Knowledge, Attitude and Perception of Female Genital Mutilation among Mothers in Oyo State, Nigeria

Olufunmilayo Doyinsola AFONJA
LCU/PG/001495

Supervisor:
Professor Oyedunni Arulogun

Being a PhD Thesis Submitted to the Department of Public Health, Faculty of Basic Medical Apllied Sciences, Lead City University, Ibadan, Oyo State, Nigeria

In Partial Fulfilment of the Requirements for the Award of Doctor of Philosophy (PhD) Degree in Public Health

2024

Lead City University Ibadan DO NOT COPY

Certification

This is to certify that **Olufunmilayo Doyinsola AFONJA** with the matriculation number **LCU/PG/001495** carried out this research work titled: '**Knowledge, Attitude and Perception of Female Genital Mutilation among Mothers in Oyo State'** in the Department of Public Health, Lead City University, Ibadan, Oyo State, Nigeria for the award of Doctorate Degree (PhD) in Public Health and that this has not been previously submitted.

Professor Oyedunni Arulogun — **Date**
(Supervisor)

Dr. F.T. Akinsolu — **Date**
Head of Department

Lead City University Ibadan DO NOT COPY

Dedication

This work is dedicated to Almighty God for His wisdom, knowledge, goodness and strength in my life and my family.

Lead City University Ibadan DO NOT COPY

Acknowledgements

I want to sincerely appreciate the Lead City University, Ibadan for providing the opportunity of a conducive and enabling environment for my learning. May the Almighty God continue to uplift and grow the University to greater heights. My profound gratitude also goes to the University College Hospital, Ibadan through the Chief Medical Director, Professor Jesse Abiodun Otegbayo for the privilege granted me to the pursue the PhD program and to achieve my passion for my academic carrier. I am grateful sir. Furthermore, I would like to appreciate the Oyo State Ethical committee for granting me access into the three (3) Local Government to obtain data for the study.

My profound gratitude goes to my amiable supervisor, Professor Oyedunni Arulogun for providing unconditional guidance and direction from the beginning to the end of this thesis. I thank you Ma, for granting me the opportunity to share in your vast wealth of knowledge and experience, God bless you Ma. My sincere appreciation also goes to my Head of Department, Dr Fola Akinsolu, for his encouragement and support. My special gratitude goes to Dr Bosun Olowolafe, for taking time out of his busy schedule to be there for me providing selfless assistance towards the completion of this thesis. I also want to appreciate Dr Posi Aduroja and all my lecturers in the department of Public Health, I extend my heart felt gratitude to you all for providing me with insightful and impactful knowledge throughout the period of my studentship in the University.

To all members of the communities where the research was conducted (Oyo West, Kajola and Ibadan North Local Governments I am grateful for your kind welcome and cooperation. To all participants, I thank you for volunteering to be included in the study. I appreciate Mr Kehinde and his team of research assistants who assisted me in collecting data. God bless you all.

I am indebted to my ever-supportive children Oyindamola and Adedoyinmola Afonja, I thank you for your understanding, encouragement and cooperation throughout the period of this program. If I have to come back this way again, I will love to have you as my children. To my late parents Alhaji Bakare Oduntan and Mrs Marian Abewa Oduntan, I bless God for being your daughter, may you continue to Rest in Peace. As for my sibling Mr Ayotunde Oduntan, thank you for your immense support and care God bless you.

Lead City University Ibadan DO NOT COPY

My gratitude also goes to Dr Akinbayo Akanji, Engeneer Kolawole Akadiri,Mr Kehinde Osikomaya, Dr Kayode Ojoogun, Alhaji Azeez Ashiru, Alhaji Kamar Olayanju and Dr C. Emeke. I am grateful for your support and encouragement.

My appreciation goes to my colleagues and classmates, most especially Mr. Francis Balogun thank you so much for being there. In addition, I want to thank all my colleagues and co-workers Mrs Temitope Adedeji, Dr Adenike Fagbamigbe, Mrs Victoria Koye-Olowe and Mr Ayobami Okunyade for your selfless support and sacrifices. To all members of staff of CHOTP, UCH Ibadan, you are all blessed in the name of Jesus. I appreciate you all.

Finally, I want to return all the glory, honour and adoration to God Almighty, who has granted me the enablement to embark on this course. He alone, saw me through by his Mercy and Grace, thank you Jesus.

"Even though the institution and persons have assisted in the process of this research, I alone stand responsible for the errors, if any, is found in this Thesis."

Lead City University Ibadan DO NOT COPY

Abstract

*Female genital mutilation (FGM) includes all procedures involving partial or total removal of the external female genitalia or injury to the female genital organs for cultural and non-therapeutic reasons. It is a public health problem which results into serious health consequences which may be short- or long-term health risk. Short term health risks are severe pain, excessive bleeding, spread of infection and urinary problems while long term health risks are various forms of long-term infections, menstrual and sexual problems and psychological consequences. Despite the numerous health risks, global outcry and interventions from the government, national and international agencies, FGM still remains highly prevalent in some communities in Oyo State, Southwest, Nigeria. Though, a lot of work has been carried out on Female Genital Mutilation in Oyo State but with little attention in these parts of the State hence, the researcher sought to investigate Knowledge, Attitude, and Perception of Female Genital Mutilation (FGM) among Mothers in Oyo State. Six research questions were raised for the study. Mixed research method approach was employed. Study sample comprised 1,150 mothers from FGM prevalent communities in three LGAs (Ibadan North, Oyo West and Kajola) in Oyo State. Interview guide and questionnaire titled – "Knowledge, Attitude and Perception of Female Genital Mutilation Questionnaire, KAPFGMQ (α = .865)" were used to gather data. Data were analysed using descriptive, inferential and thematic analysis. Results revealed that the mothers have good knowledge of FGM (**$\bar{x}$ = 2.251)** and good perception of its laws (**$\bar{x}$ = 2.260)**, do not agree to most reasons for the continued practice of FGM (**$\bar{x}$ = 1.357)**, have low practice of FGM (**$\bar{x}$ = 1.462)** and they and their daughters did not experience painful FGM procedure nor health complications (**$\bar{x}$ = 1.332)**. Hypotheses revealed a significant joint contribution of knowledge and attitude to the practice of FGM among mothers ($F_{2, 1140} = 4.171$, $P<0.05$). It was however concluded that the good level of knowledge and weak attitude of the mothers towards FGM could be the cause of their reduced level of FGM practice in Oyo State. It was recommended amongst others that government and stakeholders should ensure continuous awareness program to improvement of mothers' knowledge of FGM and the laws against the practice of Female genital Mutilation in the state using various sources so as to reduce the practice to a much lower level.*

Keywords: *Female Genital Mutilation, Attitude, Knowledge, Practice, Prevalence, Mother*

Word Count: 395

Lead City University Ibadan LIBRARY COPY

Table of Contents

Title		Page
Title		i
Certification		ii
Dedication		iii
Acknowledgement		iv
Abstract		vi
Table of Contents		vii
List of Table		x
List of Figures		xi
List of Appendices		xii
Chapter One: Introduction		
1.1	Background to the Study	1
1.2	Statement of Problem	6
1.3	Research Questions	7
1.4	Aim and Objectives of the study	8
1.5	Hypothesis	9
1.6	Significance of the Study	9
1.7	Scope of the Study	10
1.8	Limitations of the Study	11
1.9	Operational Definition of Terms	11
Endnotes		**13**
Chapter Two: Literature Review		
2.1	**Conceptual Review**	**17**
2.1.1	Female Genital Mutilation	17
2.1.1.1	History of Female Genital Mutilation	21
2.1.1.2	Prevalence of Female Genital Mutilation	22
2.1.1.3	Perceived Reasons for Female Genital Mutilation	23
2.1.1.4	Health Risks, Consequences and Experiences of Female Genital Mutilation	26
2.1.2	Knowledge of Mothers about Female Genital Mutilation	31

Lead City University Ibadan DO NOT COPY

2.1.3	Attitude of Mothers towards Female Genital Mutilation	32
2.1.4	Perception of Mothers about the Legal Actions (Laws) against Female Genital Mutilation Practice in Nigeria	36
2.2	**Theoretical Review**	**39**
2.2.1	Health Belief Model (HBM)	39
2.2.2	Theory of Planned Behaviour (TPB)	41
2.3	**Review of Empirical Studies**	**45**
2.3.1	Knowledge and Female Genital Mutilation Practice	45
2.3.2	Attitude and Female Genital Mutilation Practice	82
2.4	**Conceptual Model**	**121**
2.5	**Summary of Gaps in Literature Reviewed**	**122**
2.5.1	Knowledge towards FGM practice and Gaps of Literature Review	122
2.5.2	Attitude towards FGM practice and Gaps of Literature Review	122
Endnotes		**124**

Chapter Three: Methodology

3.1	Research Design	140
3.2	Study Area	140
3.3	Population of the Study	143
3.4	Distribution of Respondents according to Senatorial Districts	144
3.5	Sample Size Determination	147
3.6	Sampling Procedures	149
3.7	Data Collection Instruments	152
3.7.1	Research Questionnaire	152
3.7.2	Interview Guide	153
3.7.3	Validity of the Instrument	154
3.7.4	Reliability of the Instrument	154
3.8	Procedure for Data Collection	155
3.9	Method of Data Analysis	155
3.10	Ethical Considerations	156
Endnotes		**158**

Chapter Four: Results and Discussion of Findings

4.1	Demographic Data Presentation	159

Lead City University Ibadan DO NOT COPY

4.2 Answers to Research Questions 165
4.3 Test of Hypothesis 184
4.4 Discussion of Findings 186
4.4.1 Demographic Information 186
4.4.2 Practice of Female Genital Mutilation 187
4.4.3 Perceived Reasons for the Practice of Female Genital Mutilation 188
4.4.4 Experience of Female Genital Mutilation 189
4.4.5 Attitude of Mothers towards Female Genital Mutilation 190
4.4.6 Knowledge of Mothers towards Female Genital Mutilation 191
4.4.7 Perception of Mothers of the Laws against Female Genital Mutilation 192
Endnotes **193**

Chapter Five: Conclusion
5.1 Summary of Findings 194
5.2 Conclusion 195
5.3 Recommendations 196
5.4 Contribution to Knowledge 197
5.5 Suggestions for Further Research 198
Bibliography **200**
Appendices **218**
Biodata **237**
The University Compliance Certification **241**

Lead City University Ibadan DO NOT COPY

List of Tables

Table	Title	Page
3.1	Population of the Study	143
3.2	Number of selected Mothers from Oyo Central Senatorial District with the Selected LGAs. Wards and Communities.	144
3.3	Number of selected Mothers from Oyo North Senatorial District with the Selected LGAs, Wards and Communities.	145
3.4	Number of selected Mothers from Oyo South Senatorial District with the Selected LGAs, Wards and Communities.	146
3.5	Value of Chi-square (X^2) for 1 degree of freedom at four levels of precision	147
3.6	Sample Number of Mothers for the Study	149
3.7	Sample Number of Mothers for the In-depth Interview	151
3.8	Cronbach's Alpha Result	155
3.9	Variables and Methods of Analyses	156
4.1	Demographic Data of Mothers	162
4.2	Level of Practice of FGM among Mothers in Oyo State	166
4.3	Perceived Reasons for the Continued Practice of FGM	170
4.4	Experience of Female Genital Mutilation	173
4.5	Knowledge of Mothers towards Female Genital Mutilation	175
4.6	Attitude of Mothers towards Female Genital Mutilation	181
4.7	Perception of the Laws against Female Genital Mutilation	183
4.8	Multiple Regression Analysis and Model Summary for the joint contribution of perceived knowledge and attitude to the practice of Female Genital Mutilation among mothers in Oyo State	185

Lead City University Ibadan DO NOT COPY

List of Figures

Figure	Title	Page
2.1	Type I, Type II and Type III FGM Practice	20
2.2	Theory of planned behaviour model	42
2.3	Conceptual Model for the Study	121
3.1	Map of Oyo State Showing the Study Areas	142

Lead City University Ibadan DO NOT COPY

List of Appendices

Appendix	Title	Page
i	Research Instruments (Questionnaire & Interview Guide)	218
ii	Research Instruments (Yoruba version)	224
iii	Notification of Executive Approval of Protocol from Ministry of Health Department of Planning, Research and Statistics Division	231
iv	Questionnaire Consent Form	232
v	Pictures of Researcher and Research Assistants in the Field	236

Lead City University Ibadan DO NOT COPY

Chapter One

Introduction

1.1 Background to the Study

Female genital mutilation includes all procedures involving partial or total removal of the external female genitalia or injury to the female genital organs for cultural and non-therapeutic reasons[1,2]. This practice includes - Type I (Clitoridectomy), Type II (Excision), Type III (Infibulation) and Type IV (other unclassified forms of FGM practice such as pricking, stretching, piercing, incising, scraping, cauterizing the genital area or inserting herbs into the vagina)[2,3,4]. The commonest type practiced in Nigeria is Type I, although, Types II and III are less common but are found in all zones of the country while Type IV is found in two regions in Northern Nigeria and the practice is known as ‘‘Gishiri[5].

Within the context of this study, female genital mutilation is the level at which mothers in communities in Oyo State carry out the practice of female genital mutilation either on themselves or allow others such as their daughters to undergo the procedure for several reasons such as cultural beliefs, religion and so on and forth. Female genital mutilation has been shown to result in several health issues such as shock, pain, bleeding, infection, depression and stress[6,7]. Although FGM has several health consequences, the practice is still highly carried out in Africa and Nigeria. For instance, an estimated three million girls in Africa are at risk of FGM annually. In Nigeria, the prevalence ranges from 25.0-53.2% with equally high rates (31.3-36.2%) reported among pregnant women[8].

Female genital mutilation especially in Nigeria is carried out by traditional circumciser who do not have proper knowledge of human anatomy and medicine. This traditional circumciser is usually a senior female member of the family and/or someone in the neighborhood who carries out the practice without anesthesia and presence of any trained medical personnel using unsterilized instrument such as blades knives, scissors,

Lead City University Ibadan DO NOT COPY

broken glass, iron piece, a trilid, needles or any other sharp objects in the communities. The older women strongly hold down the girl to prevent her from moving around, after removing her genitalia, the child female is stitched up and her legs are bounded for a week[2,7].

The age at which FGM is carried out and the type practiced varies from one geographical region and cultural settings to another[2]. The age of the girls varies from weeks after birth to puberty and in most cultural settings or societies including those in Nigeria, most girls were cut before the age of five[9]. In these cultural settings where it is practiced, the premium reason is placed on the marriageability of women, purity and protection for the girl-woman before marriage. It was reported that these cultures viewed FGM as an attempt to make the female genitals clean (hygienic) and pure, enabling the girl or woman to maintain her virginity and reputation until she would be opened up, by her husband[5]. Other common beliefs include aesthetically pleasing, increased fertility and to enhance a baby's chance of survival during childbirth[10,11,12].

FGM was found to be most common in the southwest (53.4%) and southeast (52.8%) regions of Nigeria, however, the practice was found to be lesser in south-south (34.2%), northwest (19.6%), north central (11.4%) and north east (2.7%). This shows that FGM is more common among the Yorubas and Igbos[2,13,14]. A 2022 survey report revealed that over 50.1% of women of child-bearing age in Oyo State have been mutilated which is alarming[15]. Although gains have been made to reduce the practice, the prevalence of FGM in the State remains significant[15]. There was thus the need to find out what could be the causes of the continuous FGM practice in these communities in a bid to finding lasting solutions. Although some factors have been raised, this study sought the perception of mothers in areas of their knowledge and attitude towards FGM in communities in Oyo State where FGM is still prevalent.

Lead City University Ibadan DO NOT COPY

Knowledge of mothers about female genital mutilation has to do with their level of understanding, familiarity, and awareness of FGM, its method of operation and health consequences on the victims which is acquired through experience or education by perceiving, discovering, or learning[16,17]. Mothers' knowledge of FGM could be good (this means they know a lot about the procedure, its benefits and health consequences); fair (this means they have average knowledge about the procedure, its benefits and health consequences); or poor (this means they have little or very little knowledge about the procedure, its benefits and health consequences). A mother who does not know much about FGM may allow her daughter to undergo the procedure which could have damaging effect in the long run.

Closely related studies examining the relationship between knowledge of mothers and practice of FGM in Oyo State have yielded mixed findings. On one hand, studies showed that high knowledge or awareness of FGM among women in Oyo State although they did not have knowledge of health consequences of FGM[2,4]. On another hand, studies showed low knowledge and poor perception of FGM practice among young girls and women of child-bearing age in Oyo State, South-West, Nigeria[18,19]. These findings necessitated a comprehensive investigation into the nuanced dynamics at play.

Mothers' attitude is acquired and psychological variables, mental State achieved through life experience and a series of beliefs that predispose them in communities in Oyo State to behave in a particular way towards FGM practice[20]. This attitude could be affective, cognitive and behavioural. Affective attitude has to do with the mothers' like and dislike of FGM practice. A mother who likes FGM practice will continually carry out the practice and vice versa. Cognitive attitude has to do with the mothers' thoughts on the usefulness and value of FGM practice, the difficulty or ease of carrying out the practice and beliefs towards FGM practice. A mother who thinks or believes that FGM is a difficult practice

Lead City University Ibadan DO NOT COPY

that is also not useful will ensure that she and her daughter (s) and those of others related to her are not subjected to the practice and vice versa[21].

A mother's behavioural attitude is how these internalized systems (emotions, beliefs, thoughts and values) towards FGM practice are expressed in Oyo State[22]. Attitude of mothers towards FGM practice could be positive (strong) or negative (weak). A mother with positive or strong attitude towards FGM practice would support the practice and likely undergo it if they have not, and also willingly allow their daughters to undergo the procedure. However, mothers with negative attitude towards the practice would abhor or reject the practice. They would neither undergo the procedure nor allow their daughters to be mutilated.

However, despite the importance of examining mothers' attitude towards FGM, there are dearth of scholarly works on the attitude of mothers towards FGM in Oyo State. Although, a previous study showed that women of childbearing age in Ibadan Metropolis, Oyo State, Nigeria have an overall positive attitude towards FGM and a strong positive relationship between their attitude and FGM practice, there are several gaps in the study[18]. The study only focused on Ibadan Metropolis ignoring other regions of the State. The study also did not give attention to mothers who already have at least a daughter. These identified gaps in empirical knowledge are what this study sought to fill.

Judging from the above background, it can be depicted that the perceived knowledge and attitude of mothers could influence their practice of FGM. Mothers with good knowledge about FGM, its benefits and health consequences would be in the best position to take right decisions for themselves and their daughters unlike those with poor knowledge of FGM practice. Also, a mother with a positive (strong) attitude towards FGM practice would insist on it. She would intentionally support the practice unlike one who has a negative (weak) attitude towards it. Apart from the knowledge and attitude of mothers

Lead City University Ibadan DO NOT COPY

toward FGM practice, this study also intended to find out the current level of practice of FGM in Oyo State in order to determine its prevalence, the perceived reasons for the practice of female genital mutilation among mothers, and FGM experiences the mothers have alongside that of their daughters in Oyo State.

FGM has been regarded as a human rights violation that is deeply rooted in beliefs and perceptions over decades and generations[7]. In general, efforts to accelerate the abandonment of FGM in Nigeria have been a mix of legal/policy and advocacy interventions. In response to the international calls and in line with the Sustainable Development Goals (SGDs) Target 5.3 aimed at the eradication of all forms of harmful practices against women and children including FGM by the year 2030, the Nigerian government has passed a federal legislation, the Violence against Persons (Prohibition) Act 2015 (VAPP Act), which strongly prohibits FGM and other forms of gender-based violence in Nigeria with provisions including the prosecution of the perpetrators and reintegration of victims into society. This, in addition to other national policies such as the 2013/2017 National Policy and Plan for Action for Elimination of FGM/C in Nigeria are initiatives aimed at bringing the practice of FGM in Nigeria to an end[23].

In the same spirit, the civil society organizations (CSOs) have also continued to mobilize people against FGM through public awareness by forming a partnership with media and the civil society including traditional and religious leaders to disseminate anti-FGM messages at federal and State levels with the aim of turning cutters into anti-FGM campaigners. Currently, 13 out of 36 States in Nigeria have their own individual State laws expressly prohibiting FGM. These States are Lagos, Osun, Ondo, Ekiti, Bayelsa, Ogun, Delta, Ebonyi, Oyo, Imo, Edo, Cross-River, and Rivers[23,24].

Nevertheless, it should be noted that the VAPP Act has hardly been enforced in Nigeria and its implementation varies across the 36 States of the country with some States

Lead City University Ibadan DO NOT COPY

(especially those with historically high FGM prevalence) yet to follow suit. In addition, where it exists, it is even harder to implement the anti-FGM/C law where there is limited presence of law enforcement agents, for example, in the rural areas. Also, the rate of reporting has been low because the perpetrators are almost always family members and it is even possible that the law enforcement agents may sometimes discharge such reports as a family or community matter aimed at preserving one's socio-cultural norms and decide not to meddle[23,25]. There was therefore a need to also examine the perception of the mothers towards the laws against FGM practice in Oyo State.

1.2 Statement of the Problem

Female genital mutilation is a public health problem which results into serious health consequences which may be short- or long-term health risk. Short term health risks are severe pain, excessive bleeding, spread of infection and urinary problems while long term health risks are various forms of long-term infections, menstrual and sexual problems and psychological consequences[6,7]. It has been observed that despite the numerous health risks, global outcry and interventions from the government and international agency, FGM still remains highly prevalent in some communities in Oyo State, Southwest, Nigeria[15]. In these communities, those who hide their children or even run away with them so as not to undergo this barbaric act are compelled to bring the children back home to carry out rites or risk being excommunicated and ostracized or even called bastards[14,15].

Hence, this study sought to find out the perception of the mothers towards FGM in areas of their knowledge and attitude in these FGM prevalent communities as the procedure is mostly carried out by women of which some are traditional circumcisers. Mothers with poor knowledge of FGM practice, its benefits (if any) and health risks would allow themselves and their daughter (s) to undergo the procedure without being aware of the short- or long-term consequences of the practice. Also, mothers who have positive (strong)

Lead City University Ibadan DO NOT COPY

attitude towards the practice would likely be in support of it and would willingly allow themselves and their daughter (s) to undergo the procedure. However, women with negative (weak) attitude would not favour or support the practice.

Female Genital Mutilation is an unhealthy old cultural practice that must be unequivocally eradicated for the benefit of women and girls. The international agency and several governments have out rightly condemned the practice of FGM based on human rights violations and the associated health complications. The government of Nigeria has also joined some other parts of the world in making laws against the practice of FGM, for instance, the "Violence Against Persons Prohibition (VAPP) Act" was passed in May 2015. The country was among the five countries calling for the eradication of FGM at the forty-sixth World Health Assembly.

Despite efforts aimed at eliminating the practice of FGM in Nigeria, the practice though has declined, but still unabatedly high beyond the expected target as emphasized by Sustainable Development Goals 3 (Good Health and Well-being), and 5 (Gender Equality)[13]. Apart from examining the possible salient roles of mothers' perceived knowledge and attitude towards FGM practice, there was also the need to investigate the extent of mothers' perception of the laws against FGM in Oyo State, Nigeria.

1.3 Research Questions

This study attempted to find answers to the following questions:

1. what is the level of practice of Female Genital Mutilation among Mothers in Oyo State?
2. what are the perceived reasons for the continued practice of Female Genital Mutilation in Oyo State?
3. what are the Female Genital Mutilation experiences of mothers and their daughters in Oyo State?

Lead City University Ibadan DO NOT COPY

4. what is the level of knowledge that mothers have about Female Genital Mutilation in Oyo State?
5. what is the attitude of mothers towards the practice of Female Genital Mutilation in Oyo State?
6. what is the perception of the laws against Female Genital Mutilation among mothers in Oyo State?

1.4 Aim and Objectives of the Study

The aim of this study was to investigate knowledge, attitude and perception of female genital mutilation among mothers in Oyo State.

The specific objectives were to:

1. Determine the level of practice of Female Genital Mutilation among Mothers in Oyo State.
2. Assess the perceived reasons for the continued practice of Female Genital Mutilation among mothers in Oyo State.
3. Identify the Female Genital Mutilation experiences of mothers and their daughters in Oyo State.
4. Assess the level of knowledge that mothers have about Female Genital Mutilation in Oyo State.
5. Assess the attitude of mothers towards the practice of Female Genital Mutilation in Oyo State.
6. Determine the perception of the laws against Female Genital Mutilation among mothers in Oyo State.

Lead City University Ibadan DO NOT COPY

1.5 Hypothesis

This hypothesis was formulated and tested at 0.05 level of significance:

H_A1: There will be a significant joint contribution of perceived knowledge and attitude to Female Genital Mutilation practice among mothers in Oyo State.

1.6 Significance of the Study

This study will be significant in that it will create great awareness on knowledge, attitude and Female Genital Mutilation practice among mothers in Communities in Oyo State. It will also provide awareness on the perceived reasons for FGM practice, the present level of prevalence of the practice in Oyo State and the FGM experiences of the mothers and that of their daughters. It will also provide awareness on mothers' perception on the legal actions or laws enacted by the government against FGM in the State and Nigeria at large. The findings of the study will therefore provide immense benefit to mothers, prevalent FGM communities in Oyo State, law enforcement agencies and researchers.

First of all, to the mothers, the findings of the study should make mothers in the communities to be aware of the current state of their knowledge and attitude towards the FGM practice. It will also provide information on the level of their FGM practice and how their perceived knowledge and attitude may be influencing their FGM practice. The findings of the study should make the mothers swing into action into ensuring that they develop negative attitude towards FGM and raise their knowledge of FGM and its health consequences as these could help them curb the practice and/or ensure FGM is brought to a drastically minimal level.

The FGM prevalent communities in Oyo State will also benefit in that when these findings are put into action, these prevalent communities will have an environment with greater awareness of FGM and mothers with negative attitude towards FGM. This will ensure that there is a drastic reduction of FGM practice among the people in the

Lead City University Ibadan DO NOT COPY

communities which would invariably create a safer environment for females living within the communities.

When the findings of this study are made available to appropriate law enforcement agencies (those who are in charge of enforcing the FGM laws), it could help them to know the level of awareness and implementation of the laws against FGM practice. This should make them to put in more effort in ensuring that the laws are strictly implemented, and offenders are brought to book regardless of family affiliations. This action would help in reducing the practice drastically in the highly prevalent communities in Oyo State. Lastly, the findings of the study will be a reference point to researchers who intend to carry out similar research in future especially when the work has been published in reputable journals.

1.7 Scope of the Study

The scope of this study covered knowledge, attitude and perception of female genital mutilation among mothers in Oyo State. The 'variable scope' covered two independent variables and one dependent variable. The two independent variables which are perceived knowledge and attitude of mothers towards FGM. Knowledge was interpreted as good or poor while attitude was interpreted as strong or weak. The dependent variable which is FGM practice was also treated as a single variable. The level of practice helped in determining the current status of prevalence of FGM in the State.

The geographical scope covered major communities in three (3) Local Government Areas (LGAs) across the three senatorial districts of Oyo State, where FGM is still perceived to be highly prevalent. These local governments are - Oyo West LGA in Oyo Central Senatorial District; Kajola LGA in Oyo North Senatorial District; and Ibadan North LGA in Oyo South Senatorial District. The population scope covered mothers within 18-

Lead City University Ibadan DO NOT COPY

50 years and above who have at least a daughter alive in the above local government areas in Oyo State.

The methodology scope consisted of mixed (qualitative and quantitative) research method which involves the use of questionnaire and in-depth interview guide as instruments for data collection. Data collected were analyzed using descriptive statistics such as frequency, percentage, mean and standard deviation; inferential statistics such as multiple regression at 0.05 level of significance and thematic analysis for responses from the interview guide.

1.8 Limitations of the Study

Few of the mothers especially those who are Hausas were not willing to participate in responding to the instruments because they felt their husbands were against them doing so as a result of their cultural beliefs. Also, some of the respondents complained about the bulkiness of the instrument. The researcher alongside her research assistants were able to convince them with much needed patience until the completion of every section of the instrument and the interview guide. However, to further appreciate the respondents' voluntary participation in the study, the researcher provided incentives such as detergents, bar soaps and face towels to each the respondents. Though, this further led to additional expenses for the researcher.

1.9 Operational Definition of Terms

The following terms were defined as used in this study.

Female Genital Mutilation: This refers to the partial or total removal of the external genitalia of females in Oyo State for various reasons. It includes – Type I, II, III and IV.

Female Genital Mutilation Practice – This refers to the act or process of going through FGM procedure by mothers and their daughters in Oyo State for various reasons.

Lead City University Ibadan DO NOT COPY

Perception of Female Genital Mutilation: This refers to mothers' level of knowledge, awareness and attitude towards FGM procedure and its laws in Oyo State.

Knowledge of Female Genital Mutilation: This refers to mothers' good or poor level of familiarity or awareness of FGM procedure, health consequences and practice in Oyo State.

Attitude towards Female Genital Mutilation: This refers to mothers' strong or weak affection, belief and behaviour towards FGM practice in communities in Oyo State.

Law against Female Genital Mutilation: This refers to mothers' perception of the laws against FGM practice such as The Child's Right Act enacted in 2003, and Violence against Persons (Prohibition) Act, in May 2015 in Oyo State.

