271
>4	21	19.8	85	80.2		

FE- Fisher's Exact Test

Less than half of the respondents were aware of the existing legislature against FGM as a way of addressing the ills associated with the cultural practice. The extent to which this law is helping to curb this societal ill against women and the girl child remains a public health concern. [12, 17-19] It should also be stated that these legislations should drive continued and purposeful advocacy for the implementation of stringent measures against FGM and all other gender-based violence issues, through increased advocacy and sensitization for girl child education, if significant progress is to be made towards addressing this socio-cultural ill in the society. [20]

Concerning attitude towards FGM, over four-fifth of the respondents was not in support of the sustenance of FGM as a good cultural practice. This is in keeping with the findings from studies conducted in Owo [18] and

Abakaliki, [21] both in Nigeria. It was also observed that a high proportion of the respondents were not willing to recommend FGM to other women.

Table IV: Attitude of respondents towards Female Genital Mutilation

Variables	Attitudinal Response			
	Appropriate	%	Inappropriate	%
FGM is a good tradition that must be maintained	328	82.0	72	18.0
FGM is a religious requirement that must be met by the religious group	354	88.5	46	11.5
Women should be educated on the effects of FGM	370	92.5	30	6.5
FGM is a criterion for the girl-child to be accepted into female social group	349	87.3	51	11.7
FGM will be recommended to another woman	364	91.0	36	9.0
Daughter would be allowed to be circumcised	313	78.3	87	21.7
FGM should be encouraged by the community leader	311	77.8	79	22.2
Overall Attitude towards FGM	**Positive**		**Negative**	
Frequency (%)	98	24.5	302	75.5

This could be due to the increasing awareness and education on the debilitating effects of FGM on women and the girl children. This is instructive since most of the respondents had completed at least, the secondary level of formal education. This observation, concerning empowering women and the girl children with formal education, if scaled up, could make the practice of FGM less popular and in the long term, eradicated.

The observation of high support for FGM among respondents and intention to circumcise their daughters in the future could give an idea of very strong background socio-cultural factors fuelling the perpetuation of this cultural ill. This needs to be further explored in-depth, possibly through qualitative research such as focus group discussions, in-depth interviews, and key informant interviews, involving critical stakeholders, including but not limited to, pregnant women. It is well known in African literature that the practice of FGM has a high likelihood of generational transfer, especially in communities where it is commonly practiced. [12, 17, 22-24]

Finally, the highest proportion of the respondents with a negative attitude towards FGM was in the younger population (age group) studied compared with those who had a positive attitude. This could be the result of better adaptability to modern trends and practices among the younger population, especially in this era of information technology, where general information is available at one's fingertips through various computer devices. The younger respondents could be aware of several reports indicating the lack of health benefits of FGM and other numerous health complications. The younger women and the girl children could be harnessed as a useful asset to increase the level of sensitization and public awareness against harmful cultural practices such as FGM. Furthermore, the observation could also be linked to the increasing level of completed formal education and access to the internet among women and the girl children in the

study area. The benefit of educating the girl child as "generation next" have been suggested in a recent study carried out in Okada, Edo State, [15], where education of the girl child was observed to be very critical to influencing women's opinion concerning harmful cultural practices, especially FGM, through creation of awareness and sensitization on the negative consequences of harmful cultural practices.

Table V: Factors associated with attitude towards Female Genital Mutilation

Variables	Attitude towards FGM				Statistics	*P* values
	Negative	%	Positive	%		
Age group (years)						
20-29	142	76.3	44	23.7	FE = 5.659	0.318
30-39	139	72.4	**53**	**27.6**		
40-49	21	95.5	**1**	**4.5**		
Ethnic groups						
Benin	95	67.4	46	32.6	FE = 10.522	0.059
Esan	41	78.8	11	21.2		
Igbo	66	80.5	16	19.5		
Yoruba	34	72.3	13	27.7		
Urhobo	24	80.0	6	20.0		
Others	42	87.5	6	12.5		
Educational status						
No formal and Primary	61	76.3	19	23.7	FE = 4.835	0.166
Secondary	51	66.2	26	33.8		
Tertiary	190	78.2	53	21.8		
Religion						
Christianity	293	76.5	90	23.5	FE = 5.117	0.070
Islam	8	53.3	7	46.7		
Traditional Religion	1	50.0	1	50.0		
Marital status						
Never married	17	85.0	3	15.0	FE = 4.835	0.166
Ever married	285	75.0	95	25.0		
Parity						
≤4	281	76.8	85	23.2	FE = 5.090	0.510
>4	21	70.0	9	30.0		
Knowledge						
Poor	83	54.6	69	45.4	$\chi^2 = 57.865$	<0.001
Good	219	88.3	29	11.7		

FE- Fisher's Exact Test

The limitation of the present study is the fact that the information obtained were subject to self-reporting by the respondents and could not be verified. This may influence the validity of the research findings. Focus Group Discussions and In-depth Interviews would have improved the quality of the research findings.

Conclusion

This study identified a gap between knowledge and attitude towards FGM among ANC attendees in Benin City, Edo State. Good knowledge of FGM was identified as a significant factor that influenced the negative attitude of pregnant women towards FGM. There is a need to scale up health sensitization during ANC sessions to bridge the gap identified between knowledge and attitude. Continued advocacy and engagement of relevant stakeholders is also critical in addressing this societal ill.

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