Lead City University Ibadan DO NOT COPY

Endnotes

1. J. Beausang & S. T. Mama, *A Summary of Female Genital Mutilation/Cutting for the Pediatric and Adolescent Care Provider,* **Journal of Pediatric and Adolescent Gynecology**, 36(2), 2023, 97-102. https://doi.org/10.1016/j.jpag.2022.11.002

2. S.A. Famuyiwa, *Assessment of Knowledge of Health Consequences and Practice of Female Genital Mutilation Among Parents in Ibadan South East Local Government Area of Oyo State, Nigeria,* **Educational Journal of Multi-Disciplinary Studies, University of Port-Harcourt**, 6(1), 2017, 1-8. ISSN: 0796-8162.

3. World Health Organisation (WHO), Female Genital Mutilation. 2022. Available at https://www.who.int/newsroom/fact-sheets/detail/female-genital-mutilation 24/03/2022.

4. C.M. Ndikom, F.A. Ogungbenro & O.A. Ojeleye. *Perception and Practice of Female Genital Cutting Among Mothers in Ibadan, Nigeria*, **International Journal of Nursing and Health Science**, 4(6), 2017, 71-80. ISSN: 2381-4861 (Print), ISSN: 2381-4888 (Online).

5. O. Omigbodun, T. Bella-Awusah, D. Groleau, J. Abdulmalik, N. Emma-Echiegu, B. Adedokun & A. Omigbodun, *Perceptions of the Psychological Experiences Surrounding Female Genital Mutilation/Cutting (FGM/C) among the Izzi in Southeast Nigeria*, **Transcultural Psychiatry**, 57(1), 2020, 212–227. DOI: 10.1177/1363461519893141

6. World Health Organisation (WHO), *Health Risks of Female Genital Mutilation (FGM)*. Available at https://www.who.int/teams/sexual-and-reproductive-health-and-research-(srh)/areas-of-work/female-genital-mutilation/health-risks-of-female-genital-mutilation, 21 January, 2022

7. M.A. Alege, *Impacts of Communication Strategies in Combating the Practice of Female Genital Mutilation (FGM) and its Multiplier Effects on Women,* **Sapientia Foundation Journal of Education, Sciences and Gender Studies (SFJESGS)**, 2(4), 2020, 155 – 172. ISSN: 2734-2522 (Print), ISSN: 2734-2514 (Online).

8. A.I. Obi & O.L. Igbinadolor, *Prevalence of Female Genital Mutilation and its Determinants among Pregnant Women in Benin City, Nigeria,* **Journal of Community Medicine and Primary Health Care**, 30(2), 2018, 12-21. https://www.researchgate.net/publication/335910727

9. O. Egbodo, U. Akunaeziri, A. Edugbe, H. Shambe, M. Kahansim & A. Ocheke, *Female Genital Mutilation: Opinion of Outpatients of a Department of Obstetrics and Gynaecology in North Central Nigeria*, **African Journals OnLine**, 12, 2019, 48-60. https://www.ajol.info/index.php/jjm/article/view/184147.

Lead City University Ibadan DO NOT COPY

[10.] R. Ozuri, *Attitude of Mothers and Female Secondary School Students towards Female Genital Mutilation in Ika North East Local Government Area of Delta State*, **Sokoto Educational Review**, 20(1&2), 2021, 40-49. https://sokedureview.org/index.php/SER/article/view/438.

[11.] A.I. Obi, O.E. Obarisiagbon, O.L. Igbinadolor, K.M. Fatai, & O.O. Adesoye, *Factors associated with the knowledge and attitude towards Female Genital Mutilation among antenatal clinic attendees in Southern Nigeria*, **Annals of Health Research**, 5(2), 2019, 183-192. doi:10.30442/ahr.0502-20-50.

[12.] A.I. Obi, A.O. Adesoye & A. Adelosoye, *Awareness and Knowledge of Female Genital Mutilation among Women in a Sub-Urban Community in Edo State, Nigeria*, **Annals of Biomedical Sciences**, 15(1), 2016, 1-8. eISSN: 1596-6569

[13.] B. M. Gbadebo, A.T. Salawu, R.F. Afolabi, M. M. Salawu, A. F. Fagbamigbe & A.S. Adebowale, *Cohort Analysis of the State of Female Genital Cutting in Nigeria: Prevalence, Daughter Circumcision and Attitude towards its Discontinuation,* **BMC Women's Health**, 21(182), 2021, 1-12. https://doi.org/10.1186/s12905-021-01324-2

[14.] N. Adebowale-Tambe & A. Olufemi, *Female Genital Mutilation thrives in Oyo despite laws banning it*, https://www.premiumtimesng.com/June 1, 2019

[15.] K. Olaitan, *UN Report: Female genital mutilation Still Prevalent in Oyo, Osun and Ekiti*, Available at https://www.thisdaylive.com. Wednesday, 16th November, 2022

[16.] J.C. Nwaokoro, A.O. Ede, I.J. Dozie, C.D. Onwuliri, A.A. Nwaokoro & S.C. Ebiriekwe, *Attitude and Perception on the Impact of Female Genital Mutilation on Health and Sex Drive among Married Women in Ebenebe, Awka North L.G.A, Anambra State*, **Austin J Public Health Epidemiol**, 3(4), 2016, 1-7. ISSN: 2381-9014.

[17.] Wikipedia, *Knowledge,* Available at https://en.wikipedia.org/wiki/Knowledge (22 November 2022)

[18.] O.O. Olopha, *Practice, Perception and Attitude of Childbearing Age Women towards Female Genital Mutilation in Ibadan Metropolis, Oyo State, Nigeria,* **Journal of Positive Psychology and Counselling**, 5, 2020, 39-57. https://www.ppacjournals.org

[19.] R. Robinson, O.P. Ojajuni, I.O. Owolabi, O. Olunuga, & E.I. Oni, *Assessing the Knowledge and Intention towards the Continuation of FGM Practice among Young Girls in South West Nigeria,* **Open Journal of Social Sciences**. https://doi.org/10.4236/jss.2022.104020. 10, 2022, 271-283

[20.] C. Leo´n-Mantero, J.C. Casas-Rosal, A. MazMachado & M.E.V. Rico, *Analysis of attitudinal components towards statistics among students from different academic degrees*. **PLoS ONE**, 15(1), 2020, 1-13. https://doi.org/10.1371/ journal.pone.0227213.

Lead City University Ibadan DO NOT COPY

[21.] H. Zangeneh, *Teachers' Attitudes toward Teaching-Learning Methods of Entrepreneurship Education in Elementary Education,* **Educ Strategy Med Sci,** 12(6), 2020, 1-7. URL: http://edcbmj.ir/article-1-1746-en.html

[22.] M. Kumar, *The Relationship Between Beliefs, Values, Attitudes and Behaviour*, Available at https://owlcation.com/social-sciences/Teaching-and-Assessing-Attitudes June 25, 2022

[23.] C.C. Nnanatu, G. Atilola, P. Komba, L. Mavatikua, Z. Moore, D. Matanda, O. Obianwu, & N. Kandala, *Evaluating changes in the prevalence of female genital mutilation/cutting among 0-14 years old girls in Nigeria using data from multiple surveys: A novel Bayesian hierarchical spatio-temporal model*, **PLoS ONE,** 16(2), 2021, 1-31. https://doi.org/ 10.1371/journal.pone.0246661

[24.] C. Uzondu, *Situation Assessment and Analysis of Female Genital Mutilation/Cutting in Imo and Ebonyi States,* A Baseline Report Civil Resource Development and Documentation Centre (CIRDDOC) in Partnership with the Coalition of Eastern Non-Governmental Organisations (CENGOS) and with Funding Support from Amplify Change, 2020, 1-55. Available at https://cirddoc.org, December, 2020.

[25.] E. Leasure, C. Roth, E. Yegon, E. Anderson, N. Datta & C. Izugbara, *Women's empowerment and attitudes towards female genital mutilation abandonment in Nigeria: A cross-sectional analysis of the Nigeria demographic health survey*, **African Journal of Reproductive Health**, 26(12s), 2022, 127-137. DOI: 10.29063/ajrh2022/v26i12s.14

Lead City University Ibadan DO NOT COPY

Chapter Two

Literature Review

This chapter presented the review of relevant concepts and variables in the research topic based on the research questions and objectives in the present study. It also reviewed theories that render support to the work and previous empirical studies related to the research. It was organized according to the following sub-headings:

2.1 Conceptual Review

2.1.1 Female Genital Mutilation

2.1.1.1 History of Female Genital Mutilation

2.1.1.2 Prevalence of Female Genital Mutilation

2.1.1.3 Perceived Reasons for Female Genital Mutilation

2.1.1.4 Health Risks, Consequences and Experiences of Female Genital Mutilation

2.1.2 Knowledge of Mothers about Female Genital Mutilation

2.1.3 Attitude of Mothers towards Female Genital Mutilation

2.1.4 Perception of Mothers about the Legal Actions (Laws) against Female Genital Mutilation Practice in Nigeria

2.2 Theoretical Review

2.2.1 Health Belief Model (HBM)

2.2.2 Theory of Planned Behaviour (TPB)

2.3 Review of Empirical Studies

2.3.1 Knowledge and Female Genital Mutilation Practice

2.3.2 Attitude and Female Genital Mutilation Practice

2.4 Conceptual Model

2.5 Summary of Gaps in Literature Reviewed

2.5.1 Knowledge towards FGM practice and Gaps of Literature Review

2.5.2 Attitude towards FGM practice and Gaps of Literature Review

Lead City University Ibadan DO NOT COPY

2.1 Conceptual Review

2.1.1 Female Genital Mutilation

Alteration of the female external genitalia, referred to as Female Genital Mutilation or Female genital mutilation (FGM/FGM), has been practiced for many years or ages. It consists of all procedures that involve partial or total removal of the external female genitalia, or other injury to the female genital organs for non-medical reasons[1]. FGM consists of all surgical procedures or other injuries to the female genital organs for cultural or other non-therapeutic reasons. It is also the ritual removal of some or all the external female genitalia[2]. There is no health well-being for Female Genital Mutilation. It involves eliminating and destroying healthy and usual female genital tissue and obstructs the natural functions of the females' bodily parts[3].

The FGM procedure is usually carried out without the consent of the individual and performed by traditional practitioners using a blade or sharp knife by religious leader elderly women, traditional birth attendants or medical practitioners with limited professional training. FGM is also reported to be carried out by healthcare professional organizations (HCPO), prompting an intense debate on medicalization – defined by the World Health Organization (WHO) as a case in which FGM is practiced by any category of HCPO[4]. The FGM practice is rooted in gender inequality, attempts to control women's sexuality, and ideas about purity, modesty, and beauty. It is usually initiated and carried out by women, who see it as a source of honour, and who fear that failing to have their daughters and granddaughters cut will expose the girls to social exclusion[2].

FGM has been classified into 4 types. They include:

Type I – Clitoridectomy: This involves the partial or total removal of the clitoris and, in very rare cases, only the prepuce. Type Ia involves removal of the clitoral hood only (the fold of skin surrounding the clitoral glans). This is rarely performed alone; the more

Lead City University Ibadan DO NOT COPY

common procedure is Type 1b known as clitoridectomy, the complete or partial removal of the clitoral glands (the visible tip to the clitoris) and clitoral hood. The circumciser pulls the clitoral glands with her thumbs and index finger and cuts it off[1,5,6].

Type II – Excision: This involves the complete removal of the inner labia with or without removal of the clitoris glan and not labia. Type IIa is the removal of the inner labia, Type IIb, removal of the clitoris glan and inner labia and Type IIc, removal of the clitoris glan, inner and outer labia[1,5,6].

Type III–Infibulation or pharaonic circumcision or the "sewn closed" category: This involves the removal of the external genitalia and fusion of the wound. The inner and or outer labia are cut away, with or without removal of the clitoris glans. It is and FGM practice that involves stitching the vaginal opening with a minuscule hole for urination and menstrual bleeding or narrowing of the vaginal opening through the creation of a covering seal. Type III is found largely on northeast Africa. According to a recent report, about 35% of women with FGM have been infibulated. In type III FGM practice, the child is made to squat on a stool or mat facing the circumciser at a height that offers her a good view of the parts to be handled. Next, adult helpers grab and pull apart the legs of the girl. This is the stage at which a local anesthetic would be used if available[1,5,6].

The element of speed and surprise is vital, and the circumciser immediately grabs the clitoris by pinching it between her nails aiming to amputate it with a slash. The organ is then shown to the senior female relatives of the child who will decide whether the amount that has been removed is satisfactory or whether more is to be cut off. After the clitoris has been satisfactorily amputated, the circumciser can proceed with the total removal of the labia minora and the paring of the inner walls of the labia majora. Since the entire skin on the inner walls of the labia majora must be removed all the way down to the perineum, this becomes a messy business. By now, the child is screaming, struggling, and bleeding

Lead City University Ibadan DO NOT COPY

profusely, which makes it difficult for the circumciser to hold with bare fingers and nails the slippery skin and parts that are to be cut or sutured together.

Having ensured that sufficient tissue has been removed to allow the desired fusion of the skin, the circumciser pulls together the opposite sides of the labia majora, ensuring that the raw edges where the skin has been removed are well approximated. The wound is now ready to be stitched or for thorns to be applied. If a needle and thread are being used, close tight sutures will be placed to ensure that a flap of skin covers the vulva and extends from the mons veneris to the perineum, and which, after the wound heals, will form a bridge of scar tissue that will totally occlude the vaginal introitus[4,7].

The amputated parts might be placed in a pouch for the girl to wear. A single hole of 2–3 mm is left for the passage of urine and menstrual fluid. The vulva is closed with surgical thread, and might be covered with a poultice of raw egg, herbs, and sugar. To help the tissue bond, the girl's legs are tied together, often from hip to ankle; the bindings are usually loosened after a week and removed after two to six weeks. If the remaining hole is too large in the view of the girl's family, the procedure is repeated[7].

The vagina is opened for sexual intercourse, for the first time either by a midwife with a knife or by the woman's husband with his penis. In some areas, including Somaliland, female relatives of the bride and groom might watch the opening of the vagina to check that the girl is a virgin. The woman is opened further for childbirth (*defibulation* or *deinfibulation*) and closed again afterwards (*reinfibulation*). Reinfibulation can involve cutting the vagina again to restore the pinhole size of the first infibulation. This might be performed before marriage, and after childbirth, divorce and widowhood. Hanny Lightfoot-Klein interviewed hundreds of women and men in Sudan in the 1980s about sexual intercourse with Type III:

Lead City University Ibadan DO NOT COPY

The penetration of the bride's infibulation takes anywhere from 3 or 4 days to several months. Some men are unable to penetrate their wives at all (in my study over 15%), and the task is often accomplished by a midwife under conditions of great secrecy, since this reflects negatively on the man's potency. Some who are unable to penetrate their wives manage to get them pregnant despite the infibulation, and the woman's vaginal passage is then cut open to allow birth to take place. Those men who do manage to penetrate their wives do so often, or perhaps always, with the help of the "little knife". This creates a tear which they gradually rip more and more until the opening is sufficient to admit the penis[7,8].

Type IV: This includes all other harmful procedures to the female genitalia for non-medical purposes, including pricking, piercing, incising, scraping and cauterisation. It includes nicking of the clitoris (symbolic circumcision, burning or scanning the genitals and introducing substances into the vagina to tighten it). Labia stretching are also categorized as Type IV, common in Southern and Eastern Africa, the practice is supposed to enhance sexual pleasure for the man and add to the sense of a woman as a closed space[1,5,6].

rsity Ibadan DO NOT COPY

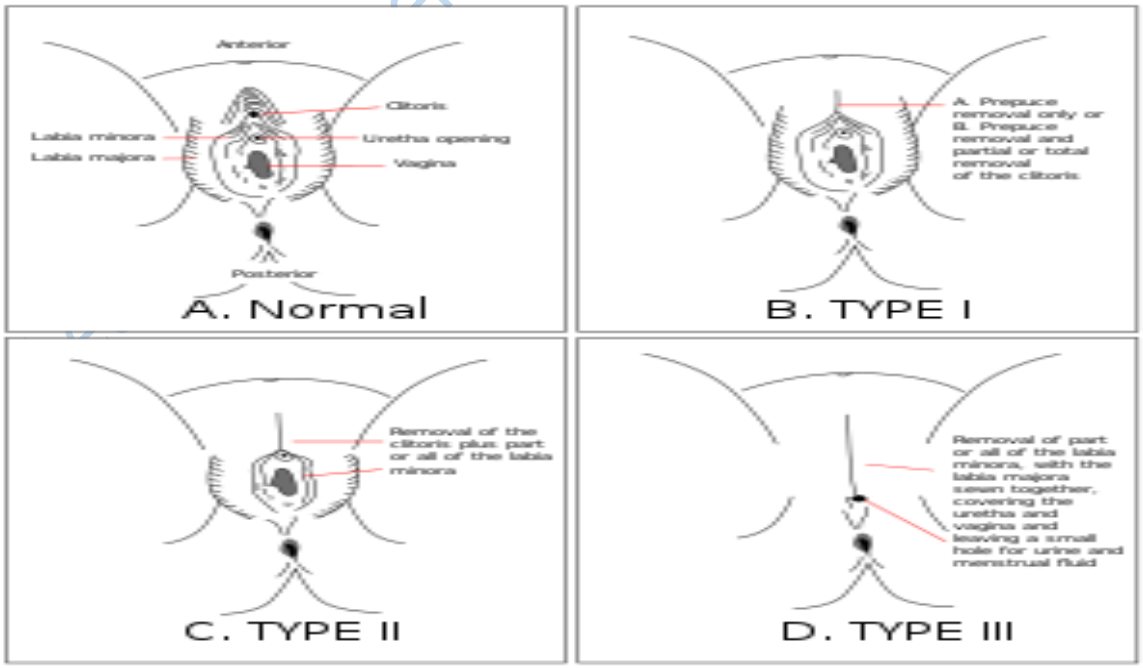


Figure 2.1: Type I, Type II and Type III FGM Practice (Source[6]).

FGM regardless of the various types is a practice that manipulates, alters or removes the external genital organs in young girls and women. In contrast to male circumcision, female cutting or female circumcision produces no known health benefits and is not performed for any medical reasons[6,9]. One of the familiar types of female genital mutilation is type 2 which reported 80% of all cases while the greatest type is type 3 which comprises about 15% of the total procedures. It was also estimated that Types 1 and 4 of Female genital mutilation account for the remaining five percent[3]. In Nigeria, the commonest type of FGM practiced is Type I. Types II and III are less common but found in all zones of the country. However, type IV is found in two regions in Northern Nigeria and the practice is referred to as 'Gishiri' in the regions[10].

2.1.1.1 History of Female Genital Mutilation

The origin of female genital mutilation remains uncertain. Based on its historical origins, the practice of female genital mutilation/cutting has been in existence for over 5000 years ago and have been evidenced in Egyptian mummies. Greek historians and geographers point out that Female genital mutilation occurred in Ancient Egypt along the Nile Valley at the time of the Pharaohs and thus Egypt is often considered as the source country[9]. In ancient Rome, the labia minora of women slaves were pierced with metal rings to prevent procreation[11].

In Western countries, FGM is commonly considered to be a foreign practice. However, the act has been reported in Germany, France, USA and England in the 19th century[11]. In Western Europe and the United States, clitoridectomy (type I FGM) was described to be practiced to treat perceived ailments like hysteria, epilepsy, mental disorders, masturbation, nymphomania and melancholia in the 1950's[9]. It was also an acceptable practice for the management of sterility in Britain. Different terminologies have been used to describe this practice across regions, cultures, time, ideological perspectives

Lead City University Ibadan DO NOT COPY

and organizations. It was previously referred to as 'female circumcision' and 'female genital mutilation'. Currently, FGM is a globally recognised term that best describes the gravity of the morally reprehensible act which distinguishes it from male circumcision[11].

2.1.1.2 Prevalence of Female Genital Mutilation

FGM Type II is considered the most practiced form globally, representing approximately 80% of all FGM procedures. It was reported that over 130 million girls and women are estimated to have undergone a form of FGM worldwide and with an incidence of approximately 6000 new cases daily. It is also estimated that between 100 and 140 million girls and women have been genitally mutilated and that every year 3 million girls are at risk of being subjected to FGM. Currently, FGM continues to be practiced in 28 countries and in several Asian countries[11,12,13]. The highest prevalence rates are found in Somalia and Djibouti where FGM is virtually universal[6]. The FGM practice cuts across all ethnicities, educational and religious groups as it has been observed amongst Christians, Muslims, Jews and animists[11].

FGM is mostly practiced in southern Nigeria. With about 200 million people already mutilated, Nigeria has the highest absolute number of cases of FGM in the world, accounting for about one-quarter of the estimated 115–130 million circumcised women worldwide. Nigeria is the third largest country with women and girls who have undergone FGM in the world with 21.6 million of them genitally mutilated. This shows that 1 in 4 women aged 15 - 49 years in Nigeria have been genitally mutilated in Nigeria[14].

FGM has the highest prevalence in the south-south (77%) (Among adult women), followed by the south-east (68%) and south-west (65%), but practiced on a smaller scale in the North, paradoxically tending into a more extreme form. The national prevalence rate of FGM is 41% among older women. However, prevalence rates progressively decline among young women groups, and 37% of circumcised women do not want FGM to continue.

Lead City University Ibadan DO NOT COPY

About 61% of women who do not want FGM said it was a bad, harmful tradition, and 22% said it was against its religion. In Nigeria, prevalence rates are lowest in predominantly Muslim populations based in the Northern region and highest among Christian populations in the Southeast[6,15,16].

In recent times, the FGM practice was found to be most common in the south west (53.4%) and south east (52.8%) regions. However, the practice was lesser in south south (34.2%), north west (19.6%), north central (11.4%) and north east (2.7%). This shows that the practice is recently more common among the Yorubas and Igbos[5]. Some communities in Oyo State are not left out of this menace. A survey report released by the United Nations in the year 2022 revealed that over 54.1 per cent of women of child-bearing age in Oyo State have been mutilated which is alarming. The findings from Oyo State revealed just a 3.3 per cent reduction in the prevalence of the practice compared to the 2016-2017 Multiple Indicator Cluster Survey (MICS) study[17].

2.1.1.3 Perceived Reasons for Female Genital Mutilation

FGM is regarded as a custom or a good tradition and must be protected as a superstitious belief practiced for the preservation of chastity and purification, family honour, hygiene, aesthetic reasons, protection of virginity and prevention of promiscuity, increasing the sexual pleasure of husband, enhancing fertility and increasing matrimonial opportunities. Other reasons are to prevent mother and child from dying during childbirth and for legal bases, such as the ability or fitness of one to inherit property if not circumcised. However, FGM is often routinely performed as an integral part of social conformity and in line with community identity[16].

FGM is widely practiced in many Nigerian cultures and is considered essential for women's socialisation, curbing their sexual appetites and preparing them for marriage. In a study of circumcised women's attitudes towards female circumcision in a Nigerian

Lead City University Ibadan DO NOT COPY

community where the practice is accepted, it was revealed that sixty-two (62) percent of the hundred (100) interviewed subjects from all social strata favoured the practice as an instrument for controlling female sexuality and cultural pride. Furthermore, FGM has been identified simply as a cultural obligation and cleansing rite, with people describing it as female circumcision, believing it is equivalent to male circumcision. Mockery, loss of respect, and reduced marriage offers are social sanctions against non-circumcised females in Nigerian cultures where FGM is practised[16,18].

FGM is viewed as a non-negotiable rite of passage into womanhood that improves the social value of a woman in every society where it is practiced. There is great superiority placed on the ability of women to marry and in the belief that FGM ensures purity and protection for the girl-woman before marriage. It was further observed that the importance of a daughter's marriageability far outweighed the importance of health, consent, and maintenance of body integrity.

FGM was described as a practice that protects and prepares the woman for motherhood and ensures fertility. In addition, it was found that some of the reasons for keeping the practice in place were to keep girls pure as virgins, protect the girls' reproductive potential, increase fertility, and aid the childbirth process. There are beliefs among practicing communities that uncut women have higher rates of stillbirths because if the baby's head touches an uncut clitoris, death will occur. However, controlling the sexuality of women and reducing their desire for sex to protect them were reasons for sustaining the practice in several other cultures. For married women, a reason for the continued FGM practice is that it limits the desire for sex due to pain during sexual intercourse and reduces the tendency for extramarital sex[10,16].

FGM is believed to make the woman more attractive physically and socially and make the genitalia more attractive. It was noted that FGM is believed to ensure girls' health,

Lead City University Ibadan DO NOT COPY

pubertal maturation, and genital cleanliness. Other reasons offered for the sustained FGM practice are the appeal to social cohesion: social ceremonies that involve the participation of the entire community surrounding the process of FGM. In Southwestern Nigeria, the cutting coincides with the naming ceremony of the baby girl, while in the Southeast, a girl who has just undergone the procedure is provided with special food, is allowed to rest for a whole week, and is surrounded by girls who have had FGM dressed in colourful clothes.

In Sierra Leone, the cutting is part of an initiation process into secret societies, in which the girls are taken into the forest for several. Leaders of the society emphasize that the essence of the process is to give the girls a sense of belonging. It was further emphasized that the female secret society promotes peace through marriages, sexual conduct, fertility, and reproduction[10,11,16,18].

Culturally, FGM is reported to be carried out in order to preserve a girl's virginity, safeguard her honour and that of her husband's patriarchal heritage or as a means of suppressing sexual desires in girls thus making them less promiscuous. Societally, FGM is a ritual performed on girls to initiate them into adulthood after which they are considered pure and desirable for marriage[13]. This appears essential for their societal recognition and acceptance. Other reasons for FGM include financial benefits, preservation of ethnic identity and maintenance of hygiene. It was also noted that culture is a powerful factor which contributes immensely to the persistent practice of female genital mutilation[11,16].

In societies where FGM is practiced, a great premium is placed on the marriageability of women and in the belief that FGM ensures purity and protection for the girl-woman before marriage. It was further observed that the importance of a daughter's marriageability far outweighed the importance of health, consent, and maintenance of body integrity. It helps the girl to maintain her reputation until she would be 'opened up' by her husband. Several cultures allude to FGM as a process of beautification of women[10,11].

Lead City University Ibadan DO NOT COPY

2.1.1.4 Health Risks, Consequences and Experiences of Female Genital Mutilation

FGM is often seen as a grave violation of a female's human rights. It reflects longstanding gender inequality and is an extreme type of discrimination against women[19]. It includes violations of children's rights, as well as violations of a person's right to health, security, and physical integrity, as well as the right to be free of torture and cruel, inhuman, or degrading treatment, and the right to life where the procedure may result in death[20]. There are no known health benefits of FGM to women and it is recognized internationally as a human rights violation against women. Between 100 million and 140 million women and girls are thought to be living with the consequences of female genital mutilation[6,13].

All forms of FGM are associated with increased health risk in the short- and long-term. Short-term health risks of FGM include - Severe pain which is because of the cutting of the nerve ends and sensitive genital tissue causes extreme pain. The healing period is also painful; Excessive bleeding (haemorrhage) which can result if the clitoral artery or other blood vessel is cut; Shock which can be caused by pain, infection and/or haemorrhage; Genital tissue swelling which could be due to local infection or inflammatory response; Infections which could spread after the use of contaminated instruments (for example, the use of same instruments in multiple genital mutilation operations), and during the healing period; Human immunodeficiency virus (HIV) which could be as a result of the cutting of genital tissues with the same surgical instrument without sterilization.

The direct association between FGM and HIV remains unconfirmed, the risk for transmission of HIV could be increased amongst girls who undergo female genital mutilation together; Urination problems which may include urinary retention and pain in passing out urine. It may also be due to tissue swelling, pain or injury to the urethra; Impaired wound healing which can cause pain, infections and abnormal scarring; Death which could result from infections, including tetanus, as well as haemorrhage that can lead

Lead City University Ibadan DO NOT COPY

to shock; and mental health problems - the pain, shock and the use of physical force during the event, as well as a sense of betrayal when family members condone and/or organize the practice, are reasons why many women describe FGM as a traumatic event[21].

Long-term health risks of FGM (occurring at any time during life) include – Pain which is due to tissue damage and scarring that may result in trapped or unprotected nerve endings; Chronic genital infections such as vaginal discharge and itching and appearance of cysts, abscesses and genital ulcers; Chronic reproductive tract infections which could cause chronic back and pelvic pain; Urinary tract infections if not treated could ascend to the kidneys, potentially resulting in renal failure, septicaemia and death. An increased risk of repeated urinary tract infections is well documented in both girls and adult women who have undergone FGM alongside painful urination which is usually due to obstruction of the urethra and recurrent urinary tract infections; and vaginal problems such as discharge, itching, bacterial vaginosis and other infections.

FGM also causes menstrual problems such as painful menstruation (dysmenorrhea) caused by the obstruction of the vaginal opening, irregular menses and difficulty in passing menstrual blood, particularly among women with Type III FGM; Excessive scar tissue (keloids) as excessive scar tissue forms at the site of the cutting; HIV (Human immunodeficiency virus) which could be transmitted and facilitated through trauma of the vaginal epithelium which allows the direct introduction of the virus. In addition, the risk of HIV transmission may be increased due to increased risk of bleeding during intercourse, because of FGM[6,21,22].

Other long-term complications include - Sexual health problems: FGM may damage the anatomic structures that are directly involved in female sexual function which can influence women's sexual health and well-being. Removal of, or damage to, highly sensitive genital tissue, especially the clitoris, may affect sexual sensitivity and lead to

Lead City University Ibadan DO NOT COPY

sexual problems, such as decreased sexual desire and pleasure, pain during sex, difficulty during penetration, decreased lubrication during intercourse, and reduced frequency or absence of orgasm (anorgasmia). Scar formation, pain and traumatic memories associated with the procedure can also lead to such problems.

FGM is also associated with childbirth complications (obstetric complications). FGM is associated with an increased risk of caesarean section, postpartum haemorrhage, recourse to episiotomy, difficult labour, obstetric tears/lacerations, instrumental delivery, prolonged labour, and extended maternal hospital stay. The risks increase with the severity of FGM; Obstetric fistula: although, the direct association between FGM and obstetric fistula has not been established but given the causal relationship between prolonged and obstructed labour and fistula, and the fact that FGM is also associated with prolonged and obstructed labour, it is reasonable to presume that both conditions could be linked in women living with FGM.

Perinatal risks as obstetric complications can result in a higher incidence of infant resuscitation at delivery and intrapartum stillbirth and neonatal death; and Mental health problems: studies have shown that girls and women who have undergone FGM are more likely to experience post-traumatic stress disorder (PTSD), anxiety disorders, depression and somatic (physical) complaints (for example, aches and pains) with no organic cause[6,21,23].

In some African countries and the Middle East where FGM is widely performed, poor hygiene is recorded. There is no anaesthesia, no sterilised equipment to replace rusting blades, which can lead to haemorrhage, shock, septicaemia and tetanus. If the victim survives, she may be left infertile, or suffer complications during childbirth, cysts and recurrent urinary tract infections may always be observed[12].

Lead City University Ibadan DO NOT COPY

Women and girls living with FGM have experienced a harmful practice which will live with them for the rest of their lifetime. The traumatic experience of FGM increases the short- and long-term health risks to females and is unacceptable from a human right and health perspective. There is an increased risk of adverse health outcomes with increased severity of FGM. The World Health Organization (WHO) is opposed to all forms of FGM and against the practice being carried out by health care providers[13,21].

FGM has serious implications for the sexual and reproductive health of girls and women. The effects of FGM depend on several factors including the type performed, the expertise of the practitioners, the environment and hygiene conditions under which it is performed, the amount of resistance and the genital health condition of the girl/women undergoing the procedure. Severe complications may occur in all the four types of FGM mentioned above but more complications are most frequent with infibulations. Infibulations, or Type III FGM, may cause complete vaginal obstruction resulting in the accumulation of menstrual flow in the vagina and uterus. Infibulations create a physical barrier to sexual intercourse and childbirth.

An infibulated woman therefore must undergo gradual dilation of the vaginal opening before sexual intercourse can take place. Often, infibulated women are cut open on the first night of marriage (by the husband or a circumciser) to enable the husband to be intimate with his wife. At childbirth, many women also must be cut again because the vaginal opening is too small to allow for the passage of a baby. Infibulations is also linked to menstrual and urination disorders, recurrent bladder and urinary tract infections, fistulae and infertility. Other immediate complications of FGM include severe pain, shock, tetanus or infection, urine retention, ulceration of the genital region and injury to adjacent tissues, wound infection, urinary infection, fever and septicemia. Hemorrhage and infection can be severe enough to cause death[2,13,21].

Lead City University Ibadan DO NOT COPY

Long-term consequences of FGM include complications during childbirth, anaemia, damage to the urethra resulting in urinary incontinence, dyspareunaia (painful sexual intercourse), sexual dysfunction, hypersensitivity of the genital area, psychological effects and increased risk of HIV transmission. When one tool is used to cut several girls, as is often the case in communities where large group of girls are cut on the same day during a social cultural rite, there arises the risk of HIV transmission.

It was added that due to damage to the female sexual organs, sexual intercourse can result in the laceration of tissues which greatly increases risk of HIV transmission. It was also revealed that most of the high FGM prevalence countries also have high maternal mortality ratios and high numbers of maternal deaths. Women who have undergone infibulations are more likely to suffer from prolonged and obstructed labour sometimes resulting in foetal death and obstetric fistula. The infants of mothers who have undergone more extensive forms of FGM are at an increased risk of dying at birth[6,24].

FGM may also have lasting psychological effect on women and girls who have undergone the procedure. The psychological stress of the procedure may trigger behavioural disturbances in the girl-child closely linked to loss of trust and confidence in her care givers. In the longer term, women may suffer feelings of anxiety and depression. Sexual dysfunction may also contribute to marital conflicts or divorce[6].

It was reported that immediate psychological trauma may stem from the pain, shock and the use of physical force by those performing the FGM. In the long term, post-traumatic stress disorder (PTSD), anxiety, depression and memory loss may occur[6,25]. A study in practicing African communities found out that women who have undergone FGM have the same levels of Post-Traumatic Stress Disorder (PTSD) as adults who have been subjected to early childhood abuse and that most of the women (80%) suffer from affective (mood) or anxiety disorders[6,26].

Lead City University Ibadan DO NOT COPY

Women who have undergone FGM may also be affected by chronic pain syndrome and (as) with other causes of chronic pain, there is an increased risk of depressed mood with reduced social functioning, feeling of worthlessness, guilt and even suicidal thoughts. It was noted that women who have experienced FGM tend to develop psychological conditions which make them withdrawn and uncommunicative or distrustful[6,27].

Other psychological effects include - emotional distance, flashbacks, sleep disorders, social isolation and stigmatization. It has also been found that the psychological trauma associated with FGM often stays with the girls and women for the rest of their lives. Women who were infibulated and who clearly remembered the incident and women who had received education concerning FGM reported more PTSD symptoms as well as greater anxiety and depression[6,27].

2.1.2 Knowledge of Mothers about Female Genital Mutilation

Knowledge has been defined as the fact or condition of knowing something with familiarity gained through associating or experiencing a thing. It is regarded as acquaintance with or understanding of a science, art, or technique; the fact or condition of being aware of something; the range of one's information or understanding of a subject; the circumstance or condition of becoming aware of truth or fact through reasoning; the fact or condition of having information or of being learned; the sum of what is known; and the body of truth, information, and principles acquired by humankind[28].

Knowledge of mothers has to do with their awareness of the FGM practice, its method of operation and health consequences on the victims. Knowledge is a familiarity, awareness, or understanding of mothers, such as facts, information, descriptions, or skills, which is acquired through experience or education by perceiving, discovering, or learning. Knowledge can refer to a theoretical or practical understanding that mothers have of a subject such as FGM. It can be implicit (as with practical skill or expertise) or explicit (as

Lead City University Ibadan DO NOT COPY

with the theoretical understanding of a subject); it can be more or less formal or systematic[29].

Knowledge can be defined as becoming acquainted about FGM practices. Mothers' knowledge about FGM practice could be good, fair or poor. Mothers' knowledge of FGM practice is good when know a lot about the practice, its benefits and health consequences; fair when they have average knowledge about the practice, its benefits and health consequences; or poor when they have little or very little knowledge about the practice, its benefits and health consequences. A mother who does not know much about the practice may allow her daughter to undergo the procedure which could have damaging effect in the long run[29,30]. Knowledge of mothers about FGM practice means to understand the relations between cause and effect of FGM practice. It is the result of mothers' personal experience, socialization, and formalized study of mothers about FGM practice[31].

2.1.3 Attitude of Mothers towards Female Genital Mutilation

Attitude is related with a category of problems concerning "how individuals perceived the world" and "behave". It refers to "people, groups, ideas, and objects", which mainly express whether individuals "like or dislike them. It is a mental and emotional "hypothetical construct" which characterizes the human personality, a concept which cannot be observed directly but can only be inferred from people's actions, or a psychological tendency to express the evaluation of a particular quality and the degree of favour or disfavour granted to it[32].

In the context of this study, attitude refers to women's opinion or feelings about female genital mutilation, expressed through their behaviour[12]. It may be defined as acquired and psychological variables, mental State achieved through life experience that direct mothers' behaviour in communities in Oyo State[33]. It is a series of beliefs that

Lead City University Ibadan DO NOT COPY

predispose mothers in communities in Oyo State to behave in a particular way towards the FGM practice[34].

Mothers' attitude in communities in Oyo State could therefore be measured by their affection, cognition and behaviour. Affection has to do with the mothers' like and dislike towards FGM practice. A mother who like FGM practice will continually carry out the practice and vice versa. The mothers' cognition includes their perceived usefulness of FGM practice, the difficulty or ease of carrying out the practice and beliefs towards FGM practice. Therefore, a mother who views or believe that FGM is a difficult practice that is not useful will ensure that her daughter (s) and those of others close to her are not subjected to the practice and vice versa[35]. A mother's behavioural attitude is her intention to carry out the FGM practice in the communities in Oyo State. It is the response or the displayed verbal or behavioural tendency to a task or entity such as FGM practice[36].

Attitude is a judgment made by mothers on FGM practice. Judgments from attitude can range from positive, negative or neutral. Attitudes arise from an inner framework of values and beliefs, developed over time. It is the readiness of the mothers' psyche to act or react in a certain way towards FGM practice[36]. An attitude is a mother's comparatively enduring sentimental orientation for FGM. It is defined as the essential qualities of a mind to give response positively or negatively to FGM practice. The attitude of a mother towards FGM can be express in two ways, whether it can be positive or whether it can be negative. The positive attitude of the mother will be shown if the practice is according to her personal like[37].

Attitudes arise out of core values and beliefs that mothers hold internally. Beliefs are assumptions and convictions mothers hold to be true based on past experiences. They are views, propositions, and convictions mothers dearly hold, consciously or unconsciously, about the true value of FGM. Beliefs are mostly acquired

Lead City University Ibadan DO NOT COPY

through such disparate means or personal experiences, family's ties, educational encounters, cultural transmission or public propagation. Belief is what influences mothers' FGM practices. 'Beliefs' are the way they think they should act towards FGM based on what they believe about FGM. Furthermore, values are defined as worthy ideas mothers hold based on FGM practice. Behaviours are how these internalised systems (attitudes, beliefs and values) are expressed towards FGM practice[36,38].

Attitude of mothers towards FGM practice are psychological tendencies materialized when they evaluate FGM practice with certain level of approval or disapproval. Attitude works as a judgment, based on tenets of rejection or assent of FGM practices. Attitude of mothers towards FGM practice is a neural and mental state of readiness, structured by their experiences they might have, which influence dynamically the answers they might have on FGM practice when faced with it. It is their evaluative reaction towards FGM practice based on the beliefs they might develop towards the practice[38].

Attitude is also viewed as a complex formed by psychological states, in which a mother has a proposition, a premise for a truth or conviction well-structured about FGM practice. Attitudes of mothers towards FGM practice can be understood through two perspectives: the behaviourist and the mentalist perspectives. In a nutshell, the behaviourist is anchored in the tenet that 'attitudes' might be inferred from the mothers' answers about FGM practice. And the mentalist, understands 'attitudes' as an inner readiness State, that, when activated, by some kind of stimulus, affects the mothers' answers towards FGM practice[38].

Attitude is defined as mothers' assessment of FGM practice in certain situations; State of mental, nervous, psychological readiness for FGM practice; mental and motor (readiness to act) expression in relation to FGM practice; psychological and personal

Lead City University Ibadan DO NOT COPY

characteristics (feelings, emotions, beliefs, values) towards FGM practice influenced by experience; and psychological tendency, expressing the evaluation of FGM practice with a certain degree of favourability or unfavourability towards the practice. Mothers with positive attitude towards FGM practice are those who do not want female circumcision to be continued in their daughters and in the community in the future while those with negative attitude want their daughters to be circumcised in the future[30,39].

Attitude is a mother's emotional State expressed by evaluating FGM practice with a certain emotional reaction and invisible construct formed on affective, cognitive or behavioural basis[39]. Attitude is a psychological construct that is an emotional and mental entity that characterizes a mother and her approach to FGM practice or her personal view on it. It involves mothers' mindset, outlook and feelings towards FGM. Attitude is a mother's State of mind regarding the usefulness of FGM practice which is precipitated through a responsive expression towards FGM practice which in turn influences the mother's thought and action towards it[40].

An attitude is an evaluation of FGM practice, ranging from extremely negative to extremely positive. Attitude is either a conscious and subconscious mental State with regards to FGM practice. It can be defined as a set of emotions or beliefs that mothers have or display towards FGM, in terms of a preference for or against FGM practice. It is also described as a settled and unchanging pattern of thinking, feeling, or observing that mothers show towards FGM practice that also influences their attention to FGM[40].

Attitude is a latent or internal disposition of mothers toward FGM practice which can be expressed through verbal and non-verbal reactions. It is not innate in the sense that it is given at birth as part of human nature but it is formed in mothers through life experiences or their association with FGM practice. A mother can have many beliefs about FGM but she can attend to only a small number of beliefs, and this form salient beliefs of

Lead City University Ibadan DO NOT COPY

the mother toward FGM practice. The salient beliefs are considered determinant factors of a mother's attitude towards FGM practice[41].

It was noted that the attitude is usually formed by the culture and environment where the mothers are raised. It was also argued that culture and environment plays an important role in the formation of brain functioning and even brain structure of mothers towards FGM practice. It was pointed out that culture has power in the formation of beliefs and ideas of a mother toward FGM practice. Since the human mind is programmed by culture and environment, it was argued that it makes the difference why mothers have a varying attitude towards FGM practice[41,42].

2.1.4 Perception of Mothers on the Legal Actions (Laws) against Female Genital Mutilation in Nigeria

Perception of mothers about the laws against female genital mutilation has to do with their understanding of the Violence Against Persons (Prohibition) Act (2015 VAPP Act) and Childs' Right Act against FGM practice in Oyo State and Nigeria. It is viewed as true belief of mothers towards the laws against FGM practice that is distinct from opinions or guesswork about FGM practice by virtue of justification[29,30]. Mother's perception of FGM is a fluid mix of framed experience, awareness, values, contextual information, and expert insight that mothers have about the legal actions against FGM practice and the extent to which these legal actions has been enforced against offenders[29,37].

The laws against FGM has to do with the legal actions or measures initiated by the government or law enforcement agencies in ensuring that the FGM practice is drastically reduced and offenders are brought to book. The laws enacted so far are - The Child's Right Act enacted in 2003, and Violence against Persons (Prohibition) Act, in 2015. In general, efforts to accelerate the abandonment of FGM in Nigeria have been a mix of legal/policy and advocacy interventions. In response to the international calls and in line with the

Lead City University, Ibadan DO NOT COPY

Sustainable Development Goals (SGDs) Target 5.3 aimed at the eradication of all forms of harmful practices against women and children including FGM by the year 2030, the Nigerian government passed a federal legislation, the Violence against Persons (Prohibition) Act 2015 (VAPP Act)[43,44].

The VAAP Act deals with incident of Female Genital Mutilation, the act is the first federal law attempting to prohibit FGM across the whole country. The VAPP Act aims to eliminate gender-based violence in private and public life by criminalizing and setting out the punishment for acts including rape (but not spousal rape), incest, domestic violence, stalking, harmful traditional practices and FGM. The VAPP Act does not provide a clear definition of FGM.

Section 6(1) provides that, 'The circumcision or genital mutilation of the girl child or woman is hereby prohibited.'

Section 6(2) criminalises and punishes anyone who performs, or engages another to perform, female circumcision or genital mutilation will be liable to a term of imprisonment not exceeding 4 years or to a fine not exceeding N200, 000 or both.

Section 6(3) criminalises and punishes anyone who attempts to perform, or engage another to perform, the practice will be liable to a term of imprisonment not exceeding 2 years or to a fine not exceeding N100, 000 or both.

Finally, Section 6(4) criminalises and punishes those who incite, aid, abet or counsel another to perform or attempt to perform FGM will be liable to a term of imprisonment not exceeding 2years or to a fine not exceeding N100, 000 or both.

The VAPP Act does not expressly criminalise failure to report FGM that has taken place or is due to take place[45]. Although Nigeria enacted the 2015 Violence Against Persons

Lead City University Ibadan DO NOT COPY

(Prohibition) Act (2015 VAPP Act), which criminalises the FGM practice in Nigeria, some Nigerian communities have continued to practice FGM unabatedly. As a federal law, the Act only applies in the Federal Capital Territory Abuja while States have to either adopt the law or create their own anti-FGM laws. Some States had their own anti-FGM laws prior to the passing of the VAPP Act[43,44].

The Child's Right Act was enacted in 2003 with the objective of protecting the rights of children. It defines a child as anyone who is less than 18 years old. The Act in Section 1 States that every action concerning a child whether undertaken by an individual, public or private body, institutions or service, court of law, or administrative or legislative authority, the best interest of the child shall be the primary consideration. In addition, the Act does not specifically define Female Genital Mutilation neither does it specifically refer to violence against women and girls but

Section 33(1) of the Act provides that a person who exploits a child in any form or way not already mentioned in this part of the Act which is prejudicial to the welfare of the child commits and offence and will be liable on conviction to a fine of five hundred thousand Naira or imprisonment to a term of five years, or to both such fine and imprisonment[45].

These, in addition to other national policies such as the 2013/2017 National Policy and Plan for Action for Elimination of FGM/C in Nigeria are initiatives aimed at bringing the FGM practice in Nigeria to an end[43]. In the same spirit, the civil society organizations (CSOs) have also continued to mobilize people against FGM through public awareness by forming a partnership with media and the civil society including traditional and religious leaders to disseminate anti-FGM messages at federal and state levels with the aim of turning cutters into anti-FGM campaigners. Currently, thirteen (13) out of thirty six (36) States in

Lead City University Ibadan DO NOT COPY

Nigeria have their own individual State laws expressly prohibiting FGM. These States are Lagos, Osun, Ondo, Ekiti, Bayelsa, Ogun, Delta, Ebonyi, Oyo, Imo, Edo, Cross-River, and Rivers[43,46].

Nevertheless, it should be noted that the VAPP Act has hardly been enforced in Nigeria and its implementation varies across the thirty six (36) States of the country with some States (especially those with historically high FGM prevalence) yet to follow suit. In addition, where it exists, it is even harder to implement the anti-FGM/C law where there is limited presence of law enforcement agents, for example, in the rural areas. Also, the rate of reporting has been low because the perpetrators are almost always family members and it is even possible that the law enforcement agents may sometimes discharge such reports as a family or community matter aimed at preserving one's socio-cultural norms and decide not to meddle[43,44,46].

2.2 Theoretical Review

This study was anchored on the following theories:

1. Health Belief Model (HBM)
2. Theory of Planned Behaviour

2.2.1 Health Belief Model (HBM)

The HBM was originally developed in the 1950s by social psychologists working at the United States Public Health Service to explain why many people did not participate in public health programs such as TB or cervical cancer screening. The theory States that people's perception or awareness or knowledge about the benefits and consequences of various health programs determined their participation in it or not[47]. The key components of the health belief model include perceived susceptibility, perceived benefits, perceived barriers, self-efficacy, and expectations (which are the product/sum of perceived benefits, barriers and self-efficacy), cues to action[48].

Lead City University Ibadan DO NOT COPY

Perceived Susceptibility (Risk): This has to do with the person's awareness or knowledge of the personal risk or susceptibility of the object which prompts the person to adopt healthier behaviours. The greater the perceived risk, the greater the likelihood of engaging in behaviours to decrease the risk[47,48]. Applying this concept to this study, it would mean that mother's level of perception or awareness or knowledge (be it good, fair or bad) of the risk of FGM practice could determine whether or not they would participate in the practice.

Perceived Benefits: This has to do with a person's knowledge or opinion or awareness of the value or usefulness of a new behaviour in decreasing the risk of developing a disease. People tend to adopt healthier behaviours when they believe the new behaviour will decrease their chances of developing a disease[47,48]. Applying this concept to this study, it would mean that mother's level of perception or awareness or knowledge (be it good, fair or bad) of the benefits or value or usefulness of FGM practice could determine whether or not they would participate in the practice. If they perceive FGM to be useful, they would adopt it and vice versa.

Perceived Barrier: This has to do with an individual's own evaluation of the obstacles in the way of him or her adopting a new behaviour. Of all the constructs, perceived barriers are the most significant in determining behaviour change. For a new behaviour to be adopted, a person needs to believe or perceive that the benefits of the new behaviour outweigh the consequences of continuing the old behaviour. This enables barriers to be overcome and the new behaviour to be adopted[47,48]. Applying this concept to this study, it would mean that mother's level of perception or awareness or knowledge (be it good, fair or bad) of the barrier of adopting FGM practice could determine whether or not they would carry out the practice.

Self-Efficacy: This has to do with the belief in one's own ability to do something[48]. People generally do not try to do something new unless they think they can do it. If someone

Lead City University Ibadan DO NOT COPY

perceives or believes a new behaviour is useful (perceived benefit) but does not think he or she can do it (perceived barrier), chances are that it will not be tried[49]. Applying this concept to this study, it would mean that mother's level of perception, belief or awareness, knowledge (be it good, fair or bad) of their ability to carry out FGM practice would determine whether or not they would carry out the practice.

Action Cues: This suggests that behaviour is also influenced by cues to action. Cues to action are events, people, or things that move people to change their behaviour[47,48]. Applying this concept to this study, it would mean that mother's level of perception, or knowledge derived from events, people or things can move them to carry out the FGM practice or not.

Relevance of the Theory to the Study

This theory rendered support to the influence of mothers' knowledge on FGM practice. According to the theory, a mother's intention to carry out the FGM practice depends on her perception, knowledge, and/or awareness towards FGM procedure. A mother's awareness or knowledge or perception of the risks, benefits and barriers of FGM coupled with her self-efficacy would determine whether she would carry out the FGM practice, continue with it or not adopt the practice. This perceived knowledge could be good or poor.

2.2.2 Theory of Planned Behaviour

The theory of planned behaviour (TPB) proposed by a theorist in 1991 is an extension of the theory of reasoned action. TPB outlines relationships among personal attitude towards behaviour, subjective norm, perceived behavioural control, intention, and behaviour. According to the theory, behavioural intention is a function of attitude towards the behaviour, subjective norm, and perceived behavioural control. Behavioural intention, together with perceived behavioural control (as a proxy for actual behaviour control), can

Lead City University Ibadan DO NOT COPY

predict behaviour[50]. The theory of planned behaviour (TPB) proposed that behaviour can be predicted by the strength of a mother's intention to behave in a particular way towards FGM practice. As a rule, the more positive the attitude and the subjective norm and the greater the perceived behavioural control, the stronger is the mother's intention to engage in FGM practice. The stronger the mother's intention, the more she is expected to try, and hence, the greater the likelihood of the mother carrying out FGM practice. Except with regard to behaviours that are largely out of the mother's behavioural control, the intention to engage in a particular behaviour (FGM practice) is the strongest predictor of the actual behaviour (FGM practice)[50,52].

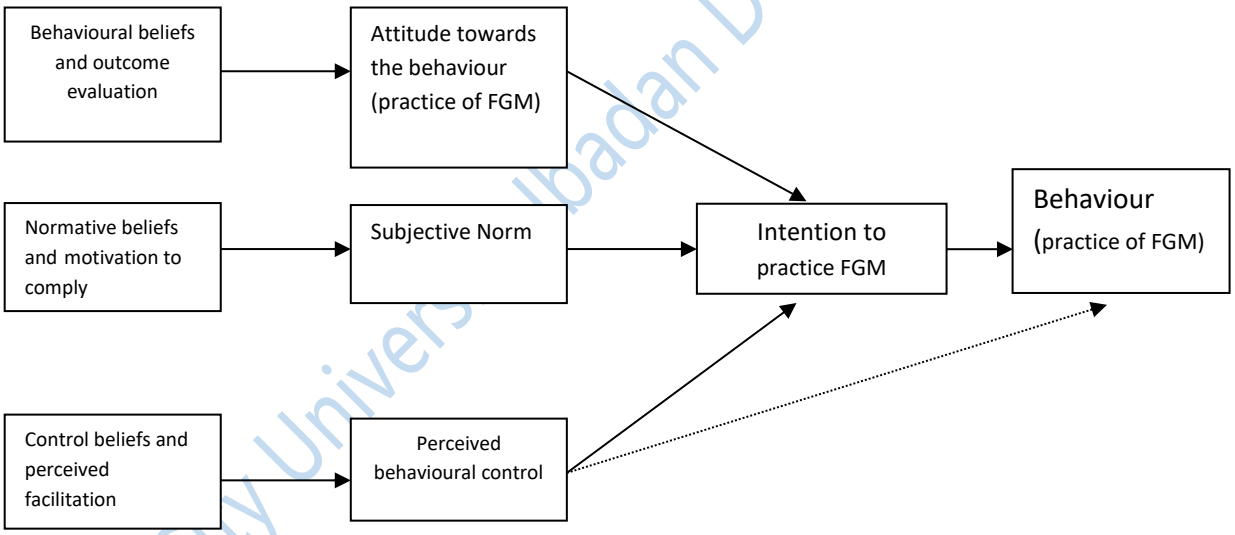


Figure 2.2: Theory of planned behaviour model **(Source[50])**

Intentions, understood as how hard mothers are willing to try or how much effort they are willing to exert to carry out FGM practice, are hypothesized to be a linear function of attitudes, subjective norms, and perceived behaviour control (PBC) about the target behaviour (FGM practice). Attitude towards behaviour is defined as a mother's overall evaluation of performing the behaviour (FGM practice) in question, which represents the

Lead City University Ibadan DO NOT COPY

mother's positive or negative feelings towards FGM practice. Attitude is a mother's subjective evaluation of FGM practice that has good/bad, harmful/beneficial and likable/dislikeable attributes. Attitudes are attached to an object when people's beliefs about the object are formed. The current understanding is that attitudinal formation can emerge from instrumental and/or affective considerations. Instrumental attitudes relate to the cognitive consideration of the consequences (e.g. advantages or disadvantages) of performing the behaviour (FGM practice) whilst affective attitudes concern the emotional experiences (e.g. like or dislike) emerging from performing the behaviour (FGM practice)[50,52].

Subjective norms are related to social factors and involve the pressure mothers feel from important others about performing or not performing FGM practice. Important others can include - parents, community leaders/heads, neighbours, husbands and their families, and fellow women. Different groups of people may have different expectations. Subjective norms reflect the perception that people whose opinions the mothers value and think they should perform the behaviour (FGM practice). It was also noted that mothers also form subjective norms when their referents (important others) perform or do not perform the behaviour (FGM practice) in question. The former has been reconceptualised as injunctive norms, the latter as descriptive norms. In their respective aggregate, both injunctive norms and descriptive norms produce a subjective norm (or perceived social pressure) to perform (or not) a given behaviour (FGM practice)[53].

Perceived behavioural control refers to the perceived ease or difficulty of performing a behaviour (FGM practice). Perceived behavioural control has two separate components: Perceived self-efficacy and perceived controllability. Perceived self-efficacy refers to a mother's perception of the ease or difficulty of performing FGM practice. It also refers to a mother's own perceived self-confidence in their ability to perform FGM practice.

Lead City University Ibadan DO NOT COPY

Controllability refers to the perception of the extent to which performing FGM practice depends on her. However, although the two components are treated as separate, they are related. Controllability reflects external control factors such as the availability of resources and opportunities that enable a mother to initiate the behaviour on their own volition, without imposed external restrictions[53,54].

The three dimensions of the model - attitude toward the behaviour (FGM practice), subjective norms, and perceived behavioural control work together to form the mother's intention to perform FGM practice. The stronger a mother's intention to perform FGM practice, the more likely she is to carry out the practice when possible. The more positive the attitude and subjective norm, and the greater the perceived behavioural control (PBC), the stronger should be the mother's intentions to perform the practice. Thus, the stronger the level of intention and perceived behavioural control (PBC), the more likely the behaviour (FGM practice) will be enacted.

Relevance of the Theory to the Study

This theory rendered support to the influence of mothers' attitude on the FGM practice. According to the theory, a mother's intention to carry out the FGM practice depends on her attitude towards it alongside subjective norm (social factors and pressure mothers feel from important others to carry out FGM practice) and perceived behavioural control (perceived ease or difficulty of performing FGM practice). In fact, the more positive or strong the attitude and the subjective norm and the greater the perceived behavioural control, the stronger is the mother's intention to engage in FGM practice and vice versa.

Lead City University Ibadan DO NOT COPY

2.3 Review of Empirical Studies

This section reviewed prior studies related to this study based on the following sub-headings:

2.3.1 Knowledge and Practice of Female Genital Mutilation among Mothers in Oyo State

A study sought to determine the perception and FGM practice among mothers in Ibadan, Nigeria. The result showed a full awareness of FGM among mothers in Ibadan North LGA as all the respondents in the current study were aware of FGM but their source of information was mainly from family and friends. This implies that the mothers in the study would not have had an accurate and updated view of FGM as information from family and friends would have been biased and sentimental compared to that coming from the mass media. Almost half of the respondents described FGM to be simply the removal of clitoris. This finding is expected because the mothers do not have complete and correct information/picture of FGM entails, since their major source of information about the practice was from family and friends. On the perceived benefits of FGM, about one-third of the respondents opined that FGM helps to conserve virginity and promotes cleanliness; while only a few perceived it as a religious obligation. On the perceived effects of FGM, more than half of the respondents agreed that, FGM could result in infection; little less than half of the respondents Stated that it could result in excessive bleeding. Only about a quarter each perceived incontinence and infertility as effects of FGM. On respondents' FGM practice, less than a fifth of the mothers affirmed they have circumcised their daughters while majority have not. These implies that even though the mothers in this study explicitly stated their awareness of the FGM practice, their practice was not fully synonymous with their awareness of the practice. This might be due some reluctance in going ahead with FGM given their awareness of some of its negative health consequences. Also, less than a

Lead City University Ibadan DO NOT COPY

third of the mothers still plans to circumcise their daughters. Results also revealed that the procedure of FGM in the study was performed mainly by traditional circumcisers and TBAs as they were identified by most of the participants. However, few identified nurses while very few identified doctors. About respondents' reasons for practicing FGM, a little above half of the respondents would circumcise their daughters due to their mother or mother-in-law's insistence; another few percentages of the respondents would do so because it is a cultural heritage that should to be promoted. With regards to the mothers' experience of FGM, many had undergone FGM at one time or the other, but none said the procedure was carried out with her permission. Another few percentages of the respondents claimed not to know whether or not they had FGM; while less than one-fifth claimed not to have undergone FGM. The mothers' level of education influenced their FGM practice. There was also a significant association between having undergone FGM and the experience of dyspareunia. Although, the views expressed by the mothers on FGM, including its eradication, were somewhat impressive, this study shows that, FGM is still being practiced and many women are living with its negative effects. It was therefore recommended that there is the need to intensify and consolidate educative and advocacy efforts to ensure that the practice is completely abolished and eradicated[1].

A similar study was undertaken to assess the knowledge of health consequences of FGM and its practice among the Female parents in Ibadan South East Local Government area of Oyo State. The results of the study showed that parents have the knowledge of FGM. The result also showed that parents do not have the knowledge of health consequences of FGM. Parents were found to be practicing FGM. Based on the findings, it was recommended that public education and seminars on the dangers of female genital mutilation should be organized by government agencies and non-governmental agencies in various communities, town hall, marketplaces, churches and mosques to acquaint the

Lead City University Ibadan DO NOT COPY

people with the knowledge of health consequences of FGM. FGM topic should be included in the Health Education curriculum of schools from primary to tertiary institutions and should be taught by health educator specialist as this would enhance the students to have the knowledge of health implication of FGM and curtail them from practicing such when they grow up, get married and have their own children; students could also disseminate the knowledge acquired in school to their parents, guidance and community at large as these would help to forestall the practice of the FGM in the society thus preventing the morbidity and mortality rate that may arise from its practice[5].

An article employed qualitative methods to ascertain the psychological experiences associated with FGM through the lifecycle of women. Results showed that the emerging themes were related to experiences and disabilities in the psychological, physical, and social health domains. While physical experiences were mostly negative, psychological experiences emerged as both positive and negative. Positive experiences such as happiness, hopefulness, and improved self-esteem were commonly described in response to a rise in social status following FGM and relief from the stigma of not having undergone FGM. Less commonly reported were negative psychological experiences, such as shame when not cut, anxiety in anticipation of the procedure, and regret, sadness, and anger when complications arose from FGM. Some participants listed disruption of daily activities, chronic pain, and sleep and sexual difficulties occurring in the aftermath of FGM. Most participants did not list FGM as having a significant effect on their daily living activities. Considering the association of FGM with both positive and negative psychological experiences in the Izzi community, more in-depth study is required to enable policy makers and those campaigning for its complete eradication to re-think strategies and interventions[10].

Lead City University Ibadan DO NOT COPY

A closely related study was implemented on assessing the knowledge and intention towards the continuation of FGM practice among young girls in South-West Nigeria. Results showed that most of the young girls displayed varying knowledge on FGM based on diverse information received in the community. Some of these information contained misconceptions and myths about the FGM practice which is due to the quality of the information passed across to the young girls. This shows the influence of source information on the knowledge of individuals. The girls obtained most of their information from members of the community. This underlines the importance of not underestimating the power of word of mouth as a source of knowledge in disseminating information about FGM to the younger generation. Many of the young girls were not aware of the complications of FGM. Complications mentioned include - bleeding, painful urination, infection transfer, HIV, pain during menstruation, mortality, and sexual dissatisfaction. It is worth noting that, while some of the girls are aware of the immediate consequences of FGM, many of them are unable to clearly explain the long-term consequences, particularly the pregnancy difficulties connected with it. It was also revealed that the young girls have low knowledge of FGM and laws and policies against the practice. According to the young girls, FGM is done to reduce promiscuity and to make childbirth easier. The mothers of these young girls may have communicated this rationale to them to justify the need for and continuance of the practice. Almost half of the young girls had the intention to continue FGM practice. Some of the girls have intention to continue the FGM practice. This intention was because they were circumcised and believe FGM will protect their offspring from difficulties during delivery and promiscuity. To prevent the continuation of FGM practices, stakeholders should plan and implement programs that change the belief of young people towards FGM. This will include sensitization program including community outreaches and media campaigns. Also, FGM content should be mainstreamed into

Lead City University Ibadan DO NOT COPY

educational activities planned for students across all levels. There should be efforts targeted at promoting locally led FGM education among young people and effective systems to promote reporting of FGM cases and the enforcement of laws and policies against the practice[14].

The objective of the study was to understand knowledge and thoughts of women towards female genital mutilation in Northeast Nigeria. Results revealed that most of the respondents were aware of FGM but not as high as in the southern part of Nigeria. The majority knew the meaning of FGM and thought of it as a harmful practice done for various reasons. It was concluded that FGM has negative impacts on females' health. It was therefore highly recommended based on the findings of the study that there is the need for the government and other important stakeholders especially those within the health sector to enlighten parents more about menace of FGM through community and school health education[22].

A cross-sectional descriptive study was carried out in Ombada province, with objectives to assess knowledge, and practices among mothers towards female circumcision. Results revealed that all the mothers knew female circumcision, while a major fraction of them affirmed that it is still practiced in their society. The significant reasons why FGM were persistently practiced were; to insure virginity, adhere to religious instructions, avoid social stigma, necessary for prospective marriages. Most mothers knew of the health consequences of FGM while a major proportion of them knew that female circumcision can be eradicated through increasing mother's awareness. It was therefore recommended based on the findings of the study that mothers should be educated on FGM and its health consequences to reduce the practice in the study area[55].

A similar study was carried out to assess knowledge and practice of the community towards female genital mutilation in Agarfa town, southeast Ethiopia. Results revealed that

Lead City University Ibadan DO NOT COPY

majority of the respondents, two hundred and fifty-three (253) representing 93% have heard of FGM. The main sources of information identified by the respondents were television (one hundred and ninety-three, 193), radio (eighty-eight, 88) and health professionals, (seventeen, 17). Two hundred fourteen (214) representing 78.7% of the respondents knew that their religion does not allow female circumcision, while forty two (42) representing 15.4% Stated that their religion allows FGM and sixteen (16) representing 5.9% do not know whether their religion allows the practice or not. About two hundred and thirty two (232) representing 85.3% of the respondents Stated that females have the right not to be mutilated and two hundred and twenty four (224) representing 82.4% knew that the practice is harmful. Participants were asked about their knowledge of the complications of FGM. About two hundred and eight (208) representing 16.5% of them had knowledge about the complications. Among these, one hundred and sixty-one (161) representing 38.9% Stated that problem during delivery; one hundred and sixteen (116) representing 28% Stated excessive bleeding; sixty five (65) Stated sexual problem while forty four (44) representing 10.6% Stated pain during urination. One hundred forty (140) representing 51.5% of the respondents knew the reason why people are practicing FGM and one hundred and thirty two (132) representing 48.5% did not know why people are practicing it. To respect the culture/tradition was the main reason followed by religion, better delivery and to decrease sexual desire. More than half the respondents Stated that FGM is not currently being practiced in their village while seventy-five (75) representing 27.6% did not know whether it is being practiced or not. The majority proportion of FGM was performed by traditional circumcisers (83.3%) and the rest by traditional birth attendant (16.7%). Females (72.2%) were the main circumcisers. Forty-eight (88.9%) were circumcised alone and majority were cut in their home. The reasons they practice FGM was to respect the culture/tradition followed by religion, better birth delivery and to decrease sexual desire. Thus, an effort

Lead City University Ibadan DO NOT COPY

should be made to change the knowledge, attitude and practice of traditional circumcisers by participating the community as whole[57].

A closely identical study was done to assess knowledge and practice towards FGM among the reproductive age women in Amad Imam town, Jarso district, East Hararge zone, Oromia Region. Results revealed that prevalence of FGM in the study area was 91.28%, where excision (type II) is the commonest type of FGM practiced. Clitoridectomy and suni where reported 30.68% and 16.28% respectively. About one hundred and seventy eight (178) representing 67.4% of the respondents had good knowledge on FGM. It was concluded that FGM is common practice in the eastern Hararge Zone, East Ethiopia. It was recommended on the basis of the findings that all hands should be on deck in ensuring that the prevalence rate of FGM in the area should be brought to a minimum level[58].

A closely related study was carried out on knowledge towards the practice of female genital mutilation among pregnant women attending maternity wing in Dagahaley Médecins Sans Frontières Hospital. Results revealed that majority of the respondents were knowledgeable on the definition of FGM. Most stated the definition to be a cultural rite of passage done to a girl once she attains a certain age. They stated that it is a practice done to remove the outer parts of the female reproductive system. A few respondents defined it as a religious practice that is done to preserve dignity and virginity of a woman until marriage. Only few of the respondents Stated they knew the effects of FGM. Some Stated severe pain as an effect of FGM, a few mentioned difficulties passing urine/feces, damage to urethra and difficult menstrual periods as immediate effects of FGM. Long-term effects of FGM that were mentioned were difficult childbirth, excessive bleeding (hemorrhage) and sexual dysfunctions. Majority of the respondents Stated FGM was legal. Most of the respondents stated they were knowledgeable about the laws mentioned in the Quran, laws preventing child abuse and the Kenyan Constitution. Many respondents were not

Lead City University Ibadan DO NOT COPY

knowledgeable of why they practiced FGM. Less than half of the respondents stated as reasons for practicing FGM that it was a cultural rite of passage and that there were laws favouring it. Some stated poverty, benefits related to the practice, and school education as reasons for FGM. It was therefore recommended that women should be more educated or enlightened on the FGM practice[59].

Another similar study was conducted to assess the perceptions of FGM practice among mothers in Owerre-Ebiri Community in Orlu Local Government Area, of Imo State. The results revealed that female genital mutilation is practiced because of fear of early pregnancy and promiscuity among womenfolk, women are not acceptable among peers in social meetings/functions in my community and FGM is also practiced to maintain cleanliness and good health in women folk, female genital mutilation raises the social status of the family and promotes social morality and decency in women, FGM of women enhances better chances of marriage in girls and also circumcision of women increases male sexual pleasure. The respondents perceived that social factors promote the FGM practice. This could be because of female genital mutilation is a practice that has long fascinated health and all other health related disciplines such as sociology and psychology. The reasons for FGM include cultural/customs, religion, decreasing the sexual desire of women, social, hygiene and aesthetic. Results also showed that age, religion, wealth, ethnicity, literacy, years of education, household affluence, region and who had responsibility for health care decisions in the household, were all significantly related to the FGM practice. This goes to show that social factors promote the FGM practice. Furthermore, it was revealed that the respondents perceived that cultural beliefs support FGM. According to them, FGM is done to initiate girls into womanhood, preserve family honour, prevent immorality, help women to preserve their virginity, enhance fertility and promote child survival, as they believe that the presence of clitoris would make a lady to

Lead City University Ibadan DO NOT COPY

desire having sex always. It was also revealed that mothers are aware of consequences of FGM in their community, they are not aware of the health benefit of not practicing female genital mutilation, there is increased awareness of FGM in mothers due to awareness and public awareness is the most effective means of FGM education. Therefore, on average, majority of the respondents are aware of female genital mutilation. There was a weak positive relationship between the mothers' educational background and the perception that uncircumcised females will become promiscuous. This implies that the more educated the mothers are, the more they perceive that uncircumcised females will become promiscuous and vice versa. That is, improvement in mothers' educational background would lead to positive perception that uncircumcised females will become promiscuous. Based on the findings of the study, the following recommendations were made Government and policy makers should make necessary adjustments and huge investment committed to eradicating FGM practices; and local communities should create awareness on FGM through the organization of seminars, workshops and training on the risks of FGM and its health consequences as this would probably help to reduce the practice[60].

A closely related study was undertaken to assess the knowledge towards female genital mutilation and its health implication among women of in a Community in Osun State Nigeria. The results revealed that sixty percent (60%) of women have the right knowledge about FGM and forty percent (40%) don't have the right knowledge, ninety-three (93%) of the respondent believe that female genital mutilation is a safe procedure which must be done to protect the child while about sixty four percent (64%) of the respondents Stated that their culture permits the practice. On the basis of the findings, it was therefore recommended that there is still need to intensify efforts on creating awareness about female genital mutilation and its health implication among men and women in the community in Osun State[61].

Lead City University Ibadan DO NOT COPY

Another closely identical study was undertaken to determine the knowledge and social cultural factors associated with health and social implications of FGM among women in Obiangwu Community, Ngor-Okpala LGA, in Imo State. The study identified the main socio-cultural factors contributing to the FGM practice among mothers in the community and explored Obiangwu community's effort to end FGM. Results revealed that most of the women had heard about female circumcision before. This implies that female circumcision is not an uncommon practice among the respondents in the study location as some of them indicated to have been circumcised or had people that have been circumcised in the study area. Concerning the knowledge of physical health risks of FGM, most of the women knew the health implications of FGM. They were aware that the risk factors involved in FGM include bleeding, infection, keloid, problems during child delivery, and death. In fact, findings from the qualitative showed that some of these women experienced part of these health implications, especially problems during child delivery and death of infants during the process. Fistulate formation is sometimes a recognized ground for divorce and causes a lack of marriageability, therefore, FGM can have the opposite effect of what it sets to achieve. While FGM aims to enhance a woman's desirability as a wife and sexual partner, the real outcomes of FGM, disadvantage women in precisely the area where it is supposed to protect and empower them such as marriageability, sexual relationships and fertility. Social-cultural factors influencing the practice of female genital mutilation in the study area showed that the people in the community did not practice FGM because of being rejected among their peers. However, the reason for the practice was to maintain cleanliness and good health in women and enhance better chances of marriage among girls. It was also observed that female circumcision persists in the society is to preserve family honour and prevents immorality and to prevent getting unwanted pregnancies. Efforts have been made by the community to end the female genital mutilation because of its health implications.

Lead City University Ibadan DO NOT COPY

Rules forbidding its practice have been put in place and that various seminars have been conducted to preach against its practice. Though the practice continued but was not common. The community is still at the planning stage of ending the practice. Some illiterate and aged people still believed in the act because to them, it was a generational practice. It was therefore recommended based on the findings of the study that efforts should be intensified to reduce the FGM practice in the communities in Ngor-Okpala LGA, Imo State[62].

A study was carried out to describe the perceptions of and the coping mechanisms employed by affected couples in dealing with the consequences of female genital mutilation (FGM) as a form of sexual disability. The findings present the justifications provided for the FGM practice, and victims' perceptions of how it affects their sexual relations. Furthermore, it highlights coping strategies employed by affected women and their spouses. The study shows that the respondents have good level of awareness of the disabling consequences of FGM practice on women. The results also revealed that the disabling consequence of FGM is largely sexual in nature, leading to traumatic experiences and negative beliefs about sex, and requiring a myriad of coping strategies employed by the disabled women, and their spouses, which may have its own implications for marital and sexual bliss[63].

A study was carried out to assess the level of awareness and knowledge of FGM in a sub-urban community, Edo State with a bid to raising awareness on FGM and developing programs against the practice. Results revealed that the mean age of respondents studied was 22.78 ± 9.30 years. Three hundred and fourteen (314) representing 96.6% of the women studied were aware of FGM while eleven (11) representing 3.4% were not aware of FGM practice. It further revealed that school and family were predominant sources of information for one hundred and fifty-five (155) and one hundred and twenty-four (124) of

Lead City University Ibadan DO NOT COPY

the women respectively. One hundred and eighty six (186) of the women representing 56.2% had good knowledge of FGM while one hundred and twenty eight (128) representing 40.8% of the respondents had poor knowledge. It was further revealed that employment status was a significant predictor identified that influenced knowledge of FGM among the sampled women. The study also identified disparity between level of awareness and knowledge of FGM with employment status identified as a significant predictor for knowledge of FGM. It was therefore recommended based on the findings that there is need for a well-coordinated approach involving all relevant stakeholders to raise the needed awareness with adequate knowledge to make informed decision against the FGM practice[64].

An identical study was implemented to assess the level of knowledge regarding FGM in Saudi Arabia. Results revealed that out of the six hundred and fifty nine (659) participants in the study, about 80.4% of them were females and 19.6% were males. The results revealed that a high percentage of the participants had heard about female circumcision. Regarding the supporters of FGM, the highest percentage cited health benefits, particularly hygiene, as the main reason. Most of the participants were against female circumcision citing health issues, whether it be psychological or physical, as their main reason. Religion was another reason, chosen by 41.7% of the respondents. Regarding FGM eradication, most of the respondents chose legal prohibition as the best action to limit this practice, followed by raising awareness about the health consequences of this practice. Laws have shown to be effective in slowing down the continuation of this ritual. Majority of participants were aware of the health consequences of female circumcision. Most of the participants were circumcised below the age of one year (70%). Regarding the health consequences of FGM, most mutilated females reported that they didn't have any complications. Majority of the participants were against the practice and most of them were

Lead City University Ibadan DO NOT COPY

females who were against it. The most common sources of information for FGM were the Internet and social media. The overall prevalence of circumcision among the female participants was low. It was concluded that the population had good knowledge of FGM. However, their knowledge is not enough to eliminate this practice hence it was recommended based on the findings that health and human rights education campaigns and programs should be done to enhance public awareness. It was also added that more research about the prevalence of this tradition should be taken into consideration[65].

A similar research work was undertaken to assess the awareness, prevalence and practice of female genital mutilation amongst students in a tertiary institution in South South, Nigeria. Results showed that a major fraction of the respondents were aware of FGM. This shows a slightly lesser awareness level of FGM as compared to the study in Jos, Nigeria with a higher awareness level and also a study in Nigeria amongst Igbo women with even a much higher awareness level. This level of knowledge is not unexpected and could be attributed to the fact that the respondents are university undergraduates who can be presumed to be educated individuals. The majority (72.8%) of the respondents do not support the FGM practice, and only few of them (12.0%) support the FGM practice. Most of the respondents reported that the FGM practice should be discontinued as they think that FGM is a form of violence against women. A low prevalence rate of FGM was reported in this study. The low prevalence rate (9.4%) reported in this study, could be because this study was done amongst university undergraduates whose parents may most likely be more educated than the regular rural dwellers with little or no education who are most likely to carry out traditional or cultural beliefs and customs such as FGM. The ethnic group/tribe of respondents was found to have a statistically significant association with being circumcised (FGM) or being genitally mutilated and being aware or knowing about female genital mutilation. This is not surprising as FGM is a customary or traditional practice in

Lead City University Ibadan DO NOT COPY

most African societies since it is believed that it helps to reduce promiscuity amongst the female folks and help in reducing infidelity amongst the females in the African society. On the other hand, the age of respondents was not found to be statistically associated with being genitally mutilated. This finding is not surprising, since the study was carried out amongst university undergraduates whose age differences would not be that significant as they are mostly of same age bracket or group. It was concluded that awareness and knowledge of FGM in this study were high. Most of the respondents were not in support of the FGM practice and want the practice to be discontinued. The prevalence of FGM in this study is lower as compared to many other studies. It was therefore recommended based on the findings that there remain the need for more education to the general public and parents in particular on the health implications or consequences of FGM and the need for legislation or laws to be seriously enacted against the practice[66].

A study was carried out to determine women's views on aspects of female genital mutilation, types of female genital mutilation, reason for and attitude towards female genital mutilation. Results revealed that the prevalence of FGM from this study is 21.9%. In total, 429 respondents representing 97.9% reported the existence of FGM at the time of the interview. Majority of respondents about two hundred and eighty-three (283) representing 66.0% Stated that the clitoris was the main part removed. The main reason given for genital cutting was to prevent sexual promiscuity in sexual practice and was the response of one hundred and thirty-two of the women, while thirty-five of the women noted that it was done to preserve virginity. Three hundred and eighty-four (384) representing 89.5% of the women were aware of the campaign against female genital mutilation and two hundred and ninety-eight (298) representing 69.5% of them were in support of the legislation against FGM. Seventy-nine (79) of the women representing 18.4% were not in support of the legislation out of which nineteen (19) representing 24.1% felt that to stop the

Lead City University Ibadan DO NOT COPY

practice means to interfere with the norm. Female genital mutilation is still practiced in the environment and some of the women know the negative reproductive health consequences of FGM and had experienced them during sexual intercourse and childbirth. However, regarding stopping FGM, majority had not taken any steps towards stopping the practice. Hence, it was recommended that there should be public enlightenment and awareness campaigns about the dangers of FGM in women and girls; and policies against this harmful practice should be enacted and strictly enforced especially in communities where it is still highly prevalent[67].

The objective of a closely related study was to determine knowledge of women towards obstetric effects of FGM practice among Maasai women. Results revealed that half of the women were knowledgeable on obstetric effects of FGM. Majority of them (81%), sustained perineal tears during childbirth while 53% had postpartum hemorrhage. Majority of the respondents (81%) had negative attitude towards FGM and 87% of the respondents would not encourage their daughters to be circumcised. Most of them, 64%, disagreed that circumcision made one a respectable woman. It was therefore concluded on the basis of the findings that most of the women have knowledge and positive attitude towards FGM practice in the study area. The obstetric effects of FGM were fairly known and there was negative attitude towards FGM practice. It was recommended that campaigns should be done to ensure that more women have good knowledge of the health consequences which includes the obstetric effects of FGM so that they can develop the negative attitude towards the practice which is to abhor it[68].

A similar study was carried out on Prevalence, Knowledge, and Practices of Female Genital Mutilation and Cutting (FGM/C) Among United Arab Emirates Population. Results revealed that the number of women with FGM was three hundred and forty-four (344); hence the prevalence of FGM in the study was 41.4%. Type I was the most prevalent

Lead City University Ibadan DO NOT COPY

(62.8%), followed by Type II (16.6%) and Type III (5%). FGM was less prevalent among educated and employed women and was mostly performed during infancy and childhood. Among the participants, 13.7% reported that their daughters had undergone FGM, with Type I being the most common, and 25% of them planned to have their future daughters undergo Type I FGM. While FGM was mostly performed by ritual circumcisers (74.4%), it was performed by health professionals and in the clinic setting, respectively. About sixty nine percent of the participants considered FGM a custom, while 72.8% were against the practice, and only 17.4% believed in its legality. Complications occurred in 30% of cases. The type of FGM was associated with the occurrence of complications such as bleeding, difficulties in sexual life, and delivery-related problems. One-fifth of the male participants expressed plans to circumcise future daughters. It was concluded that FGM remains a prevalent practice in the UAE and has a negative association with the general health of Emirati women. The lack of clear legislation to criminalize this practice is a problem to be addressed. It was therefore recommended that national-level educational and legal strategies should be a priority in a bid to eradicating the practice in the study area[69].

A study was carried out 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. Results revealed that mean age of the respondents was 30.3±4.8 years. 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. The high level of awareness and knowledge of FGM could also

Lead City University Ibadan DO NOT COPY

be attributed to the high prevalence of FGM as cultural practice in the study population. The 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. 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. Concerning attitude towards FGM, over four-fifth of the respondents was not in support of the sustenance of FGM as a good cultural practice. It was also observed that a high proportion of the respondents were not willing to recommend FGM to other women. 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 FGM practice 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 sociocultural 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. Age group, religion and educational status were identified as significant factors influencing

Lead City University Ibadan DO NOT COPY

knowledge of FGM while in relation to attitude towards FGM, knowledge of FGM 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[70].

A closely related study was carried out on Knowledge about Female Genital Mutilation among Females Attending Wad Nubawe Health Center (August 2020). Female genital mutilation (FGM) was defined in the study as all procedures that involve partial or total removal of the external female genital organs, or any other injury to the female genital organs for non-medical reasons. Results revealed that most of the females about 86% in the study on FGM at the Wad Nobawi Health Center were aware of FGM while 14% were not aware and most of the target group about 93% had good knowledge of the types of FGM. Most of the target group about 65% knew of the risks of FGM to include - severe pain and severe bleeding; about 49% knew of ulcers as risk of FGM. Most of the target groups knew about complications during childbirth while very few knew about infertility as health consequences of FGM. It was concluded that most of the respondents have good knowledge of FGM especially the health consequences of the practice. It was recommended based on the findings that public enlightenment campaigns should be done to ensure the knowledge level about FGM among Females Attending Wad Nubawe Health Center is drastically improved[71].

A study noted that the knowledge of medical students about FGM are questionable in Egypt. Hence, the study was carried out to explore the level of knowledge towards FGM and identify the possible predictors favouring its practice among medical students. Results revealed inadequacy of medical students' knowledge. The total knowledge score was significantly higher among females compared to males. The higher knowledge level among

Lead City University Ibadan DO NOT COPY

females made them to be against the FGM practice. Furthermore, the included female students demonstrated higher level of knowledge than males being FGM is a harmful practice and against the law, while males responded that FGM reduces promiscuity and increases the chance of the female to get married. The discrepancy in the level of knowledge between both sexes sharing the same educational program reflects the weak impact of the educational content to be able to correct the effect of the prevailing deeply rooted culture towards FGM. Out of the included female medical students in this study, 12.6% were circumcised and 3.7% refused to mention their status. Overall, the surveyed sample expressed a negative attitude towards FGM, refusing this practice to continue, females appeared to be more against the practice than males. 77.4% of females and 67.6% males of medical students, mentioned FGM should be legislated and criminalized by law. It is evident that; half of the surveyed students thought that criminalization of FGM could prevent the future practice as a first step, 49% expressed their fear if health care professionals refuse to perform FGM may lead to shifting to the traditional circumcision being a final resort of the families opening the door to painful and unhygienic practices with more complications. 67.6% of the surveyed students declined the male preference to marry a circumcised female and that misconception that FGM increases the chance of the females to get married. The possible predictors for future practicing of FGM among the surveyed medical students showed being less knowledgeable male practitioner appeared to influence the future FGM practice. While student's age, religion and the type of medical education were not affecting the future intention of FGM practice among medical students. It was recommended that male students should also be equipped with the knowledge of FGM practice and its health implications as this would make them to kick against the practice in future[72].

Lead City University Ibadan DO NOT COPY

A similar study was investigated on the knowledge and public perception on FGM of Bini indigenes who reside in Oredo Local Government Area of Edo State, Southern Nigeria. The study revealed that a total of ninety-two (92) respondents representing 43.4% believed in FGM as against one hundred and twenty (120) representing 56.6% who were opposed to it. Of these respondents, about one hundred and fourteen (114) representing 53.8% appeared to be very knowledgeable on the importance of FGM to the Benin culture as against ninety-eight (98) representing 46.2% that were not conversant with it. The result also showed that a great percentage of respondents about one hundred and sixty (160) of them representing 75.5% supported that the people of ancient Benin kingdom strongly believe and honour their culture on the cultural practices and norms as it relates to FGM, while a lesser number of them about fifty-two (52) of them representing 24.5% were opposed to this view. This is indicative that FGM remains an important aspect of the culture of these people till recent times. It was reported that eighty six (86) representing 40.6% of the respondents Stated that Benin girls who are circumcised are likely to be a prostitute; ninety four (94) of the respondents representing 44.3% reported that they believe that girls who are not circumcised enjoy sex; about sixty two (62) representing 29.2% reported that they believe that girls who are circumcised enjoy sex; about sixty (60) representing 28.3% Stated that girls who were not circumcised stay more in their matrimonial home; one hundred and twelve (112) representing 52.8% reported that girls from Benin culture have choice of being circumcised; one hundred and thirty four (134) representing 63.2% reported that Benin parents believe more in their culture rather than the World Health Organisation's stance about FGM; ninety (90) representing 42.5% reported that girls who are not circumcised command respects in the society; while seventy four (74) representing 34.9% reported they have been circumcised. An average number of the respondents believed more in their tradition rather than their educational influences. While about fifty-six (56)

Lead City University Ibadan DO NOT COPY

representing 26.4% reinforced that in spite of their level of educational awareness, they still believe in FGM; about one hundred and eight (108) representing 50.9% respondents reported that their educational qualification changed their beliefs and practices of FGM. The results imply that educational health campaigns against FGM could be useful in combating the hazardous implications of FGM on the socio-cultural well-being of the female child. Continuous education geared towards global best practices in study area is highly recommended[73].

A similar study was carried out with the purpose to determine the prevalence of FGM among three generations in Abuja, the federal capital city of Nigeria. Results revealed a significant decline in FGM prevalence between the women interviewed and their mothers and a substantial difference between them and their daughters. The prevalence of FGM in this study was not significantly different across all religions in the first and second generations but significantly lower among Christians than Muslims and Traditionalists in the third generation. The rate of FGM practice was considerably lower across all religions in the third generation than in the first and second generations. Education was significantly associated with the women's decision to perform the FGM on their daughters. The rate at which respondents circumcised their daughters significantly decreased with an increase in the respondent's level of education. Also, most of those who performed FGM on their daughters confirmed that their religions and culture require FGM. In this study, women who were not educated were two times more likely to mutilate their daughters than the educated ones. Also, women whose mothers were circumcised were more likely to circumcise their daughters. It was also revealed that mothers who had experienced FGM reported cutting their daughters more than those who had not experienced it. It was concluded that although there is a decline in FGM prevalence from the first generation to the third generation in Nigeria, the current prevalence of 8.7% remains a public health

Lead City University Ibadan DO NOT COPY

concern. Nigerian women's ongoing experience of FGM requires both individual and stakeholders' involvement to eradicate health-related problems such as tissue damage, infection, scarring, infertility, and pains during sexual intercourse, urination, and menstruation. It was recommended that there is need for public sensitization of women on the dangers or implications of female genital mutilation on women and girls in a bid to curbing the menace[74].

A study was carried out to assess the knowledge and current practice of daughters' FGM among women living in fourteen (14) FGM-prone countries in Africa as a proxy to assess the future burden of FGM in the continent. Results revealed that the overall prevalence of FGM among mothers and their daughters was 60.0% and 21.7%, respectively, corresponding to 63.8% reduction in the mother-daughter ratio of FGM. The prevalence of FGM among daughters in Togo and Tanzania were less than one per cent, 48.6% in Guinea, with the highest prevalence of 78.3% found in Mali. The percentage reduction in mother-daughter FGM ratio was highest in Tanzania (96.7%) and Togo (94.2%), compared with 10.0% in Niger, 15.0% in Nigeria and 15.9% in Mali. Prevalence of daughters' FGM among women with and without FGM was 34.0% and 3.1% respectively. The risk of mothers having FGM for their daughters was significantly associated with maternal age, educational status, religion, household wealth quintiles, place of residence, community unemployment and community poverty. The country and community where the women lived explained about 57% and 42% of the total variation in FGM procurement for daughters. Procurement of FGM for the daughters of the present generation of mothers in Africa is common, mainly, among those from low social, poorer, rural and less educated women. It was also revealed that most of the women had average level of knowledge about FGM practice. It was recommended based on the study that

Lead City University Ibadan DO NOT COPY

mothers should be properly oriented and educated on the risks, dangers, complications of FGM for their daughters so as to ensure that they prevent the practice on their daughters[75].

The aim of a study was to assess awareness among men regarding female genital mutilation (FGM) and practice of circumcision of their daughters. FGM is an ancient practice that constitutes an extreme form of discrimination and violation against human rights of female. It has been reported that the prevalence of FGM in Egypt is 91%, and the prevalence of FGM among daughters aged 15–17 years is 74%. Men therefore have an essential role to play in the elimination of violence against women and prevention of FGM, as they play an essential role in decision making regarding circumcision of their daughters. This study showed that all participants had heard about FGM. Most of them had this practice in their families, and 66.7% of them supported the practice. Moreover, this study revealed that the main cause of practicing FGM is tradition. The decision of practicing FGM is made mainly by fathers, and 62% believed that there was no problem regarding uncircumcised women. Approximately half (49%) of the participants believed that men have a role regarding FGM through participation in decision-making process. Three-quarters of participants had daughters, and 63.7% of them had mutilated daughters. Nearly half of those who had no daughters intended to circumcise their future daughters. It was concluded that men have an important role in continuation of FGM. Therefore, program for its prevention should include men in their disciplines, as they play an important role in elimination of the practice[76].

Another study was undertaken to investigate the association between female genital mutilation illiteracy levels and girl-child marriage in sub-Saharan Africa. Results showed that the overall prevalence of FGM in the twelve countries was 52.19%, with the highest prevalence in Guinea (97.17%). The overall prevalence of girl-child marriage in the twelve countries was 57.96%, with the highest prevalence in Chad (78.06%). Women who had

Lead City University Ibadan DO NOT COPY

never experienced female genital mutilation were less likely to experience girl-child marriage compared with those who had ever experienced female genital mutilation. Age, secondary/higher level of education, richest wealth quintile, exposure to mass media, medium community literacy level and low community socioeconomic status were found to be protective against girl-child marriage. The findings also revealed that female genital mutilation is associated with girl-child marriage in sub-Saharan Africa. The continued practice will adversely affect the reproductive health outcomes of girls in the sub-region. Policies aimed at eliminating female genital mutilation and girl-child marriage should focus on compulsory basic education, poverty alleviation and increasing access to mass media. Furthermore, campaigns should cover more communities with lower literacy levels and medium socio-economic status[77].

A closely related study was carried out to document the prevalence of FGM among women seeking care at the National Obstetric Fistula Centre, Abakaliki, Nigeria and their perceptions about the practice. Results revealed that the mean age of the women was 51.8+10.3 years. About one-third of the women were aged 50-59 years while 81.3% were grand multiparous. About 90% of the women were farmers and 50% were married. One hundred and thirty-seven (33.3%) were sexually active and three hundred (300) had stopped menstruating. Majority (91.5%) were circumcised. Over half (54.4%) were circumcised in childhood, 29.9% in adolescence, 10.9% before marriage and 4.9% after marriage. Most of them (78.6%) believed the practice was bad and 88.3% desired it should be stopped. It was concluded that FGM is still common in the environment. Over half of the procedures are done in childhood. Majority of the women affected believe the practice is bad and should be stopped. It was therefore recommended based on the findings of the study that education at all levels is needed to eradicate it[78].

Lead City University Ibadan DO NOT COPY

A study was carried out on Understanding the Predictors of Female Genital Mutilation in Nigeria. The study was specifically implemented to determine if paternal age, level of education and income level are related to the female genital mutilation status of his daughter and how maternal factors such as maternal knowledge influence this potential relationship. The results showed that there is a statistically significant relationship between father's education level and his daughter's FGM status. Maternal age, mother's circumcision status and her education level were also related to daughter's FGM status. It was concluded that further research is needed to better understand how paternal factors affect FGM prevalence as it may suggest acceptable intervention strategies to stopping this practice[79].

A study was carried out to assess the knowledge and FGM practice among traditional birth attendances in Mogadishu. Results showed that majority of respondents about two hundred and eighty-three (283) representing 97.3% responded that FGM is practiced in their household. Almost of respondents about two hundred and eighty-seven (287) representing 98.6% mentioned that they had undergone FGM. Nearly two third of respondents mentioned that they had performed FGM. Among these respondents, about one hundred and forty-five (145) representing 49.8% mentioned that they routinely perform FGM. Eighty-five (85) out of one hundred and ninety-two (192) of respondents declared that they were practicing FGM more than ten (10) years. Among these respondents, ninety-eight (98) representing 33.7% mostly practice type 1(clitoridectomy). Majority of respondents about one hundred and seventy-four (174) representing 59.85% mentioned that they will practice FGM in the future and more than two third of respondents about two hundred and twenty nine (229) representing 78.7% were planning to perform FGM for their daughters. It was also revealed that many respondents had low level of knowledge, and high level of FGM practice. The majority of the respondents, about one hundred and

Lead City University Ibadan DO NOT COPY

fourteen (114) representing 39.2% were aged above forty-six (46) years old. Findings on respondents' educational level shows that half of respondents, about one hundred and forty-two (142) out of two hundred and ninety one (291) representing 48.8% were illiterate, two hundred and nine (209) representing 71.8% believed that FGM do not cause Hemorrhage; two hundred and thirty one (231) out of two hundred and ninety one (291) of respondents mentioned that FGM do not cause difficulty in labor or childbirth. It was concluded based on the findings that female genital mutilation (FGM) is one of the worst types of violence against little girls and women practiced in the name of religion, tradition and culture. It was also recommended based on the findings that the elimination of FGM practice would require the awareness FGM complications on girls and women's lives through public enlightenment so as to change their attitudes towards the practice and hence stop the practice. There should also be serious legislation or laws enacted against the FGM practice and these laws should be strictly adhered to by members of the public[80].

A study was carried out on knowledge and perceptions of complications associated with female genital mutilation/cutting among Somali Community in Wajir County, Kenya. Results revealed that age, sex, education level, occupation or the nature of the settlement area are important socio-demographic parameters that affect the knowledge and perceptions towards FGM. Women (mothers and grandmothers) – who have undergone FGM are still at the fore front in advocating for it. Men as decision makers at the household level support FGM. Both men and women have sufficient knowledge regarding the FGM related complications. This knowledge is however more among women than it is in men. Women are also more aware of the complications during and after FGM compared to males. More married women compared to single, divorced or widowed just like women from rural areas compared to those from urban and peri-urban areas. Young people are ready and willing to have their daughters undergo the practice though type 2 is most preferable.

Lead City University Ibadan DO NOT COPY

Culture and religion contribute more towards shaping the community's perception regarding FGM though the contribution of religion is still contestable. Religion (Islam) is quoted widely as advocating for the practice something that has no basis in the Quran, the prophetic saying, scholarly opinion and the analogical deduction. The practice persists partly because it is believed to maintain the sexual purity of a girl by containing her sexual desires until marriage. About 72.1% of the members of the community are not aware of any interventions or campaigns against FGM in the area. It was recommended that targeted awareness creation campaigns on the dangers of FGM on the young Somali girls by the local and International NGOs, CBOs and Human Rights groups in the County. This should target mainly older women, mothers, fathers, young girls and young boys who are future parents. Local radio stations, sermons in the mosques, school programs and during Maternal and Neonatal and Child health clinics (MNCH) in local health facilities; male involvement in campaigns against FGM are critical avenues for this. Finally, there should be involvement of religious leaders such as sheikhs and Imams to help as knowledge, attitude and practice change agents within the community[81].

The objective of the study was to assess the knowledge and practice of Al Undub Abo-kleio native villagers toward the FGM performance, stigma of not doing it and the willingness to stop it in the future. Results revealed that the participants were one hundred and sixty-three (163) of which 55.9% were females and 44.1% were males. Ninety nine percent (99%) of the respondents know what FGM is and about. Forty three percent (43%) of the respondents were in favour of the practice, while fifty seven percent (57%) were against the FGM practice. Eighty four percent (84%) had a good knowledge of FGM complications while fifty three percent (53%) of the respondents had already circumcised their daughters and forty six percent (46%) intend to do so soon. It was further revealed that there is a statistically significant association between religious perception as a cause of

Lead City University Ibadan DO NOT COPY

FGM practice and sex preferring males, and between traditions as a cause of FGM practice and sex preferring females. In the study, ninety percent (90%) of the females were circumcised; the first decision maker of circumcision was the mother with percent of seventy-eight (78%). Forty-nine (49%) of the females said that circumcision increase their chances of getting married. Fifty percent (50%) of males Stated that they prefer circumcised women of which thirty nine percent (39%) preferred that from a religious point of view. The study therefore shows the ignorance regarding FGM health consequences, in spite of the awareness and the suffering from the immediate and long-term complications. These results indicate an urgent need to develop effective strategies to educate and prevent the FGM practice and ensure proper management of its consequences, especially in rural areas[82].

A study was carried out on legal awareness and practices of Female Genital Mutilation/Cutting (FGM/C) among United Arab Emirates Medical Practitioners. Results revealed that about half of the participants have seen FGM/C patients in their UAE practice. Regarding medical staff, the total knowledge score concerning possible complications of the performed procedure was assessed at 64%, that is, at a moderate level. None of the study participants had previously performed any type of FGM/C. However, 6.7% were willing to do it upon a mother's or guardian's request. About 83% of study participants Stated that FGM/C should be halted internationally. Only 26.7% of the medical practitioners were aware of UAE law concerning FGM/C, while 50% had no knowledge concerning this issue. The study also revealed that cultural conditions take priority over medical knowledge, making medical practitioners inclined to accept the circumcision of girls and women. The crucial goals of future activities should focus on sensitizing society and the medical community, the need to create clear laws penalizing the practice, and the legal obligation to report the circumcision of a girl or woman[83].

Lead City University Ibadan DO NOT COPY

The aim of a similar research was to report on the Australian primary healthcare providers' experiences of caring for women living with FGM/C. Results revealed that primary healthcare professionals had basic knowledge of FGM/C with little or no experience with the management, support, and care of affected women in Australia. This impacted their attitude and confidence to promote, protect, and restore the target population's overall FGM/C-related health and wellbeing issues. Hence, this study highlights the importance of primary healthcare practitioners being skilled and well-equipped with information and knowledge to care for girls and women living with FGM/C in Australia[84].

The aim of a study was to estimate effect of FGM on females' knowledge, sexual score domains, and intention in northern Upper Egypt. Results revealed that the prevalence of Female Genital Mutilation (FGM/C) among total participants at Beni-Suef is 71.4%. Good knowledge score (27%) was more prevalent among non-mutilated females. There was a significantly higher desire domain, Arousal domain, Lubrication domain, Orgasm domain, Satisfaction domain, and total score among not circumcised married participants than circumcised ones but the Pain domain didn't differ significantly between circumcised, and not circumcised. About 79.4% of females who experienced FGM/C had the intention to mutilate their daughters in the future. It was concluded that good knowledge score was more prevalent among non-mutilated females. There was a significant relationship between FGM and knowledge, attitude, Sexual Score Domains, and intention to mutilate their daughters in the future[85].

Similarly, a study was carried out to assess knowledge, practice, and predictors of female genital mutilation in Degadamot district. Result of the study revealed that 56.6% of mothers had good knowledge about female genital mutilation. 70.8% of under 5 years old female children's had female genital mutilation. Marital status, monthly income, custom,

Lead City University Ibadan DO NOT COPY

belief and value towards female genital mutilation had significant association with female genital mutilation. It was concluded that prevalence of FGM practices among female children of under 5 years of age was found to be high as compared to the national level and most mothers had good knowledge about FGM[86].

Similar research was conducted on Female Genital Mutilation: An evaluation of the knowledge of French General and Specialized Travel Medicine Practitioner. Results revealed that less than 50% of these practitioners had adequate knowledge of FGM. Only 42.9% declared having encountered FGM. It was concluded that FGM is likely underestimated in health facilities. It was recommended that medical education and supporting information should be developed to better address and prevent FGM[87].

A similar study was conducted on General Practitioners' (GP) patterns of training and knowledge of FGC and their effect on the GPs' assessment of FGC as a potential cause of health problems. Results revealed that two-third of the participants had received training on FGC, but only over half received training on FGC related health problems. Over 75% of the participants Stated a need for more knowledge of FGC typology and Norwegian legislation. While the majority of the participants assessed their knowledge of FGC medical codes as inadequate, this was not the case for knowledge of the cultural aspects of FGC. Female GPs were more likely to have experience with patients with FGC-related health problems than male GPs. Among GPs with experience, 46% linked health problems to FGC in patients unaware of the connection between FGC and such health problems. GPs were more likely to assess FGC as a potential cause of health problems when they had experience with patients having FGC-related problems and when they assessed their knowledge of FGC typology and FGC-related medical codes as adequate. It was concluded that to improve their assessment of FGC as a potential cause of patients' health problems, GPs

Lead City University Ibadan DO NOT COPY

should receive comprehensive training on FGC, with particular emphasis on typology, health problems, and medical codes[88].

Similar research was implemented on Female Genital Mutilation/Cutting: Pediatric Physician Knowledge, Training, and General Practice Approach. Results showed that compared to general pediatricians, child abuse pediatrician (CAP) reported more FGM/C education, awareness of FGM, confidence in identifying sub-types and discussing FGM/C. For 6-12 month olds, 10% of general pediatricians reported never performing external genital examination (EGE) at female well child visits (WCV), increasing to greater than 50% for 17-18 year olds. Pediatric physicians are not trained to diagnose or manage FGM/C. EGE are not done at WCVs and FGM/C diagnoses are missed[89].

The goal of a similar study was to assess the knowledge and perceptions of healthcare professionals in relation to FGM. Results showed that 13.9% of the respondents indicated that they had received training in FGM, however just 10.7% correctly identified the three types of FGM; 10.7% identified the countries where it is usually practiced; 33.9% knew the legislation in Spain; and only 4.4% found a case of FGM during their professional practice. Regarding the knowledge about protocols, 8.64% of the sample indicated to know one of them. It was concluded that the present study demonstrate that it is necessary to improve the training and awareness of healthcare professionals related to FGM in Castilla la Mancha[90].

A closely related study was conducted to assess the perceptions, knowledge, and practices of the primary healthcare professionals in relation to FGM in the Clínic-Malvarrosa healthcare area of Valencia. Results showed that less than 5% of professionals responded that they had ever found a case of FGM during their professional practice and 21.8% responded that they had ever worked with population at risk of FGM. Almost 15% of professionals responded that they had received training on FGM but of those who had

Lead City University Ibadan DO NOT COPY

received training, only 22.7% correctly identified the typology of FGM and less than 5% correctly identified the geographical area. Only 6.9% of the respondents admitted to know some protocol of action, being midwives, paediatricians and social workers the most aware professionals of such protocols. It was concluded that the study demonstrates that FGM is a problem present in the population attending primary healthcare services in Valencia. However, the professionals showed a profound lack of knowledge around the concept, typology, countries of prevalence of FGM and existent protocols of action. It was suggested that it is the duty of healthcare professionals to recognize this situation and to follow the right protocols of action, refer these women and their families to the most appropriate services and professionals that fit their needs, ensuring a multidisciplinary, positive and transcultural care for these families[91].

A similar work was carried out on Health care professionals' knowledge, and experiences of FGM in sub-Saharan Africa. The work revealed three overarching themes: (1) Knowledge of FGM (2) attitudes towards the FGM practice and (3) experiences of FGM. The review revealed that healthcare professionals (HCPs) have limited knowledge of FGM and its health implications. Furthermore, some HCPs openly disapprove the FGM practice, but may undermine abandonment messages and perform FGM in secret due to cultural affiliations and financial rewards. This is indicative of HCPs moving towards medicalizing FGM by upholding cultural beliefs and practices rather than adhering to professional policies, codes of conduct and the legal position. The work identified determinants for the preservation of FGM among some HCPs in sub-Saharan Africa countries to include pervading cultural beliefs, poor design of professional trainings in the field of FGM and limited knowledge by HCPs[92].

A study was undertaken to explore the knowledge, experience and needs of midwives in relation to the care of women with FGM in Australia. Results showed that

Lead City University Ibadan DO NOT COPY

24% of the midwives did not know the correct classification of FGM. Almost half of the respondents (48%) reported they had not received FGM training during their midwifery education. Midwives (8%) had been asked or knew of others who had been asked to perform FGM in Australia. Many midwives were not clear about the law or health data related to FGM and were not aware of referral paths for affected women. It was concluded that as frontline providers, midwives must have appropriate up-to-date clinical skills and knowledge to ensure they are able to provide women with FGM the care they need and deserve. Midwives have a critical role to play in the collection of FGM related data to assist with health service planning and to prevent FGM by working closely with women and communities they serve to educate and advocate for its abandonment. It was recommended that addressing these training needs of midwives are key strategies to deliver optimal quality of care for women especially those who have undergone FGM practice[93].

An identical study was done to evaluate the level of Iranian midwives' knowledge of FGM/C. Results showed that only 20.23% of participants had good knowledge about FGM/C, and knowledge of 3.58% of participants was weak. There was no correlation between knowledge and demographic characteristics of participants. It was concluded the average level of participants' knowledge indicate a need to develop effective strategies to increase knowledge of midwives and improving their attitude toward FGM/C[94].

A research work was done to assess the level of total knowledge of females toward the FGM practice. Results showed that the age of most of studied participants was within 15-30 years. The majority of studied participants (90.2%) were highly educated. More than half (57.5%) of studied participants were single, round two-thirds (65.4%) of studied participants were students. Only 25.7% of females had good knowledge regarding FGM/C, while 40.5% and 33.8% had poor and fair levels of knowledge. 71.3% of females mentioned that the source of their information about FGM/C was their personal experience.

Lead City University Ibadan DO NOT COPY

Poor knowledge score (37.1%) was more prevalent among females with circumcision. It was concluded that knowledge score regarding FGM was poor for the most of participants. The main source of females' information was their personal experience. Poor knowledge score was more prevalent among mutilated females. It was recommended among others that development of an educational programs and brochures for mothers about FGM is required to increase their awareness[95].

A closely related study was conducted to assess Upper Egyptian females' knowledge about FGM/C. Results showed that the mean age of the studied participants was 20-45 years. 77.2% knew that FGM/C has other names; 76.9% of females knew that FGM/C practice is illegal; and 79.1% knew that the government makes an effort to reduce FGM/C practice. Most (87.3%) of participant females knew that FGM/C has complications and health problems. Concerning immediate health consequences, 59.5% mentioned bleeding, 49.2% and 16.1% mentioned severe pain and psychological trauma, respectively. As regards, long-term health consequences, 48.8% and 51.9% of females mentioned psychiatric consequences and sexual consequences, respectively, while almost all did not know that labor problems are among the long-term consequences of FGM/C. it was concluded that most females did not know that FGM/C has more than one type and almost all did not know that FGM/C has four types. Most of females knew that FGM/C practice is illegal and knew that the government makes an effort to reduce FGM/C practice. Most of participant females knew that FGM/C causes complications and health problems. It was recommended that development of educational programs and brochures for mothers about FGM is required to increase their level of awareness about FGM[96].

Similarly, a study sought to assess FGM/C-related knowledge, perceptions, and determinants of disagreement with FGM/C and circumcision of future daughters among university students. Results revealed that students were within 18-25 years of age; 54.0%

Lead City University Ibadan DO NOT COPY

were males and 58.0% were non-medical students. 58.2% were rural residents and 46.7% of the students were not aware of the ban. The main source of information about FGM/C among the students was educational curricula or health education sessions. Only 19.0% of the students had good knowledge about FGM/C. 43.3% of the students were neutral towards discontinuing FGM/C. 56.2% of the students disagreed with FGM/C. 59.3% of the students disagreed with circumcision of their future daughters. Independent determinants of the outcome were awareness of the ban and disagreement with Statements like: FGM/C preserves females' virginity, has religious basis, makes females happier in marriage, and enhances females' hygiene. It was concluded that knowledge about FGM/C and its ban is low, even among educated population such as university students; and FGM/C is still misperceived as a religious percept. It was recommended that maximizing the utilization of health education and curricula might help increase anti-FGM/C attitudes among university students with neutral perceptions and initiate the much-needed momentum for elimination[97].

A research work was done on female genital cutting: clinical knowledge, and practices from a provider survey in the US. Results revealed that nearly half of respondents did not receive formal FGC training, but a majority had cared for FGC-affected women in their practice. A 'know-do' gap existed with managing infibulated patients; and surgical defibulation procedures were not routinely offered. Most respondents reported a desire for additional education. Women's healthcare providers in the US, regardless of disciplinary backgrounds, were inadequately prepared to meet the needs of FGC-affected women. It was recommended amongst others that to address these, FGC content needs to be embedded in educational and training curricula, and ongoing clinical mentorship made available[98].

A study was investigated on the knowledge, beliefs, and attitude of a sample of Kurdish women of FGM and the main enabling factors for performing this practice and the

Lead City University Ibadan DO NOT COPY

barriers to ending FGM. Results showed that the women had poor knowledge about different aspects of FGM particularly concerning the procedure and the consequences. The mutilated participants revealed the devastating experience of the pain and the psychological effects they have experienced. Reducing sexual desire, having halal (permissible by Allah) hands, and religious requirement were the main reasons for practicing FGM. Reduction in women's sexual desire and the related social problems with the husband were the main problems identified to be associated with FGM. Most women did not support the continuation of FGM practice, but some women still think that FGM should be left to the people's preference. The participants identified raising people's awareness, active involvement of religious leaders in prevention efforts and the issuance and enforcement of legislation against FGM as the primary measures to reduce FGM practice. It was concluded that passing through FGM at childhood is an overwhelming experience with long-term effects for women. There is still a significant segment among the women population that do not oppose the continuations of FGM and need religious and scientific evidence against FGM. Some reasons for practicing FGM are deeply embedded in the culture and traditions, and there is a need for extensive efforts to raise the awareness of the population and change their thoughts and behaviour about FGM[99].

A study was also carried out to assess the knowledge and perspectives of the local religious leaders in Erbil governorate, Iraqi Kurdistan Region about different aspects of FGC. Results showed that the participants believed that FGC is useful for reducing or regulating the sexual desire of women to prevent adultery and engagement in pre and extramarital sexual relations and to enhance hygiene of women. They indicated that there is no any risk in doing FGC if there is no excessive cut. Most participants indicated that FGC is attributed to the religion and some considered it a tradition mixed with the religion. People rarely ask the advice of the religious leaders regarding FGC, but they frequently

Lead City University Ibadan DO NOT COPY

complain about the effects of the practice. Participants did not support having a law to ban FGC either because they thought it would be against the religion's advice on FGC or it will not work. It was concluded that the local religious leaders lack adequate knowledge about different aspects of FGC particularly the health consequences. There are different and disputing viewpoints about the reasons for practicing FGC, and there is poor support for having a law banning the practice. There is an essential need for enhancing the knowledge of the local religious leaders regarding FGC and its adverse effects on the women's health[100].

A study was carried out on female genital mutilation (FGM) in Egypt, knowledge and concepts of Egyptian medical students: A cross-sectional study. Results revealed that 71.2% were aware of FGM complications especially among females. Two-thirds reported illegality. 7.8% were in favour of FGM conduct with a higher male preference. Religious and traditional factors were the principle contributing factors to the practice. Three quarters of female students did not agree that FGM increased the chance of marriage. Almost one-fifth of female students reported having been subject to FGM, with a high level of dissatisfaction. It was shown that Egyptian medical students lacked knowledge about FGM with no structured training, so every effort should be done to end this inhumane practice[101].

The empirical studies discussed above are indeed similar to perceived knowledge and female genital mutilation among mothers in Oyo state. However, these studies differed in certain aspects from the present study in the study area, study objectives, research questions and hypotheses. Closely related studies examining the relationship between knowledge of mothers and practice of FGM in Oyo State yielded mixed findings. On one hand, studies showed that high knowledge or awareness of FGM among women in Oyo State although they did not have knowledge of health consequences of FGM[1,5]. On another hand, studies showed low knowledge and poor perception of FGM practice among young

Lead City University Ibadan DO NOT COPY

girls and women of child-bearing age in Oyo State, South-West, Nigeria[14,56]. These findings necessitated a comprehensive investigation into the nuanced dynamics at play.

2.3.1 Attitude and Practice of Female Genital Mutilation

A study was implemented to assess the attitude of mothers and female secondary school students towards female genital mutilation in Ika North East Local Government Area of Delta State. The results revealed that there is no significant difference in the different ages of mothers and their attitude towards female genital mutilation; there is no significant difference in the educational attainment of mothers and their attitude towards Female Genital Mutilation; and there is no significant difference between mothers and female secondary school students in their attitude towards female genital mutilation. Based on the findings of the study, it was recommended among others that it is imperative that actions be taken to prevent and reduce the unacceptable practice of female genital mutilation in the society; women should be given the privilege for proper academic coaching such as acquisition of literacy skills or pre-employment training lectures; women should also be given the opportunity to play a vital role in female genital mutilation and as such programmes of activities should be circulated in all the various groups in the communities in order to avoid bias, chaos and crisis[3].

A similar study aimed investigating the wishes and attitude of Somali women regarding FGM found that except for one, all women that participated in the survey were circumcised. A significant proportion of women embraced the continuation of FGM and a little above average proportion of them were satisfied with being mutilated. Their wishes, attitude, and practices were shaped by their religion and traditions. However, the proportion of those who wanted to stop FGM was 91% which is high. It was concluded that the wishes and attitude of the women significantly affect their FGM practice. It was therefore recommended that there should be further efforts and research from different countries,

Lead City University Ibadan DO NOT COPY

cultures, beliefs, organizations, and individuals focusing on knowledge, awareness, legalization, and the opinions of lay and religious individuals, particularly including women's rights activists, and women with FGM, to stop FGM which is also known as female genital cutting or female circumcision[4].

An identical study was conducted to investigate the attitude and perception of Female Genital Mutilation in Ebenebe, Awka North L.G.A, Anambra State, Southeastern Nigeria. The result obtained showed that one hundred and eighty-nine (189) representing 94.03% of the interviewed women were aware of the practice of female circumcision in their community. About one hundred and two (102) representing 51.52% of them reported that FGM practice is usually carried out at their native homes and one hundred and seventy six (176) representing 89.34% of the women were aware of the health implications of female circumcision. About 68.2% of respondents perceived that FGM is a bad practice that should be abolished. It was therefore concluded based on the findings of the study that women perceived that FGM is a bad practice because its health implications were relatively high. It was therefore recommended amongst others that efforts should be made by relevant bodies to encourage policies and programs relating to FGM in terms of abolition, awareness campaign and possible sensitization of the female folks[12].

A closely related research work was undertaken to determine how females in Osun State, particularly in Ilesha West, Ilesa east, Ede North and Ede South Local Government of Osun State, felt about female genital mutilation. Results showed that a greater percentage of the respondents were enlightened about FGM before it was done for them. Similarly, most of the respondents were circumcised at a young age, resulting in a prevalence rate of 53.7 percent. Furthermore, tradition, culture, and ignorance were all important factors in the FGM practice. Another motive for FGM continuation was to lessen sexual desire. The major reasons provided for favouring FGM were tradition and culture. Increased female

Lead City University Ibadan DO NOT COPY

hygiene and safe delivery were also among other reasons claimed for favouring FGM. Even though many of the respondents were unaware of the rationale, they nevertheless supported the FGM practice. The procedure was opposed by a larger number of people because it could lead to difficult labour and delivery. Other factors include hemorrhage, religion, barbarism (incivility), decreased sexual satisfaction, culture and tradition, HIV/AIDS infection, and so on and forth. Type I (Clitoridectomy) was identified to be the most common and prevalent type of FGM among the women in the six geographical areas during the interview and the administration of the question. Only 16.0% of the respondent undergo TYPE II (Excision), 17.4% of the respondent has undergo TYPE III (Infibulation). During the analysis of the questionnaire, it was discovered that TYPE IV (Sunna) is the least common among the respondents. The level at which the respondents were enlightened on or before the FGM procedure was done to them ranges from 40.6% to 43.5%. It was noted that in Federal Polytechnic Ede in Ede North LGA that FGM seems to be a norm and only few percent of the victims accounted that they went through shame, embarrassment or isolation, hence 47.8% of the respondent were not stigmatized in this research, while 31.9% were stigmatized which took a lot of time before they regained social balance among peers. The age at which the female respondents were circumcised varied from one person to another. Averagely, the respondents were circumcised while they were infant that is, less than a year old (33.4%). Only few of them were circumcised between 2 to 10 years old (20.3%) and quite number of respondents (30.8%) did it when they were fully grown up (10 years of age and above). Therefore, it can be established that circumcision was done for a larger part of the study population at a very tender age without their knowledge, and this accounts for the reason why most females were not aware that FGM was done for them. Few of the uncircumcised respondents wished they had done it and might do it in future because some of them believe it won't make them promiscuous. A significant number of

Lead City University Ibadan DO NOT COPY

females in the sample Stated that they had no psychological complaints; there could be a variety of explanations for the relatively high percentage of respondents who Stated that they had no complaints. According to the qualitative research, a lot of respondents were only recently made aware of their circumcision. Any complaints they might have, they believed, could not be linked to the fact that they had been circumcised. Even though more than half of the respondents (56.8%) believe that FGM is harmful, 44.2% percent believe that uncircumcised girls will become promiscuous. FGM is regarded to promote a woman's devotion to her husband by over a third of respondents (30.5 percent). Women who have had FGM are not at danger of gynecological issues, according to about a quarter of respondents. It was recommended based on the results of the study that FGM should be abolished through government policy, especially with the level of awareness and publicity on its adverse health consequences[20].

A closely similar study was carried out to assess the attitude and practice of mothers of childbearing age towards FGM in Obi koji Kebele, Wolisso woreda South, West Shoa zone. Results revealed that three hundred and twenty-four of the mothers responded that FGM can lead to a health problem, while fifty-eight (58) of the mothers said that FGM does not lead to any health problem. Among the mothers who know the possible problems that could occur as a complication of FGM, one hundred and twenty-eight (128) responded that the problem occurs immediately after the procedure (bleeding) and during childbirth. Among the respondents, three hundred and seventy (370) of the respondents claimed that the practice is abandoned by law and is punishable, while twelve (12) of the mothers responded it has no legal provision. Three hundred thirty-five of respondents do not want their daughters to be circumcised and need to avoid FGM in the future, while forty-nine (49) want to continue with FGM. Maternal education has very significant association with mothers' knowledge, attitude and practice about FGM. Mothers who had access to different

Lead City University Ibadan DO NOT COPY

kinds of mass media were more likely found having good knowledge, attitude and practice than mothers who had no access to any kind of mass media. Maternal age was another variable which has very significant association with knowledge, attitude and practice of mothers. This study showed the magnitude of FGM in the study area and amongst the respondents to be 63.7%. In conclusion, this study revealed that maternal education, access to different kinds of mass media and maternal age have significant positive effect on mothers' knowledge, attitude and practice about FGM[30].

A closely related cross-sectional descriptive study was carried out in Ombada province, with objectives to assess attitudes and practices among mothers towards female circumcision. Results showed that the mean age of the mothers that participated in study was (32±11.9) years, of which fifty one percent (51.0%) of them had formal education and eighty four percent (84%) were Muslim in religion. The attitude of majority of the mothers towards (FC) was found to be negative which means that they encouraged it. The negative attitudes were associated with marriage prospective, safeguard virginity, religious instructions, husband pleasure, removal of genitalia dirtiness, and tradition practice. In addition, it was found that Type I Female Circumcision also known as 'clitoridectomy' or 'Sauna' is the most preferred type by most of the mothers. It was concluded based on the findings that negative attitudes persists among mothers in Northern Sudan and these negative attitudes is supported by their religious, cultural, social, traditional beliefs and misconceptions. It was therefore recommended that all hands must be on deck in ensuring that mothers develop the negative attitude towards Female circumcision to eradicate the practice[55].

A similar study was examined on the practice, perception and attitude towards FGM among women of childbearing age in Ibadan Metropolis, Oyo State, Nigeria. The results of the study showed a high prevalence rate of FGM among the women as two hundred and

Lead City University Ibadan DO NOT COPY

thirteen (213) of three hundred sampled respondents were circumcised. This results thus confirmed the position of Oyo State as one of the States in Nigeria with the highest prevalence rates of FGM. The FGM practice was operationalized in terms of a woman having her female child circumcised. The women of childbearing age in Ibadan Metropolis, Oyo State practice FGM in that they have had their female children circumcised. There was a low level of FGM practice (36.6%) with 22% of the one hundred and eighty-two (182) women whose female children are yet to be circumcised having the intention of doing so in the future. On a comparative note, this finding should serve as a glimmer of hope because the level of FGM practice is remarkably lower than the prevalence rate of FGM and this could be taken to mean a decline in the FGM practice in the study area. It was observed that the respondents have an overall positive attitude towards FGM that is, they are in support of the FGM practice, and generally, a bad perception of FGM. This overall perception of the respondents is that female circumcision helps to conserve virginity till marriage and prevent promiscuity among women respectively. The results further showed that there was a strong and positive correlation between the perception of the respondents and the FGM practice, educational status, religion, and marital status of the respondents were not significantly associated with the FGM practice. The findings of this study also indicate that there exists a strong and positive relationship between the attitude towards FGM and the FGM practice among women of childbearing age in Ibadan Metropolis, Oyo. The implication of this is that as the positive attitude towards FGM increases, there is strong likelihood of a corresponding increase in the level of FGM practice in the study area. Lastly, the circumcision status of the respondents did not have a significant association with their daughters' circumcision status. Be that as it may, the odds ratio shows that in the study area, women who were not circumcised had 0.93 times the odds of not having their female children circumcised as women who were circumcised but this was not significant enough

Lead City University Ibadan DO NOT COPY

to establish an association between the circumcision status of the respondents and that of their daughters[56].

The aim of a study was to assess the attitude and practice of the community towards female genital mutilation in Agarfa town, southeast Ethiopia. Result revealed that about 86.1% of females were circumcised. Female genital mutilation was reported to be known by 93% of the participants. Furthermore, about 81.6% of the participants rejected the continuation of FGM practice. One fourth of them Stated that FGM is currently being practiced in their village. About twenty percent were sure that there is no female circumcision currently. Majority reported that traditional circumcisers are the main operator of the practice. The main reasons for the practice were to respect culture and for religion. It was concluded that the prevalence of Female genital mutilation is high; the study participants had good knowledge and negative attitude towards the FGM practice; majority of them had high degree of awareness about the complications of the practice and that the main circumcisers were found to be traditional circumcisers. It was also recommended among others that an effort should be made to change the attitude and practice of traditional circumcisers by creating awareness in the community as a whole[57].

A similar research work was conducted to assess attitude and practice towards FGM among the reproductive age women in Amad Imam town, Jarso district, East Hararge zone, Oromia Region. Results revealed that the prevalence of FGM in the study area was 91.28%, while excision (type II) is the commonest type of FGM practiced. Clitoridectomy and Sunna types of FGM were reported to be carried out at a rate of 30.68% and 16.28% respectively. Also, one hundred and eighty-eight (188) of the women representing 71.2% were found to have positive attitude towards FGM while thirty (30) of the women representing 11.36% were found to have negative attitude towards Female Genital Mutilation[58].

Lead City University Ibadan DO NOT COPY

A strongly linked study was carried out on the attitude towards the practice of female genital mutilation among pregnant women attending maternity wing in Dagahaley Médecins Sans Frontières Hospital. Results revealed that majority of the respondents believed FGM to be a compulsory cultural ritual. Most respondents strongly agreed or agreed that FGM was a traditional and important practice among them. The respondents stated that FGM preserves girls' chastity until marriage. Some stated that it was a rite of passage, while for some the practice was associated with family honor. Few stated that the practice is necessary for hygiene since female genitalia are unclean. Some did not believe it prevented stillbirths or enhanced fertility. Most respondents also agreed that girls who had experienced it reported a lot of genital infections. A few respondents stated the practice had harmful and negative consequences on mental well-being and health. Some said FGM resulted in painful childbirth, while others stated the procedure caused low self-esteem, disturbed body image and fear to have menses. Less than half of respondents said that their community leaders had taken a firm stand of forbidding the practice and few had noticed that religious leaders would have convinced believers to forbid the practice. Few respondents knew that the practice is outlawed in the Kenyan constitution, while some noted that people in general perceive FGM as an illegal practice[59].

A study was conducted on Cohort analysis of the State of female genital mutilation in Nigeria: prevalence, daughter circumcision and attitude towards its discontinuation. It was conducted to perform cohort analysis of the State of FGM between the years 2009 and 2018 in Nigeria. Results revealed that FGM has reduced over the years from 56.3% among the 1959–1963 birth cohort to 25.5% among 1994–1998 cohorts but a rise in FGM between 1994–1998 cohorts and 1999–2003 cohorts (28.4%). The percentage of respondents who circumcised their daughters reduced from 40.1% among the oldest birth cohort to 3.6% among the younger cohort. Birth-cohort, religion, education, residence, region, and

Lead City University Ibadan DO NOT COPY

ethnicity were associated with FGM. Factors associated with the daughter's circumcision were birth-cohort, religion, residence, region, ethnicity, wealth, marital status, FGM status of the respondent, and FGM required by religion. Similar factors were found for discontinuation intention. It was concluded that the FGM practice is still high but decreasing among younger birth-cohorts in Nigeria; there is no significant change in the perception of the discontinuation of FGM. It was recommended that more awareness about the adverse effects of FGM, particularly among women with poor education in Nigeria will greatly reduce this cultural menace's timely eradication[102].

A similar study was carried out on attitudes towards female genital mutilation among adolescents in rural Burkina Faso: A multilevel analysis. Results showed that about 43% of women in the sample reported having undergone FGM; 74% of women and 76% of men believed FGM should be abandoned. The strongest predictors of FGM receipt were religion, ethnicity, the village's FGM rate and mother's education. The strongest predictors of FGM abandonment attitudes were religion, ethnicity, belief that FGM is religiously required, and FGM status. Males' attitudes were less determined by community factors than that of females while females' attitudes were more strongly influenced by factors linked to modernization, such as maternal education and household wealth. FGM continues to be common in rural and small-town Burkina Faso, and the analysis suggests that social conventions play an important role in its continuation. However, modernisation-related factors were stronger predictors of abandonment attitudes than of FGM status, particularly in adolescent women. The changes these relationships suggest may benefit the next generation of girls[103].

Another identical study was undertaken to examine adolescent girls' attitudes toward the continuation or discontinuation of female genital mutilation (FGM) in association with their demographics in seven different countries in Africa. Results revealed

Lead City University Ibadan DO NOT COPY

that the prevalence of supporting the continuation of FGM among adolescent girls was 58% in Egypt; 63% in Guinea; 16% in Kenya; 72% in Mali; 3% in Niger; 23% in Senegal and 52% in Sierra Leone. Being Muslim and having low economic status were significantly associated with supporting the continuation of FGM in five of the participating countries. Girls having no education or only primary education in Guinea, Kenya, Mali and Sierra Leone exhibited a higher likelihood of supporting FGM than girls with secondary or higher education. In Egypt, Niger and Senegal, there was no association between education and supporting FGM. The girls who stated that they had no exposure to media showed the higher likelihood of supporting FGM in Guinea, Kenya, and Senegal than those with exposure to media. It was therefore recommended that increasing media coverage and education, and reducing poverty are of importance for shifting adolescent girls' attitudes in favour of discontinuation of FGM[104].

A closely related study was carried out to assess the influence of the location of mothers and female students on their attitudes towards female genital mutilation in Delta State, Nigeria. The results revealed that there was a significant difference in the attitude of mothers towards female genital mutilation in both urban and rural areas. FGM was found to be more prevalent in rural than urban areas. The reason for the more likely occurrence in rural areas may be connected to the high community ties and social norms which have great influence on the people when compared to those in the urban areas. However, there was no significant difference in the attitude of female secondary school students towards female genital mutilation in either urban or rural areas. Based on this, it was recommended that female secondary school students living in urban or rural areas should be educated on FGM practice as much as possible to help them develop the negative attitude towards the practice[105].

Lead City University Ibadan DO NOT COPY

A similar study was carried out to determine the prevalence, awareness and attitude towards the FGM practice among Igbo women of child-bearing age in Nigeria. The results were collected and analyzed with the SPSS version 23. Univariate analysis was performed to determine independent risk factors that could possibly affect prevalent rates in the population. The level of significance was set at 0.05. The study showed that out of 367 respondents interviewed, 49 had FGM, which gave a prevalence rate of 13.4%. However, 98.7% were aware of FGM, and their major sources of information was 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 since 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 and parous women compared to the younger age group and nulliparous women respectively. Conclusion: Despite the high awareness and negative attitude of the populace to the FGM practice and its consequences, it has 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[106].

The objective of a similar study was to investigate African immigrant women's attitude and perceptions of female genital mutilation (FGM) within the Canadian Criminal Code. Results revealed that most of the participants (70%) had undergone FGM, 25% had

Lead City University Ibadan DO NOT COPY

not and 5% were unable to confirm their FGM status. Participants' perceptions of sexuality remained inconclusive and were linked to their ethnicity and religion. The participants commonly believed that FGM was supported by both tradition and Islamic religion and perpetuated by the desire to promote tradition and to respect ancestors. Participants of Islamic faith Stated that Islamic support for FGM was for clitoridectomy, known as Sunna, and not the more complex form known as infibulation. Five per cent argued that FGM is against Islamic teachings and more of an ethnic tradition promoted in the name of culture. Although seventy per cent of the participants have undergone FGM, twenty-five have not undergone FGM while five per cent were not certain of their FGM status. In addition, 50 percent reported their daughters born in Africa had undergone FGM before migrating to Canada, 38 per cent were unsure if their daughters undergone FGM, and twelve per cent reported their daughters did not undergo FGM. Irrespective of their personal experiences, there was a common preference for clitoridectomy a minor form of FGM than infibulation, which ten percent reported they had. All women noted that under the Canadian context, they would not subject their daughters to FGM, but were critical of the criminalization. The consensus was that the "Canadian system failed to put into consideration their culture in which children were the property of their patrilineage, and mothers cannot dictate to their husbands' families what to do with their children." As such, a daughter can be a victim of FGM without the approval of her parents. The criminalization of FGM puts the onus on the parents to safeguard their daughters from such practice. For forty five percent of the women, it means they would not travel to their heritage society with their daughters, and this has meant families not visiting home as a unit until the children are old enough to defend themselves from becoming a victim of FGM. In addition, the women noted that deliberate attempt have not been made by Canadian government to educate immigrants of their position, however they have gained their knowledge through secondary sources

Lead City University Ibadan DO NOT COPY

including friends relatives and at times from their Imams in the mosques. Although most of the women believed that eliminating FGM would put the reproductive rights of women in their personal hands, many opposed the argument linking FGM to sexuality and infertility. The women reported that the high fertility an average of five children among African immigrants in Canada does to support such position and as such, is likely to point to other hidden agenda in the international interest to eliminate FGM. The decision makers behind FGM were identified as mainly women both in the past and in the present. Mothers and grandmothers were primarily involved in the decision to have a daughter undergo FGM in their heritage societies. However, in Canada both parents are involved when there was a decision not to perform FGM. Nearly half of the participants supported their parents' primary motive for FGM, to decrease sexual desire or promiscuity in females[107].

A systematic review and meta-analysis was carried out on the attitudes toward female genital mutilation/circumcision. The results indicate that the random-effects pooled estimation of negative attitudes toward FGM practice was fifty three percent (53%). Furthermore, the pooled estimation of attitudes toward the decision not to circumcise young daughters was sixty three percent (63%). It was concluded that despite the increased awareness and efforts to ban FGM in many countries around the world, the review demonstrates that positive attitudes toward FGM is still far from being eradicated and have hardly changed in the past years. This issue reflects deeply rooted cultural and social concerns of health care professionals about continuing the practice. It is believed that circumcised women can play a key role in encouraging the abandonment of FGM through educational and cultural campaigns[108].

A report carried out in Nigeria showed that women (42%) who were circumcised were more likely to believe that female genital mutilation should continue compared to

Lead City University Ibadan DO NOT COPY

women (13%) who were not circumcised. This shows a negative attitude of women who are already circumcised towards FGM practice[109].

The aim of a study was to understand how parental attitudes towards the practice of female genital mutilation influence decision making related to the cutting of girls' genitals. Data from fifteen (15) Demographic and Health Surveys were analyzed to assess whether couples with at least one living daughter aged 0 to 14 years share the same opinions about the continuation of the practice, and to what extent couples' opinions are associated with the risk of daughters being cut. The analysis revealed that a significant percentage of couples hold discordant opinions on the continuation of the practice including in countries where the practice is very common. While a daughter's likelihood of being cut is much higher when both parents think the practice should continue, the analysis also shows that many cut girls have parents who oppose the practice. It further suggests that female genital mutilation is more prevalent among daughters whose mothers want the practice to continue and whose fathers are opposed or undecided, compared to daughters with fathers who are the sole parent supporting its continuation. Understanding the extent to which parental opinions influence decisions and which girls are most likely to be cut is essential for developing appropriate interventions aimed at promoting the abandonment of the practice[110].

A similar study was carried out to investigate the attitude towards FGM of young people (boys and girls) in Somali and Harari regions of Eastern Ethiopia. The result of the study reveals that eighty-six (86%) of study participants condemned the FGM practice. Almost fifty-nine (59%) of male participants from both study areas preferred to marry uncircumcised girls. Being a female and being a Muslim are significantly associated with the support toward the continuation of the FGM. Although the study demonstrates a positive attitude towards the abandonment of FGM, there is a need to increase the

Lead City University Ibadan DO NOT COPY

knowledge about the position of Islam in FGM and to educate women about the harmful effect of FGM[111].

Closely related research was undertaken to empirically investigate the views, and attitudes of men from the Igbo tribe of Nigeria towards FGM. Results showed that the socio-demographic predictors of favouring FGM continuation include age, education, and occupation. The protective factors include mass media and having a Christian faith. Believing that FGM is a religious requirement that increases marriageability of girls, enhances cleanliness/hygiene, and improves male sexual satisfaction, significantly predicts men's view of favouring its continuation. It was concluded that the study provides evidence to suggest that some Nigerian Igbo men's view of FGM is less than positive. As an outcome of this study, an explanatory funnel model of factors influencing Igbo men's views on FGM, which is grounded in both modernisation and masculinity theories was developed. The model presents measures to be put in place both at the individual and community levels, which may contribute even further to FGM decline. Findings from this study also demonstrate the importance of using a mixed methods approach to gain a broader understanding of men's views, and attitudes towards FGM continuation. This is the first mixed methods study to investigate Igbo men's views of FGM, so this study is methodologically unique. It was therefore recommended based on the findings that policy makers should focus on increasing access to media messages regarding the harmful consequences of FGM and develop more awareness campaigns against the practice and ensure access to higher education, particularly in rural areas to enhance employment opportunities. There is a need for sensitively designed health programmes for men to improve their knowledge of the normal structure and functions of the female reproductive system and, also, to offer psychosexual therapy to the affected male members of practicing communities[112].

Lead City University Ibadan DO NOT COPY

A similar study was set out to determine the attitude and FGM practice amongst adults in Ilorin Metropolis, North-Central, Nigeria. Results showed that the mean age of the respondents was thirty-five years and about half of them were between the ages of thirty and thirty nine years. Almost all the respondents were married. More than half of the households practiced female genital mutilation. Majority of the female genital mutilation was done by a traditional practitioner. Slightly more than half of the respondents practiced FGM as a form of religious obligation while just a few practiced it to ease childbirth. Most of them had negative attitude towards the practice since they believed it should continue instead of discontinuing. There was a statistically significant association between socio-demographic variables and practice of female genital mutilation. There was also a statistically significant association between attitude and practice of female genital mutilation. Majority of the respondents in the study area practiced FGM and they held a lot of misconceptions and beliefs about the effect of FGM. It was recommended that stakeholders should put in more efforts to curb the menace of FGM to stop it from having detrimental effects on children yet unborn[113].

An identical study was carried out to explore the attitudes toward female genital mutilation (FGM) in a survey of one hundred and seven (107) West African immigrants, including thirty-six (36) men. Results showed that men in this study were as knowledgeable about the health consequences of FGM as women, though with a less nuanced understanding. They also rejected the practice at rates comparable to women. Despite this knowledge and rejection of FGM, most men did not express a personal preference for women with or without FGM in intimate relationships. Future research and interventions must explore men's opposition to FGM and emphasize the impact of FGM on their partners' gynecological and reproductive health[114].

Lead City University Ibadan DO NOT COPY

A similar study explored U.S. healthcare providers' beliefs and attitudes regarding FGM. Results indicated that, although most respondents emphasized maintaining a nonjudgmental and open-minded attitude toward clients' experiences, some only focused on the negative aspects of FGM. It was recommended on the basis of the result that efforts should be made to ensure that healthcare providers educate others on the dangers of FGM practice[115].

A study was undertaken to evaluate the effect of an educational program on mothers' attitudes about female genital mutilation at Tanta city. Results showed that before the implementation of the educational program about female genital mutilation, the studied sample had low scores of attitudes towards FGM. After implementation of the program, there was a significant improvement in the total attitude score of the studied sample. There was also a significant positive correlation between their total attitude and FGM practice after the three months post intervention. It was concluded that the health education program about female genital mutilation was effective and improved the attitude of the studied sample regarding FGM practice. It was recommended based on the result of the study that continued effort should be made regularly to develop and improve positive attitude and discouraging negative attitude towards FGM practice among mothers[116].

A study was carried out to investigate the prevalence of FGM and men's attitude towards the practice in South-East Nigeria. The findings showed that FGM is still practiced in South-East Nigeria even though the extent of its practice is diminishing compared to what it was in the past. The practice has persisted because of men's financial and moral sponsorship. Men encourage FGM-practice because they perceive women with FGM as being more sexually appealing than women without FGM. It was therefore recommended that FGM-eradication efforts should not be gender-biased. Public enlightenment campaigns should be mostly targeted at the men folk[117].

Lead City University Ibadan DO NOT COPY

A study was investigated on how empowerment may affect women's intention to perpetuate FGM and the FGM practice on their daughters in African countries. Results showed that the prevalence of women who had at least one daughter who had undergone FGM was consistently higher among low empowered women. Tanzania, Benin, and Togo were exceptions for which no differences in having at least one daughter subjected to FGM was found for any of the three domains of women's empowerment. In most countries, the double stratification pointed to a lower proportion of daughters' FGM among women who reported being opposed to the continuation of FGM and had a high empowerment level while a higher proportion was observed among women who reported being in favour of the continuation of FGM and had a low empowerment level. This pattern was particularly evident for the social independence domain of empowerment. In a few countries, however, a higher empowerment level coupled to a positive opinion towards FGM was related to a higher proportion of daughters' FGM. It was therefore concluded that empowerment of women has a significant positive effect on women's intention to perpetuate and practice FGM on their daughters in African countries. It was therefore recommended that all hands should be on deck in ensuring that women in many African countries be empowered to reduce the perpetuation and FGM practice[118].

A study was carried out to report on the prevalence of FGM, women's attitude towards this practice, and its association with selected socio-demographic factors. Results showed that overall prevalence of FGM was 38.9%, and among the participants' daughters was 17.4%. There has therefore been a substantial increase in the prevalence of FGM in 2013 compared to its 2003 level. Respondents who had undergone circumcision were more likely to have their daughters circumcised. In all three surveys, almost all the circumcisions were performed by traditional practitioners. In the regression analysis, respondent's age, area and region of residency, religious affiliation, educational status, and household wealth

Lead City University Ibadan DO NOT COPY

appeared to be significant predictors of FGM. It was concluded that in Nigeria, FGM remains a widely prevalent phenomenon with an increasing number of women experiencing this practice. Also, regional and socioeconomic disparities were observed in the prevalence which merit urgent policy attention. It was recommended that awareness should be created among the women to ensure that they have the negative attitude towards FGM practice and thus abhor the continuation of the practice[119].

A similar study was aimed to determine the prevalence and attitude towards female genital mutilation in Nigeria. Results showed that the mean age of the respondents was 36.5±8.0 years; a minor proportion of the respondents want the practice of female genital mutilation to continue; and the prevalence of female genital mutilation was 37.5%. It was further revealed that traditional circumcisers performed most circumcisions, and majority of the circumcision were done during infancy. The predictors of female genital mutilation including being of older age group, educational attainment, and geo-political zone, place of residence, religion and wealth index of the respondents. It was concluded that the prevalence of female genital mutilation in Nigeria is still high, and majority of the procedure is performed by traditional circumcisers. It was recommended that there is the need for public education in discouraging the continued practice of female genital mutilation and emphasis should be on the complications of the procedure and the perceived economic benefits. Secondly, education of the girl child should be encouraged as it is of immense importance in bringing the practice of female genital mutilation to an end[120].

A similar study was sought to know the perception and attitude of pregnant women residing in a rural community in northern Nigeria to FGM. The results revealed that out of the three hundred and twenty-three (323) respondents, two hundred and fifty six (256) representing 79.3% were aware of the practice and the common varieties of FGM known to them were Gishiri cut in one hundred and thirty eight (138) and Angurya cut in one

Lead City University Ibadan DO NOT COPY

hundred and twelve (112). The notable reasons for carrying out FGM in the community were tradition, to ease difficulty in childbirth and better marriage prospect. Of the respondents that were aware of FGM; about hundred (100) of them representing 39.1% have experienced it and fifty five of them representing 21.5% were willing to subject their daughters to the procedure. There was statistically significant association between willingness to mutilate daughters by the respondents type of education and the type of facility they were receiving antenatal care. It was concluded that FGM is prevalent in the community with Gishiri cut being the commonest variety. The respondents believed that FGM is often associated with ease in childbirth and many of them would subject their daughters to the practice. It was however recommended that female education and empowerment is crucial to the discontinuation of the FGM practice[121].

A cross-sectional, community-based study using interview administered questionnaire to explore knowledge of people living in a rural area in Minia, Egypt. Results revealed that FGM was performed on seventy six percent of females, complications occurred in thirty five percent of them. Females demonstrated a higher level of knowledge than males. Nearly fifty six percent of respondents believed that this practice should continue. Females were more supportive of the continuation of FGM than men. The attitude that FGM is a good practice, knowledge level, women's status and religion were significantly associated with women's willingness to subject their daughters to FGM in the future. Attitude was the only significant predictor associated with men's willingness to subject their daughters to FGM. It was concluded that there is a strong correlation between social pressure and intentions to carry out FGM which suggests that FGM practice will continue to be embraced among future generations unless policies are put in place to eradicate this practice through empowering females by education and reasonable income[122].

Lead City University Ibadan DO NOT COPY

The aim of a paper was to identify some of the interventions by the government and non-governmental organizations undertaken to reduce the practice of Female Genital Mutilation (FGM) in Kenya. The paper also examined the attitude of the West Pokot Community towards the measures taken by these organizations in stopping FGM. Focus was made in Sook Division of West Pokot County which was selected randomly out of the four locations in the district. The study revealed divided opinions about Female Genital Mutilation among the Pokot. It was also revealed that most of the community members seem to be in favour of the practice, while others were against it. Government and the World Vision Organization are intervening against the practice in the region and most participants seem to have negative perception on the anti- FGM measures laid down by the Government and the Non-Governmental Organization (NGOs). It was recommended amongst others that to help the community understand and change these cultural practices, there is need to involve other stake holders concerned with the FGM, these include the girls, parents, old women, men, traditional circumcisers with whom the government and non-governmental organizations should work with[123].

A study was undertaken to explore minority migrant men's attitudes towards female genital mutilation (FGM), and how these attitudes can be used to develop strategies to engage men in the eradication of FGM. The study was conducted based on interviews and focus group discussions. The findings included four sets of attitudes showing how men explain, rationalize, and justify their roles in the FGM process, and the practice itself, each with its own in-built tensions and ambivalences: downplay, noninvolvement, adjustment, and curiosity. The study revealed that men's attitudes can be enabling, disabling or neutral. Disabling strategies may actively hinder the abandonment of FGM, enabling strategies may actively promote the abandonment, and neutral strategies may do both or neither. Men's attitudes toward FGM and their roles in the FGM process may work against the inclusion

Lead City University Ibadan DO NOT COPY

of men in anti-FGM work. Disabling attitudes do not oppose FGM, but rather (implicitly) support it. They operate through mechanisms of downplaying, where the harmful consequences of FGM are diminished and denied. Many different aspects of FGM were continually downplayed during the focus group discussion: men's role in the process, their knowledge about it, the surgery as such, and the various risks involved in terms of mental and physical health. Downplay may be understood as the result of lack of knowledge and involvement. It can also be interpreted as a strategy, conscious or not, for maintaining male and paternal privileges. To downplay men's role means downplaying men's responsibility. If the risks of FGM are downplayed, or even minimized, there is no need for responsibility for the power and authority of men in a system in which girls are cut; cutting is not a problem. Men's attitudes toward FGM and their roles in the FGM process may be neutral. Neutral attitudes refer to men's culturally prescribe roles in the FGM process, through which their partaking, responsibility, and interests remain un-articulated. They operate through mechanisms of noninvolvement and adjustment. In the analysis of noninvolvement, it was shown that men experience and express tensions and paradoxes in relation to their own involvement in the FGM decision-making process. Initially described as a woman's issue, concerning only mothers, daughters, and grandmothers; men are depicted as non-involved in the practice. However, as the discussion continued, the men talked about how fathers and mothers discuss and together decide to not have their daughters cut. Despite this, the tendency to discursively exclude men from the decision-making related to FGM is clear. FGM is mainly constructed as a women's issue: women are both victims and perpetrators of FGM. In the analysis of adjustment, a set of beliefs and behaviours were reviled, in which the importance of following informal institutions (Somali tradition and culture) and formal institutions (Swedish laws) related to FGM were underlined. The men described the negotiations between these conflicting rules as difficult

Lead City University Ibadan DO NOT COPY

but necessary. The risk of appearing as deviant, either as fathers with insufficient authority or as criminals, is a strong force of social control in settings where FGM is normative as well in settings where FGM is non-normative and criminalized. Neither in non-involvement nor adjustment, men's partaking in the FGM process is clearly articulated. Men's attitudes toward FGM and their roles in the process may be enabling, meaning they actively contribute to the abandonment of FGM. Enabling attitudes operate via mechanisms of curiosity, that is, men expressed will to learn more about the health consequences of FGM, policy, and legal framework, and what is considered Swedish tradition. The men's desire to learn more throughout the focus group discussion repeatedly placed the discussion leaders in a position of having to answer questions and provide knowledge, which they had explicitly Stated was not in their roles as discussion leaders. Moreover, an analysis of curiosity showed that men indeed may be interested in the FGM process and in gender relations more generally. Through curiosity, men's responsibilities as complicit and gendered agents in the upholding as well as the abandonment of FGM are underlined. It was concluded that men's attitudes play a major role in the continuation of the FGM practice. It was also recommended among others that stakeholders should do all they can in ensuring that men have positive and positive attitude towards the FGM practice so as to ensure that the practice is discontinued[124].

A scoping review was conducted to identify research and gaps in literature about FGM–related attitudes and experiences among individuals from FGM–practicing countries living in the United States. The findings of the review suggest that both women and men from FGM-practicing countries living in the United States generally oppose FGM, and that women with FGM have significant physical and mental health needs and have found US healthcare providers to lack understanding of FGM. It was recommended that there is need

Lead City University Ibadan DO NOT COPY

for future research to improve measurement of FGM by applying a health equity lens and considering the sociocultural influences on FGM–related attitudes and experiences[125].

A study was implemented on the experiences of female genital mutilation (FGM) among West African immigrants in New York City from three West African countries (the Gambia, Guinea, and Mali) with FGM prevalence rates of seventy-six (76), ninety seven (97), and eighty nine (89) percent, respectively, among girls and women aged fifteen (15) to forty nine (49) years. Despite the small sample size, the findings of this exploratory study highlight important aspects of immigrant women's experiences regarding FGM and indicate the need for further exploration. Participants drew from personal experiences to discuss FGM and their views of the practice. Salient themes that emerged included the secretive and violent nature of the practice, the primacy of matriarchal decision-makers, the fear among immigrant mothers that their children would be subjected to FGM without their consent, and health care encounters in the US. It was therefore concluded that West African immigrants in New York City had neutral attitudes towards the FGM practice. It was recommended that there should be sensitization of the immigrants in order to ensure that they develop positive attitude towards the practice[126].

A study was undertaken to investigate the prevalence of and personal disposition (attitude) towards female genital mutilation in three hundred and forty five (345) university undergraduate students of Michael Okpara University of Agriculture, Umudike (MOUAU), South-East Nigeria using a pre-tested structured questionnaire. The results revealed that religion had the highest reason for the conduct of FGM. It further revealed that there is no association between place of birth and circumcision status, whereas State of circumcision had a significant association with willingness to carry out circumcision in daughter in the future. Forty four percent of the respondents believed that uncircumcised girls are prone to promiscuity in adulthood while the remaining 55.1% did not believe so. The belief that

Lead City University Ibadan DO NOT COPY

non-circumcised girls are prone to prone to promiscuity in adulthood had a significant association with prospective circumcision of daughters. The prevalence of circumcision was high among the population with a reasonable number seeing no ills in the practice and expressed willingness to sustain it. It was recommended that a strategy to curtail this practice has to focus on creating awareness at correcting this misconception as a learning theme at the tertiary level of education system rather than an assumption of passive knowledge[127].

A similar study was carried out to explore the attitude of mothers toward the FGM practice. Results revealed that 65.2% of the respondents believed this practice should be continued. The most cited reason reported regarding FGM was a requirement for religion (90.7%). About 73.9% of mothers Stated that the most cited reason reported regarding the abandonment of FGM was health complications. About 59.8% of the study participants thought that FGM could be stopped through education. The results further revealed that women who graduated from primary school, who had no social media account, and women who were circumcised by a traditional birth attendant were more likely to think that FGM should be continued compare with their counterparts. It was concluded that mothers who were less educated, had no social account and those circumcised by a traditional birth attendant had more positive attitudes toward FGM[128].

Similarly, a study was carried out to explain the spatial variations in the risk factors for female cutting in Nigeria. The specific objective was to estimate the spatially varying relationships of the factors influencing women's attitude towards female cutting in Nigeria and to identify how the variables exact influence across the States. The results showed that women's higher educational level and higher household wealth lowered the desire for continuation of FGM everywhere in the country, but the effects of most other variables varied in direction, strength and magnitude. It was recommended based on the findings that

Lead City University Ibadan DO NOT COPY

there should be the use of local approaches to address the factors that encourage the continuation of female cutting in Nigeria[129].

A closely related study was investigated on the factors associated with the FGM prevalence, attitudes toward the discontinuation of the practice, and consequences of FGM practice on reproductive health in terms of sexual transmitted infections/symptoms (STIs/STSs) among women of reproductive ages in Senegal. The results showed that rural areas, married women, women of Muslim religion, women of lower education and lower wealth, and women who were never exposed to social media reported a higher prevalence rate of FGM and were more likely to support continuation of FGM practice. Furthermore, FGM practice was associated with lower knowledge about STIs/STSs and higher prevalence of STIs/STSs. It was recommended based on the findings that education promotion, poverty reduction, rural development, and dissemination of the adverse consequences of FGM practice could help reduce FGM practices[130].

A similar study was carried out to assess the knowledge, attitude, and practice of health care workers on FGM practices in the region. Results showed that thirty six (17.8%) of the health workers believed FGM was a mandatory religious practice, while one hundred and fifty eight (78.2%) regarded it as a cultural practice. All the respondents knew it caused health problems, thirty-two (15.8%) believed it was a good practice though one hundred and seventy six (87.1%) of the respondents believed it violated human rights of the girls/women and ninety nine (49%) wanted the practice to continue. Fifteen (40.5%) had conducted FGM on a girl before, five (13.5%) claimed medicalization made FGM practice safer and five (13.5%) of the respondents intended to circumcise their daughters in future. It was concluded that health care workers still have attitudes and practices that positively promote and could encourage FGM practices despite their knowledge of the health consequences and their acceptance as a violation of the rights of women and girls. This

Lead City University Ibadan DO NOT COPY

attitude has high tendencies of depriving the community members of access to accurate information that will enable them to make informed decision about FGM and efforts to eradicate the practice[131].

A pilot study was carried out to research the attitudes towards and the knowledge of female genital mutilation (FGM) in adult women with FGM and their partners. Results showed that 89% of participants thought that FGM should be stopped and 72% said they knew FGM is illegal in the United Kingdom (UK). 15% reported that FGM caused no danger, or were unaware of any danger to women's health. The study demonstrates the opposition to FGM by participants, but some lack of knowledge regarding the legal and health implications. It was further revealed that women and children are affected by female genital mutilation (FGM) globally and in the United Kingdom (UK). The majority of knowledge on practices and the attitudes towards FGM comes from UNICEF and USAID research in Africa and there is scant data on FGM practices in diaspora communities in the UK. It was recommended that health and social care professionals are placed in a unique position to work with community members to educate men and women to end FGM[132].

The aim of a similar study was to examine religious leaders' attitudes towards the practice and to look for measures to eliminate the practice. Findings showed that, the 86% of the respondents held negative attitudes about FGM practices while 9% appreciate the practice and 5% of the participants were neutral. In examining the reasons for the attitudinal differences, it was revealed that, social-cultural factors, religious requirements, patriarchy, and lack of education and knowledge of the consequences of the female circumcision were the main reasons for the different attitudes of religious leaders in the FGM practice. Some of the religious leaders believe that, FGM is a social-cultural requirement which must be obeyed and preserved by every member of the society. Respondents believe that, FGM is not only a rite of passage, also increases marriageability and honor to women. Religious

Lead City University Ibadan DO NOT COPY

requirement mentioned as another reason for the differences in attitudes towards FGM practice. Respondents with positive thoughts on the practice referred FGM as "Sunna" which is an important religious ceremony that purifies women. Religious leaders believe that, for a woman to pray properly, she must be clean bodily and spiritually. Unmutilated women believed to be unclean until she removed the foreskin folds in her genital organs which believed to hide dirt. Religious leaders insisted that, FGM helps women to resist extramarital and pre-marital sexual intercourse which is against religious rules. However, other respondents who were against the practice believed that FGM is not a religious requirement since it lacks foundation in religious books. Patriarchal systems (rooted in their society) was another reason led to differences in attitudes over FGM practice. Some of the respondents believed that the practice is done to appraise males. It was also revealed that there are several measures which can be taken to change religious leaders' attitudes to the practice, to support fully the elimination of FGM in the society. Provision of comprehensive education and knowledge related negative impact of the practice to women's health, was suggested as one of the strong technique if used effectively. The use of senior religious leaders to implant the correct religious information about FGM to the ordinary religious leaders was another technique which was mentioned by the participants. The use of media like radio and newspapers to spread some educative messages concerning the negative impact of the practice, also, mentioned as an essential measure to change religious leaders' attitudes in the elimination of FGM[133].

A related study investigated females' attitude toward the FGM practice. Results showed that most of studied participants (70.4%) were rural residences, 90.2% were highly educated, and 96.8% were Muslim, 72.8% of studied participants' mothers were educated. About 29.7% of participants are suffering from complication after FGM, about 82.1% of them suffering from pain after the surgery. More than one-third of females (35.5%) had an

Lead City University Ibadan DO NOT COPY

negative attitude towards (supporting) FGM/C and 44.3 % of them had a positive attitude towards (refusing) FGM/C. Negative and neutral attitude score (49.3%) was more prevalent among females with circumcision. There was a significant relationship between circumcision and the participant's attitude. Traditions and culture was the main reason for performing FGM/C as Stated by females (77.4%). It was concluded that there is an association between negative attitudes and experience of mutilation. Negative attitude score was more prevalent among mutilated females. There was a significant relationship between exposure to mutilation and the participant's attitude. Traditions and culture was the main reason for performing FGM/C. It was recommended that educational programs and brochures for mothers be developed to change their behaviour and attitude toward of FGM/C[134].

Similarly, a study was done to estimate the prevalence of FGM among Egyptian females, to assess their attitude, and intention to practice FGM, and to determine their possible correlates. Results revealed that the prevalence of FGM was 74.2%. 65.3% had a positive attitude regarding (that is, were against) FGM, and 31.8% reported that they intended to practice FGM. Logistic regression models showed that younger age, rural area of residence, and level of education (illiteracy or just reading and writing) were significantly associated with marital status, exposure to mutilation, and attitude. Significant predictors of females' intention to practice were their mutilation experience, level of knowledge, and attitude and husband's pressure to perform FGM. It was concluded that FGM remains common in Egypt. Poor knowledge and negative attitude had a positive significant correlation, and both were among the predictors of females' intention to practice mutilation. Males played a role in the continuation of practice in the community. It was recommended that awareness campaigns and law enforcement may help reduce the FGM practice in Egypt[135].

Lead City University Ibadan DO NOT COPY

A study was conducted on prevalence and attitudes on female genital mutilation/cutting in Egypt since criminalisation in 2008. Results showed that the prevalence of FGM/C among adolescent women statistically significantly decreased from 94% in 2008 to 88% in 2014, after adjusting for education, residence and religion. Prevalence of support for the continuation of FGM/C also statistically significantly decreased from 62% in 2008 to 58% in 2014. The prevalence of FGM/C among ever-married women aged 15-19 years in Egypt has decreased since its criminalisation in 2008, but continues to affect the majority of the subgroup. Likewise, support of FGM/C continuation has also decreased, but continues to be held by most ever-married women of reproductive age. It was recommended that all hands should be on deck in further reducing the prevalence and support for FGM[136].

A similar research work was conducted on beliefs and attitudes regarding FGM in a rural village in Region Kankan, Guinea, before the start of an awareness campaign. Results showed that 1.5% of participants thought that FGM was a good practice, only 27% were against it. 24.2% wanted to abandon the practice. 97% of participants declared that FGM is still practiced in their region, only 27.3% had knowledge of a Guinean law that forbids it. Most of them declared that FGM was done by a traditional excisor, 36.4% declared that the practice was also done by medical staff. Mothers and "aunties" were indicated as the main decision makers regarding FGM. In 57.6% of cases, tradition was given as the main reason. None of the respondents indicated that the daughter was consulted or informed about the upcoming FGM. Negative consequences of FGM were revealed by 24.2% of the participants, but only 18% out of them declared they will not force their own daughter. It was recommended that more efforts should be put into the total eradication of the procedure and all hands should be on deck in ensuring that people have negative attitude towards the practice[137].

Lead City University Ibadan DO NOT COPY

A closely related research work was conducted to assess prospects reasons for performing and refusing female genital mutilation in Northern Upper Egypt. Results revealed that the main reasons for performing FGM/C as mentioned; were traditions and culture, religious requirements, and to decrease the sexual desire of females. The main reasons for refusing FGM/C were complications, not necessary, and problems between wife and husband. The main sources information about FGM/C were personal experience, friends or neighbours. It was concluded that traditions and culture were the main reasons for performing FGM/C, followed by religious requirements, and to decrease the sexual desire of females. Health consequences of FGM/C were the main reasons for refusing the procedure, followed by females who stated that FGM/C is not necessary, and problems caused between wife and husband related to FGM. It was recommended among others that there should be increased awareness about FGM/C law against all parties, whether parents seeking to perform FGM/C or health care workers or other persons participating in performing FGM/C[138].

An identical study was conducted in Iran, where FGM is a religious practice and not considered a crime, aiming to evaluate the attitudes toward female genital mutilation: a survey among the residents of Uramanat Region, Iran. The results revealed that about 66.8% of the female participants had been circumcised. The findings indicated that 81.04% of the male residents and 88.5% of the female residents believed that FGM is a religious practice. Only 8.1% of the female residents compared to 18.7% of the male residents considered FGM to be illegal. Although 78.8% of the male participants stated that their spouse was circumcised, the majority of the men (57.8%) preferred a wife with healthy female genitalia. It was concluded that according to the results, there are numerous and confusing perspectives regarding FGM. The lack of specific rules and knowledge about the psychological, sexual, and physical effects of FGM lead to the continuation of this practice.

Lead City University Ibadan DO NOT COPY

It was recommended amongst others that raising the awareness of various social groups about FGM and its complications could put an end to this inhuman issue[139].

A study was carried out to explore the perceptions of and barriers to reporting female genital mutilation (FGM) by victims and survivors of FGM to the police in England and Wales. Results revealed that all victims/survivors that were interviewed Stated that they did not support the FGM practice, and that they would not follow it for younger women in their own family. Second, the findings revealed that none of the respondents had reported their experience to the police. Thirdly, key barriers to reporting were identified to include: their belief that reporting their own experience would not serve any purpose because they had experienced FGM as children, and in another country; that they did not feel able to report new incidents of FGM in the community because of a lack of trust in the police due to previous negative experiences. Finally, they believed that FGM could be prevented only by work within the community, and not through engagement with the criminal justice system[140].

A study was aimed to assess the effects of a secondary school-based health education intervention on the knowledge and attitude of female students towards FGM in Sudan. Results revealed that the participants were between 14 to 17 years old, 30.3% of which were subjected to FGM. The main source of information about FGM was family and friends (41.1%). Most participants had a negative attitude towards FGM. The means of attitude scores increased from 5.76 pre-intervention to 6.53 post-intervention. It was concluded that school-based health education has a positive impact on both knowledge and attitude of female students towards FGM in Sudan. As such, introducing health education about the complications of FGM in curricula of secondary schools in Sudan has the potential to improve students' knowledge and attitude. Ultimately, such interventions can

Lead City University Ibadan DO NOT COPY

help reduce the prevalence of the practice when students become responsible for future families[141].

A similar study was carried out to estimate the relationship between women's intention for female genital mutilation and their exposure to complications and pressure. Results revealed that around half of the participants (47.9%) supported the continuation of Female Genital Mutilation (FGM) for young generations. Most females who experience FGM (79.3%) have no intention of circumcision their daughter. Most females (54.6%) of females who didn't expose to complications from FGM did not decide yet if they will mutilate their daughter. Moreover, 8.6% and 4.6% who were exposed to pain and bleeding, respectively, had not intended to mutilate their daughters. Also, 85.9% who did not disclose to pressure from neighbours had no intention to mutilate their daughters. An association between women's intention to circumcise their daughters and the source of their information was found. There was also an association between women's intention for mutilation and the complications they have been exposed to. There was an association between women's intention for mutilation and their exposure to pressure from family or neighbours. It was recommended among others that alleviating females' intention toward Female Genital Mutilation should be established by improving females' resistance toward family or neighbours regarding destructive and harmful traditions such as FGM procedure[142].

Another closely related study was implemented to examine men's perception towards FGM abandonment in Kenya. Results revealed that FGM awareness was higher among men (98%) compared to women (97%) and over 90% of men and women favour its abandonment. Apart from women's age, all variables (region, place of residence, religion, ethnicity, education, wealth index, marital status, polygyny and men's age) were significant. Young men and women below 30 years were more in favour of FGM

Lead City University Ibadan DO NOT COPY

abandonment than older folks. In the logistic regression, age and ethnicity were negatively associated with FGM abandonment while education, wealth and marital status were positive. Women's age, women's marital status and place of residence were insignificant. It was concluded that given that men are the architects and custodians of community social norms, programmes to end FGM should be considered a major part of their involvement; culture specific interventions should be put in place using the social norms theory; and education and cultural intermarriages should be promoted as a way of ending harmful cultural practices[143].

A study was conducted on the impact of health education on attitudes of parents and religious leaders towards female genital mutilation. Results revealed that the attitudes of Mullahs, Mokhtars and parents substantially changed from a position of supporting female circumcision to expressing a wish to abandon the practice and not cut their future daughters. It was concluded that brief educational interventions can be an effective strategy for changing the attitudes of parents and public leaders towards FGM. Health education is a useful strategy for changing attitudes. However, such interventions must be delivered alongside other strategies to ensure a multifaceted approach to addressing complex social dynamics. A comprehensive public health approach that includes legal measures, community-based action and an appropriate health system approach is therefore necessary for the eradication of FGM practice[144].

The aim of a similar study was to assess the association between women's empowerment and their intention to have their daughters undergo FGM/C in the country. Results revealed that a significantly higher proportion of women who participated in labour force reported that they intended to cut their daughters compared to those who did not. Similarly, the proportion intending to cut their daughters was significantly higher among women who accepted wife beating than among those who rejected the practice. A

Lead City University Ibadan DO NOT COPY

significantly higher proportion of women with low decision-making power intended to cut their daughters compared to those with high decision-making power. Results from multivariate regression analysis showed that the odds of intending to cut daughters were significantly higher among women who participated in labour force and those who accepted wife beating than among those who did not. In contrast, the likelihood of intending to cut daughters was significantly lower among women with high than low knowledge, and among those aged 45–49 than among those aged 15–19. The findings underscore the need to align anti-FGM/C policies and programmes to women who have undergone FGM/C, those with low knowledge, women who support wife beating and young women. Such interventions could highlight the adverse implications of the practice by stressing the psychological, health and social implications of FGM/C on its survivors[145].

A study was investigated on the prevalence of and personal disposition towards female genital mutilation in three hundred and forty-five (345) university undergraduate students of Michael Okpara University of Agriculture, Umudike (MOUAU), South east Nigeria. Results showed that there is no association between place of birth and circumcision status, whereas State of circumcision had a significant association with willingness to carry out circumcision in daughter in the future. Also, the belief that non-circumcised girls are prone to promiscuity in adulthood had a significant association with prospective circumcision of daughters. The prevalence of circumcision is high in this population (30.1%) with a reasonable number (16.8%) seeing no ills in the practice and expressed willingness to sustain it. It was therefore recommended that there should be a strategy to curtail the FGM practice such as creating awareness at correcting this misconception as a learning theme at the tertiary level of education system rather than an assumption of passive knowledge[146].

Lead City University Ibadan DO NOT COPY

Similar research was undertaken on attitudes of health care providers regarding female genital mutilation and its medicalization in Guinea. Results revealed that many health care providers participating in the study opposed to FGM and its medicalization. Survey data showed that 94% believed that it was a serious problem; 89% felt that it violated the rights of girls and women and 81% supported criminalization. However, within the health sector, there was no enforcement or accountability to the national law banning the practice. Despite opposition to the practice, many (38%) felt that FGM limited promiscuity and 7% believed that it was a good practice. It was concluded that health care providers could have an important role in communicating with patients and passing on prevention messages that can contribute to the abandonment of the practice. Understanding their beliefs is a key step in developing these approaches[147].

A closely identical study was conducted on health care providers' and mothers' perceptions about the medicalization of female genital mutilation or cutting in Egypt: A Cross-Sectional Qualitative Study. Results revealed that parents who seek medicalized cutting often do so to minimize health risks while conforming to social expectations. Thus, the factors that support FGM/C overlap with the factors that support medicalization. For many mothers and healthcare providers, adherence to community customs and traditions was the most important motive to practice FGM/C. Also, the social construction of girls' well-being and bodily beauty makes FGM/C a perceived necessity which lays the ground for stigmatization against uncut girls. Finally, the language around FGM/C is being reframed by many healthcare providers as a cosmetic surgery. Such reframing may be one way for providers to overcome the law against FGM/C and market the operation to the clients. It was concluded that the contradictions and contestations highlighted in the study among mothers and healthcare providers suggest that legal, moral and social norms that underpin FGM/C practice are not harmonized and could lead to a further rise in the

Lead City University Ibadan DO NOT COPY

medicalization of FGM/C. The results therefore highlights the critical role that health providers can play in efforts to drive the abandonment of FGM/C in Egypt[148].

Identical research was done on providers' attitudes about female genital mutilation/cutting in Philadelphia. Results revealed that 61.2% reported encountering FGM/C at least once in the past 5 years, yet 13.7% of participants reported receiving formal training in FGM/C; 77.5% felt unprepared and 47.1% uncomfortable serving patients with FGM/C. 34.1% of participants knew the matriarchal influence on the custom. The majority of providers accurately identified the short and long-term clinical consequences of FGM/C, but 67.7% of participants denied familiarity with laws regarding FGM/C. assessment of their attitude revealed most of the participants believe that all types of FGM/C are harmful and FGM is a practice rooted in tradition[149].

A related research work was carried out on factors associated with health care provider attitudes, and confidence for the care of women and girls affected by female genital mutilation/cutting. Results revealed that factors associated with more confidence for clinical FGM/C care include - awareness of health complications, ever cared for a woman with FGM/C, being a woman or person of color, and more than 5 years of clinical practice. Increased confidence in communication skills for FGM/C care was associated with awareness of more health complications for FGM/C. Women endorsed significantly less negative attitudes toward FGM/C compared with men; no other factors were associated with health care provider attitudes. It was concluded that future research should further investigate factors associated with health care provider attitudes toward FGM/C and those affected by the practice to promote quality care. Health providers require adequate training for clinical FGM/C care and in the communication skills that promote patient/provider communication cross-culturally[150].

Lead City University Ibadan DO NOT COPY

Another identical study was conducted on the effects of antenatal care visits and health facility delivery on women's choice to circumcise their daughters in sub-Saharan Africa: Evidence from demographic and health surveys. Results revealed that mothers who had four or more antenatal care visits were less likely to circumcise their daughters compared with those who had zero to three visits. Mothers who delivered at a health facility were less likely to circumcise their daughters than those who delivered at home. With the covariates, circumcision of daughters increased with increasing maternal age but decreased with increasing wealth quintile and level of education. Girls born to married women and women who had been circumcised were more likely to be circumcised. It was recommended that pregnant women should be encouraged to attend antenatal care visits as they would be impacted quality information that could empower them in taking important decisions such as avoiding FGM procedure[151].

A study was done on the risk of female genital cutting in Europe: Comparing immigrant attitudes toward uncut girls with attitudes in a practicing country. Results showed that Sudanese immigrants in Switzerland were significantly more positive about uncut girls than Sudanese in Sudan, and that selective migration out of Sudan likely contributed substantially to this difference. It was concluded that immigrant attitudes toward uncut girls is negative as compared to attitudes of those in a practicing country[152].

A similar study was undertaken to explore the attitude and intention of migrant populations in the Netherlands regarding FGM/C. Results revealed that as a result of migration and regardless of country of origin and gender, many participants have changed their attitudes towards the abandonment of FGM/C. None of the participants intended to have FGM/C performed on their daughters. Generally, the social pressure to perform FGM/C seems to be lower in the Netherlands when compared to the country of origin. Most participants felt confident in their ability to resist social pressure. However, some

Lead City University Ibadan DO NOT COPY

participants feared that they might succumb to social pressure or feared that their daughters would undergo FGM/C without their consent. It was concluded that because of acculturation process, interest in the FGM practice/C could wane following migration. Nonetheless, some pressure to perform FGM/C still exists after migration. Newly arrived migrants and those more vulnerable to social pressure, may benefit from educational interventions that increases knowledge and awareness about various aspects of the practice, with an emphasis on empowering those individuals in facing social pressure[153].

A study was conducted to assess the influence of education on hegemonic masculinity attitudes between male and female students and whether parental education differentiated the groups. Results showed that education did not change the attitudes of students toward FGM/C; however, parental education had an influence on both male and female students' attitudes toward FGM/C. The study suggests that education alone may not be sufficient to end FGM/C practice. A comprehensive community-led strategy incorporating culturally congruent health care to involve multiple parties of health professionals, religious leaders, government, and policy makers may be needed to address the problem[154].

The empirical studies discussed above are indeed similar to attitude and perception of female genital mutilation among mothers in Oyo state. However, these studies differed in certain aspects from the present study in the study area, study objectives, research questions and hypotheses. Despite the importance of examining mothers' attitude towards FGM, there are dearth of scholarly works on the attitude of mothers towards FGM in Oyo State. Although, a previous study showed that women of childbearing age in Ibadan Metropolis, Oyo State, Nigeria have an overall positive attitude towards FGM and a strong positive relationship between their attitude and FGM practice, there are several gaps in the study[56]. The study only focused on Ibadan Metropolis ignoring other regions of the State.

Lead City University Ibadan DO NOT COPY

The study also did not give attention to mothers who already have at least a daughter. These identified gaps in empirical knowledge are what this study sought to fill.

2.4 Conceptual Model

The conceptual model for the study showed the relationship between the independent variables (perceived knowledge and attitude of FGM) and the dependent variable (FGM practice) among mothers in Oyo State as illustrated in figure 2.3:

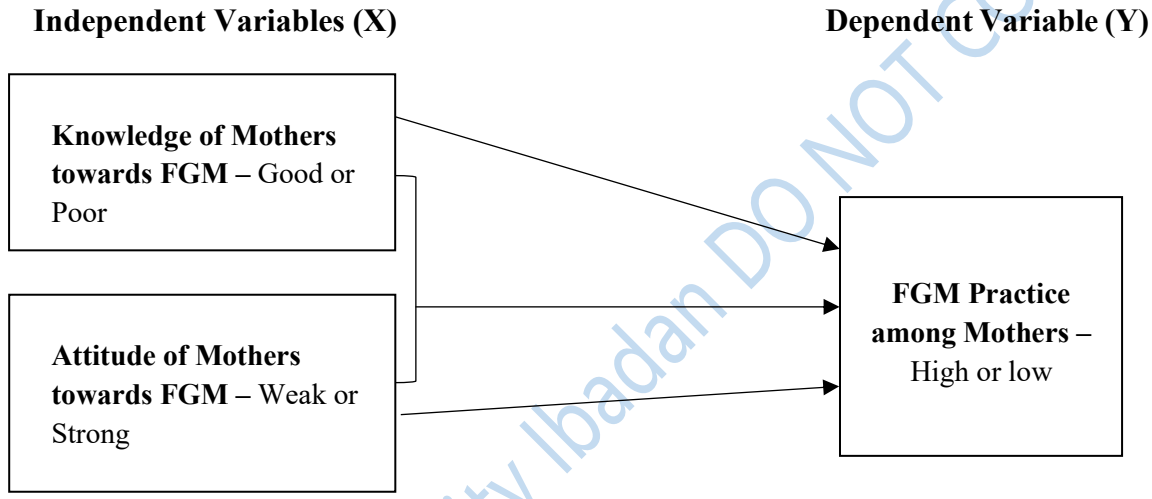


Figure 2.3: Conceptual Model for the Study (Source: Researcher)

Figure 2.3 showed the joint and relative influence of the independent variables (knowledge and attitude of FGM) on the dependent variable (FGM practice). Perceived knowledge of mothers which could be good or poor was studied as a single variable. Mothers' knowledge of FGM practice is good when they know a lot about the FGM practice, its benefits, health consequences, laws against it and so on and forth. However, mothers' knowledge of FGM practice is poor when they have little or very little knowledge about the FGM practice, its benefits, health consequences, laws against it and so on and forth.

Attitude of mothers towards FGM which could be weak or strong was also studied as a single variable. In the concept of this study, mothers with weak or negative attitude

Lead City University Ibadan DO NOT COPY

towards the practice are those who abhor or reject the practice that is, they are against the practice. These mothers would neither undergo the procedure nor allow their daughters to be mutilated. However, mothers with strong or positive attitude towards FGM practice are those who support the FGM practice and would likely undergo it if they have not, and willingly allow their daughters to undergo the practice. FGM practice by the mothers was also treated as a single variable. The FGM practice among the mothers could be high, or low.

2.5 Summary of Gaps in Literature Reviewed

Female genital mutilation which has to do with the partial or total removal of the external genitalia in females, has long been a subject of social, cultural, and economic inquiry. While literature on the topic has expanded over the years, there are still significant gaps in our understanding of the attitude, knowledge, experiences, reasons and laws against the practice. This study aimed to explore these gaps, highlighting the need for further research and analysis to enhance understanding of this complicated procedure.

2.5.1 Knowledge towards FGM practice and Gaps of Literature Review

Knowledge which has to do with awareness or familiarity with FGM plays a significant role in shaping individuals' decisions or behaviour towards FGM practice. Knowledge of women has been mostly considered with few attention also given to that of mothers[1,5,14,127,128,131]. However, existing literature often fails to adequately explore the knowledge of mothers of the laws against the FGM practice which also created a gap in literature that needed to be addressed.

2.5.2 Attitude towards FGM practice and Gaps of Literature Review

One crucial area where literature falls short is in examining the attitude of women especially mothers towards FGM practice. Attitude of women of child bearing age,

Lead City University Ibadan DO NOT COPY

pregnant women, female secondary school students, men and adults have all been considered in enormous aspects[3,56,105,113]. However, much attention has not been given to the attitude of mothers towards FGM practice especially in Oyo State which provided a gap in literature that needed to be addressed.

Lead City University Ibadan DO NOT COPY

Endnotes

1. C.M. Ndikom, F.A. Ogungbenro & O.A. Ojeleye. *Perception and Practice of Female Genital Cutting Among Mothers in Ibadan, Nigeria*, **International Journal of Nursing and Health Science**, 4(6), 2017, 71-80. ISSN: 2381-4861 (Print); ISSN: 2381-4888 (Online)

2. J. Beausang & S. T. Mama, *A Summary of Female Genital Mutilation/Cutting for the Pediatric and Adolescent Care Provider*, **Journal of Pediatric and Adolescent Gynecology**, 36(2), 2023, 97-102. https://doi.org/10.1016/j.jpag.2022.11.002

3. R. Ozuri, *Attitude of Mothers and Female Secondary School Students towards Female Genital Mutilation in Ika North East Local Government Area of Delta State*, **Sokoto Educational Review**, 20(1&2), 2021, 40-49. https://sokedureview.org/index.php/SER/article/view/438

4. C. Adigüzel, Y. Baş, M.D. Erhan & M.A. Gelle, *The Female Genital Mutilation/Cutting Experience in Somali Women: Their Wishes, Knowledge and Attitude,* **Gynecol Obstet Invest**, 2018, 1-11. DOI: 10.1159/000493130

5. S.A. Famuyiwa, *Assessment of Knowledge Of Health Consequences And Practice Of Female Genital Mutilation Among Parents In Ibadan South East Local Government Area Of Oyo State, Nigeria,* **Educational Journal of Multi-Disciplinary Studies, University of Port-Harcourt**, 6(1), 2017, 1-8. ISSN: 0796-8162

6. M.A. Alege, *Impacts of Communication Strategies in Combating the Practice of Female Genital Mutilation (FGM) and its Multiplier Effects on Women,* **Sapientia Foundation Journal of Education, Sciences and Gender Studies (SFJESGS)**, 2(4), 2020, 155 – 172. ISSN: 2734-2522 (Print); ISSN: 2734-2514 (Online)

7. Wikipedia, *Female Genital Mutilation,* Available at https://en.wikipedia.org/wiki/Female_genital_mutilation 17 November 2022

8. R.E.B. Johansen, *Virility, pleasure and female genital mutilation/cutting. A qualitative study of perceptions and experiences of medicalized defibulation among Somali and Sudanese migrants in Norway,* **Reprod Health**., 14(1), 2017, 1-25. doi: 10.1186/s12978-017-0287-4.

9. A.A. Odukogbe, B.B. Afolabi, O.O. Bello, A.S. Adeyanju, *Female genital mutilation/cutting in Africa*, **Translational Andrology and Urology**, 6(2), 2017, 138-148. https://tau.amegroups.com.

Lead City University Ibadan DO NOT COPY

[10.] O. Omigbodun, T. Bella-Awusah, D. Groleau, J. Abdulmalik, N. Emma-Echiegu, B. Adedokun & A. Omigbodun, *Perceptions of the Psychological Experiences Surrounding Female Genital Mutilation/Cutting (FGM/C) among the Izzi in Southeast Nigeria*, **Transcultural Psychiatry**, 57(1), 2020, 212–227. DOI: 10.1177/1363461519893141

[11.] D.C. Njoku, A. Heba & U. Njoku, *The History, Sexual, and Reproductive Consequences of Female Genital Mutilation on Women: A Focus on Sub-Saharan Africa,* **Sapientia Foundation Journal of Education, Sciences and Gender Studies (SFJESGS)**, 2(4), 2020, 265 – 290. ISSN: 2734-2522 (Print); ISSN: 2734-2514 (Online)

[12.] J.C. Nwaokoro, A.O. Ede, I.J. Dozie, C.D. Onwuliri, A.A. Nwaokoro & S.C. Ebiriekwe, *Attitude and Perception on the Impact of Female Genital Mutilation on Health and Sex Drive among Married Women in Ebenebe, Awka North L.G.A, Anambra State,* **Austin J Public Health Epidemiol**, 3(4), 2016, 1-7. ISSN : 2381-9014

[13.] World Health Organisation (WHO), *Female Genital Mutilation*, Accessed at https://www.who.int/newsroom/fact-sheets/detail/female-genital-mutilationon 24/03/2022

[14.] R. Robinson, O.P. Ojajuni, I.O. Owolabi, O. Olunuga, & E.I. Oni, *Assessing the Knowledge and Intention towards the Continuation of FGM Practice among Young Girls in South West Nigeria,* **Open Journal of Social Sciences**, 10, 2022, 271-283. https://doi.org/10.4236/jss.2022.104020

[15.] R. Haruna & I.M. Hassan, *Female Genital Mutilation in Some Selected Communities in Borgu Local Government Area of Niger State, Nigeria,* **African Journal of Humanities & Contemporary Education Research**, 6(1), 2022, 71-81. ISSN: 2760-5689X

[16.] R. Keredei, *The effects of female genital mutilation among teenage girls and young women in Nigeria,* PhD Thesis in International Affairs, Linnaeus University, Sweden, 2022, 1-45. http://lnu.diva-portal.org

[17.] K. Olaitan, *UN Report: Female genital mutilation Still Prevalent in Oyo, Osun and Ekiti*, Available at https://www.thisdaylive.com. Wednesday, 16th November, 2022

[18.] B.U. Mberu, *Female Genital Mutilation/Cutting in Nigeria: A Scoping Review, Evidence to End FGM/C: Research to Help Women Thrive,* **Population Council: New York**, 2017, 1-65. http://www.popcouncil.org/uploads/pdfs/2017RH_FGMC-NigeriaScopingReview.pdf

[19.] E. Batyra, E. Coast, B. Wilson & V. Cetorelli, *The Socioeconomic Dynamics of Trends in Female Genital Mutilation/Cutting Across Africa*, **BMJ Global Health**, 5, 2020, 1-9. doi:10.1136/ bmjgh-2020-003088

Lead City University Ibadan DONOT COPY

[20.] B.C. Ateko & J. O.Petinrin, *The perspective of Women on Female Genital Mutilation in Osun State, South West Nigeria,* **International Journal of Advances in Engineering and Management (IJAEM)**, 4(6), 2022, 2476-2482. ISSN: 2395-5252

[21.] World Health Organisation (WHO), *Health Risks of Female Genital Mutilation (FGM),* Available at https://www.who.int/teams/sexual-and-reproductive-health-and-research-(srh)/areas-of-work/female-genital-mutilation/health-risks-of-female-genital-mutilation, 21 January, 2022

[22.] M. Amodu, M. Bolori, A. Kuchichi, I. Ngoshe & F. Bukar, *Female Genital Mutilation in Northeastern Nigeria*, **Open Access Library Journal**, 6(11), 2019, 1-10. doi: 10.4236/oalib.1105827

[23.] E. Klein, E. Helzner, M. Shayowitz, S. Kohlhoff, & T.A. Smith-Norowitz, *Female Genital Mutilation: Health Consequences and Complications—A Short Literature Review,* **Obstetrics and Gynecology International**, 2018, 1-7. doi.org/10.1155/2018/7365715

[24.] A. González-Timoneda, M. González-Timoneda, A.C. Sánchez & V.R. Ros, *Female Genital Mutilation Consequences and Healthcare Received among Migrant Women: A Phenomenological Qualitative Study,* **International Journal of Environmental Research and Public Health**, 18(13), 2021, 71-95. Doi: 10.3390/ijerph18137195

[25.] T. Van Eck, *The Psychological Impact of FGM,* Available at https://www.fawco.org/global-issues/target-program/health/blog-health-matters/4632-tharien-van-eck-and-martha-canning, 11, October, 2021

[26.] R.A. Adimula & I.N. Ijere, *Psycho-Social Traumatic Events among Women in Nigeria,* **Madridge J AIDS**, 2(1), 2018, 17-28. doi: 10.18689/mja-1000104

[27.] New Step for African Community, NESTAC, *The Effects of FGM on Women's Health,* Available at https://nestac.org.uk/2020/02/04/the-effects-of-fgm-on-womens-health. 2020, 1

[28.] Merriam-Webster, *Knowledge, Merriam-Webster.com Dictionary,* https://www.merriam-webster.com/dictionary/knowledge. Accessed 24 Nov. 2022

[29.] Wikipedia, *Knowledge,* Available at https://en.wikipedia.org/wiki/Knowledge (22 November 2022)

[30.] S.S. Belda, & A.K. Tololu, *Knowledge, attitude and practice of mothers towards female genital mutilation in South West Shoa zone, Oromia region, Ethiopia,* **MOJ Public Health**, 6(2), 2017, 279–286. DOI: 10.15406/mojph.2017.06.00162

Lead City University Ibadan DO NOT COPY

[31] S. Philipson, & E. Kjellström, *When Objects Are Talking: How Tacit Knowing Becomes Explicit Knowledge*, **Journal of Small Business Strategy**, 30(1), 2020, 68-82. ISSN: 1081-8510 (Print) 2380-1751 (Online)

[32] F. Gaiseanu, *Attitude as an Expressible Info-Operational Reaction to a Perceived/Purposed Object/Objective,* **International Journal on Neuropsychology and Behavioural Sciences**, 1(1), 2020, 12-16. DOI: 10.51626/ijnbs.2020.01.00002

[33] M. Krischler & I.M.C. Pit-ten, *Pre- and in-service teachers' attitudes toward students with learning difficulties and challenging Behaviour*, **Front. Psychol.** doi: 10.3389/fpsyg.2019.0032. 10(327), 2019, 1-10

[34] C. Leo´n-Mantero, J.C. Casas-Rosal, A. MazMachado & M.E.V. Rico, *Analysis of attitudinal components towards statistics among students from different academic degrees*. **PLoS ONE**. e0227213. https://doi.org/10.1371/ journal.pone.0227213. 15(1), 2020, 1-13

[35] H. Zangeneh, *Teachers' Attitudes toward Teaching-Learning Methods of Entrepreneurship Education in Elementary Education,* **Educ Strategy Med Sci.** URL: http://edcbmj.ir/article-1-1746-en.html. 12(6), 2020, 1-7

[36] M. Kumar, *The Relationship Between Beliefs, Values, Attitudes and Behaviour*, Available at https://owlcation.com/social-sciences/Teaching-and-Assessing-Attitudes June 25, 2022

[37] M.A. Khan, R.Q. Danish & H.F. Ali, *Role of Attitude towards Knowledge Sharing, Perceived Norms and Perceived Control to Predict Knowledge Sharing Behaviour among Auditors in Service Organizations of Pakistan*, **The Business and Management Review**. https://cberuk.com. 10(3), 2019, 356-365

[38] F.A.D. Anjos, *The Intrinsic Relationship between Belief and Attitude: A Qualitative Study with Some Brazilian Undergraduate Students of English,* **Rev. EntreLínguas, Araraquara**. e-ISSN: 2447-3529. DOI: https://doi.org/10.29051/el.v6i2.13721. 6(2), 2020, 391-404

[39] A.P. Bakanauskas, E. Kondrotienė, A. Puksas, *The Theoretical Aspects of Attitude Formation Factors and Their Impact on Health Behaviour,* **Sciendo Organizacijų Vadyba: Sisteminiai Tyrimai**. https://doi.org/10.1515/mosr-2020-0002. 83, 2020, 15-36

[40] Wikipedia, *Attitude (Psychology),* Available at https://en.wikipedia.org/wiki/Attitude_(psychology), 21 November 2022

[41] A. Damianus, A. Luciano, A. Ubasa, T. Magallanes, M.J. Encarnacion & F.B. Ranay, *Attitude toward the work and its influence on the Individual work performance of employees: Basis for Attitude Management*, **Technium Social Science Journal**. 18(1), 2021, 378-394.

Lead City University Ibadan DO NOT COPY

[42.] D. Abun,T. Magallanes, S.L. Foronda & M.J. Incarnacion, *The Attitude of Graduate students toward Research and their Intention to Conduct Research in the Future,* **International Journal of Modern Research in Engineering & Management (IJMREM).** ISSN: 2581-4540. 2(11), 2019, 74-87

[43.] C.C. Nnanatu, G. Atilola, P. Komba, L. Mavatikua, Z. Moore, D. Matanda, O. Obianwu, & N. Kandala, *Evaluating changes in the prevalence of female genital mutilation/cutting among 0-14 years old girls in Nigeria using data from multiple surveys: A novel Bayesian hierarchical spatio-temporal model*, **PLoS ONE,** 16(2), 2021, 1-31. https://doi.org/ 10.1371/journal.pone.0246661

[44.] E. Leasure, C. Roth, E. Yegon, E. Anderson, N. Datta & C. Izugbara, *Women's empowerment and attitudes towards female genital mutilation abandonment in Nigeria: A cross-sectional analysis of the Nigeria demographic health survey*, **African Journal of Reproductive Health**, 26(12s), 2022, 127-137. DOI: 10.29063/ajrh2022/v26i12s.14

[45.] A. Oluwadamilare & A.O. Babajide, Female Genital Mutilation Assessment in Nigeria: The Adequacy of the Law, UNIZIK Journal of Public and Private Law, 12, 2022, 36-47. ISSN: 2174-2865

[46.] C. Uzondu, *Situation Assessment and Analysis of Female Genital Mutilation/Cutting in Imo and Ebonyi States,* A Baseline Report Civil Resource Development and Documentation Centre (CIRDDOC) in Partnership with the Coalition of Eastern Non-Governmental Organisations (CENGOS) and with Funding Support from Amplify Change, 2020, 1-55. Available at https://cirddoc.org, December, 2020

[47.] I. Ajzen, *The Theory of Planned Behaviour*, **Organizational Behaviour and Human Decision Processes**. DOI:10.1016/0749-5978(91)90020-T. 50(2), 1991, 179-211

[48.] I. Ajzen, & P. Schmidt, *Changing Behaviour Using the Theory of Planned Behaviour,* In M. S. Hagger, L. D. Cameron, K. Hamilton, N. Hankonen, & T. Lintunen (Eds.), The handbook of Behaviour change, **Cambridge University Press**: **USA**. https://doi.org/10.1017/9781108677318.002. 2020, 17–31

[49.] I. Ajzen, *Attitude structure and Behaviour*. In Attitude Structure and Function; Pratkanis, A.R, Breckler, S.J, Greenwald, A.G, Eds; **Lawrence Erlbaum Associates: Mahwah, NJ, USA**. ISBN 9780805803235. 2020, 241–274

[50.] I. Ajzen & D. Albarracin, *Predicting And Changing Behaviour: A Reasoned Action Approach*, In I. Ajzen, D. Albarracin, & R. Hornik (Eds.), Prediction and Change of Health Behaviour: Applying the Reasoned Action Approach, **Taylor and Francis: USA.** https://doi.org/10.4324/9780203937082. 2012, 3-21.

[51.] I. Ajzen, *Perceived Behavioural Control, Self-Efficacy, Locus of Control, and the Theory of Planned Behaviour*, **J. Appl. Soc. Psychol**. DOI:10.1111/j.1559-1816.2002.tb00236.x. 32(4), 2002, 665–683

Lead City University Ibadan DO NOT COPY

[52.] G.M. Hochbaum, *Public Participation in Medical Screening Programs: A Sociopsychological Study. (Public Health Service, PHS Publication 572*), **U. S. Government Printing Office: Washington, DC**. https://search.library.wisc.edu/catalog/999694547302121. 1958, 1-23

[53.] N. Adeline, I.C. Ojiakor & J.C. Onovo, *Awareness, Knowledge and Perception of Female Genital Mutilation and Cutting (FGM/C) Radio Campaign and Practice Among Women in Imo State*, **Archives of Current Research International.** DOI:10.9734/acri/2019/v16i430095. 16(4), 2019, 1-11

[54.] A. Bandura, *Self-Efficacy,* **W. H. Freeman and Company: New York, NY**. https://doi.org/10.4278/0890-1171-12.1.8. 1997

[55.] E.A. Esmeal, A.E.E.M. Ahmed, H.A. Waggiallah, & Y.M. Almosaad, *Knowledge, Attitude, And Practice Among Mothers Towards Female Circumcision Ombada Province Khartoum State, Sudan*, **Int J Community Med Public Health**. DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20162043. 3(7), 2016, 1788-1794

[56.] O.O. Olopha, *Practice, Perception and Attitude of Childbearing Age Women towards Female Genital Mutilation in Ibadan Metropolis, Oyo State, Nigeria,* **Journal of Positive Psychology and Counselling**. https://www.ppacjournals.org. 5, 2020, 39-57

[57.] A.Y. Mohammed, T. Ermeko & A.L. Wodera, *Assessment of Knowledge, Attitude and Practice towards Female Genital Mutilation Among community of Agarfa Town, Southeast Ethiopia*, **J Comm Pub Health Nursing**. Doi: 10.4172/2471-9846.1000273. 6(3), 2021, 1-6

[58.] W. Anmut, T. Toru, A. Yeshambel, & M. Mesele, *Knowledge, Attitude and Practice Towards Female Genital Mutilation Among Reproductive Age Women in Amad Imam Town, Jarso District, East Hararge Zone, Oromia Region, Ethiopia: A Community Based Study,* **Journal of Medicine, Physiology and Biophysics: An International Peer-Reviewed Journal**. ISSN 2422-8427. 66, 2020, 14-21

[59.] M.O. Othowa, *Knowledge and Attitudes towards the Practice of Female Genital Mutilation,* A research project among pregnant women attending maternity wing in Dagahaley Médecins Sans Frontières Hospital, Available at https://globalhistorydialogues.org/projects/knowledge-and-attitudes-towards-the-practice-of-female-genital-mutilation. 2021, 1-5

[60.] J.E. Ibebuike, G.I. Nwokike, S.C. Alagwu & N.P. Kalu, *Mother's Perception of Female Genital Mutilation among Mothers in Owerre - Ebiri Community in Orlu L.G.A,* **International Journal of Advanced Research in Biological Sciences.** ISSN: 2348-8069, DOI: 10.22192/ijarbs. 5(12), 2018, 87-94

[61.] T. Oladimeji, *Knowledge and Attitude towards Female Genital Mutilation and its Health Implications among Women in a Community in Osun State,* A Paper presented at

Lead City University Ibadan DO NOT COPY

the 8th African Population Conference, Entebbe, Uganda, 18th to 22nd November, 2019, Available at http://uaps2019.popconf.org/abstracts/190418

62. S.O. Olaoye, *Socio-Cultural Factors and the Continuity of Female Genital Mutilation (FGM) among Mothers in Obiangwu Community, Ngor-Okpala LGA, in Imo State,* **Research and Reviews Journal of Social Sciences**. https://www.rroij.com. 6(2), 2020, 1-11

63. M. Owojuyigbe, M.E. Bolorunduro & D. Busari, *Female Genital Mutilation as Sexual Disability: Perceptions of Women and Their Spouses in Akure, Ondo State, Nigeria*, **Reproductive Health Matters.** https://doi.org/10.1080/09688080.2017.1331685. 25(50), 2017, 80-91

64. A.I. Obi, A.O. Adesoye & A. Adelosoye, *Awareness and Knowledge of Female Genital Mutilation among Women in a Sub-Urban Community in Edo State, Nigeria*, **Annals of Biomedical Sciences**. eISSN: 1596-6569. 15(1), 2016, 1-8

65. M. Malak, D. Basalem, S. Aleiidi, N. Helabi, M. Almutairi, & A. Alhamed, *Awareness of Female Genital Mutilation/Cutting among the General Population in 2019: A Survey based Study in Saudi Arabia,* **Cureus**. DOI 10.7759/cureus.6651. 12(1), 2020, 1-10

66. A.O. Eguvbe, P.W. Alabrah, D.O. Allagoa, & J.A. Agbo, *Awareness, Prevalence And Practice of Female Genital Mutilation Amongst Students in a Tertiary Institution in South-South Nigeria,* **European Journal of Public Health Studies**. DOI: 10.46827/ejphs.v5i2.121. 5(1), 2022, 18-28

67. O. Egbodo, U. Akunaeziri, A. Edugbe, H. Shambe, M. Kahansim & A. Ocheke, *Female Genital Mutilation: Opinion of Outpatients of a Department of Obstetrics and Gynaecology in North Central Nigeria*, **African Journals OnLine**. https://www.ajol.info/index.php/jjm/article/view/184147. 12, 2019, 48-60.

68. K.W. Muchene, I.G. Mageto, & J.J. Cheptum, *Knowledge and Attitude on Obstetric Effects of Female Genital Mutilation among Maasai Women in Maternity Ward at Loitokitok Sub-County Hospital, Kenya*, **Obstet Gynecol Int**. DOI: 10.1155/2018/8418234. 1(1), 2018, 1–5.

69. S. Al Awar, M. Al-Jefout, N. Osman, Z. Balayah, N. Al Kindi & T. Ucenic, *Prevalence, Knowledge, Attitude and Practices of Female Genital Mutilation and Cutting (FGM/C) Among United Arab Emirates Population,* **BMC Women's Health**. https://doi.org/10.1186/s12905-020-00949-z. 20(79), 2020, 1-12

70. A.I. Obi, O.E. Obarisiagbon, O.L. Igbinadolor, K.M. Fatai, & O.O. Adesoye, *Factors associated with the knowledge and attitude towards Female Genital Mutilation among antenatal clinic attendees in Southern Nigeria*, **Annals of Health Research**. doi:10.30442/ahr.0502-20-50. 5(2), 2019, 183-192

Lead City University Ibadan DO NOT COPY

[71.] T.M. Alameen, *Knowledge About Female Genital Mutilation Among Females Attending Wad Nubawe Health Center,* An MBBS degree Thesis, Thesis, Department of community medicine, Faculty of Medicine, University of Science and Technology. DOI: http://196.202.134.58:8080/xmlu. 2020, 5

[72.] A.M. Abdelmoaty, H.A. Sabry, & R.Y. Elamir, *Knowledge, Attitude and Intention to Future Practice of Female Genital Mutilation among Medical Students, Egypt,* **Egyptian Family Medicine Journal (EFMJ)**. http://efmj.journals.ekb.eg. 4(2), 2020, 7-21

[73.] E.O. Akintoye, O.P. Akintoye & J.O. Adjene, *Knowledge, Attitudes and Perception of the Public on Female Genital Mutilation,* **Journal of Medical Clinical Case Reports**. https://unisciencepub.com. 3(1), 2021, 1-5

[74.] C.E. Anyanwu, K. Torpey, O.P. Abiodun, O.F. Sanni, & I.D. Anyanwu, *Variations in the Prevalence of Female Genital Mutilation Among Reproductive-aged Women in Nigeria Across Three Generations,* **International Journal of Maternal and Child Health and AID**. https://doi.org/10.21106.ijma.548. 11(2), 2022, 1-10

[75.] A.F. Fagbamigbe, I.O. Morhason-Bello, Y.O. Kareem & E.S. Idemudia, *Hierarchical Modelling of Factors Associated with the Practice and Perpetuation of Female Genital Mutilation in the Next Generation of Women in Africa*, **PLoS ONE.** https://doi.org/10.1371/journal.pone.0250411. 16(4), 2021, 1-18

[76.] H.M. Shaheen, Z.A. Kasemy, & E.F.M. Salah, *The Current Situation Regarding Awareness About Female Genital Mutilation Among Men Working in Schools of Benha City, Qaluobia Governorate*, **Menoufia Med J.** DOI: 10.4103/mmj.mmj_542_15. 30(1), 2017, 23-27

[77.] B. Ahinkorah, J. Hagan, A. Seidu, O. Bolarinwa, E. Budu, C. Adu, J. Okyere, A.G. Archer & T. Schack, *Association Between Female Genital Mutilation and Girl-Child Marriage in Sub-Saharan Africa,* **Journal of Biosocial Science,** 55(1), 2022, 1-12. doi:10.1017/S0021932021000687

[78.] B. Daniyan, I. Sunday-Adeoye, K. Ekwedigwe & D. Dantani, *Female Genital Mutilation: Prevalence and Perception of Patients in South-East Nigeria,* **European Journal of Pharmaceutical and Medical Research**. ISSN: 2394-3211. 5(11), 2018, 1-4

[79.] R. Ogbuoji, *Understanding the Predictors of Female Genital Mutilation in Nigeria,* A paper presented to the faculty of the University of North Carolina at Chapel Hill in partial fulfilment of the requirements for the degree of Masters of Public Health in the department of Maternal and Child Health. Chapel Hill, North Carolina. https://cdr.lib.unc.edu. 2017, 3

[80.] S.M. Mohamed, *Knowledge, Attitude and Practice of Female Genital Mutilation Among Traditional Birth Attendants in Mogadishu-Somalia,* PhD Thesis, Benadir University, Somalia. https://www.umu.se. 2020, 4

Lead City University Ibadan DO NOT COPY

[81.] S.I. Hussein, *Knowledge and Perceptions of Complications Associated with Female Genital Mutilation/Cutting among Somali Community in Wajir County, Kenya,* Master of Public Health Dissertation, School of Public, University of Nairobi. http://erepository.uonbi.ac.ke. 2018, 4

[82.] A.M.E. Mudawi, A.E.A. Yousif, & E.A.A. Abdulmajid, *Knowledge, Attitude and Practice of Female Genital Mutilation and the Associated Stigma in Al Undub Abo-Kleio Area in Gezira State Central Sudan in 2018,* **Gynecology & Obstetrics**. ISSN 2161-0932. 10(1), 2020, 1-10

[83.] S. Al Awar, K. Zareba, G.S. Sallam, N. Osman, T. Ucenic, H. Khair, S.A. Shdefat, H.A. Fattah, & S. Maki, *Legal Awareness and Practices of Female Genital Mutilation/Cutting (FGM/C) among United Arab Emirates Medical Practitioners*, **Int. J. Environ. Res. Public Health.** doi.org/10.3390/ijerph20064710. 20(4710), 2023, 1-13

[84.] O. Ogunsiji, A.E. Ogbeide, & J. Ussher, *Experiences of Primary Healthcare Workers in Australia towards Women and Girls Living with Female Genital Mutilation/Cutting (FGM/C): A Qualitative Study*, **Healthcare**. https://doi.org/10.3390/ healthcare11050702. 11(702), 2023, 1-15

[85.] F. H. Abd-ELhakam, R.E. Ebrahim, M.Z. Mohammed & H.E. Hassan, *Female Genital Mutilation: Impact on Knowledge, Attitude, Sexual Score Domains and Intention of Females in Northern Upper Egypt*, **Archives of Medical Case Reports and Case Study.** DOI:10.31579/2692-9392/161. 6(5), 2022, 1-8

[86.] G. Melese, M. Tesfa, Y. Sharew, & T. Mehare, *Knowledge, Attitude, Practice, and Predictors of Female Genital Mutilation in Degadamot District, Amhara Regional State, Northwest Ethiopia*, **BMC Women's Health**. https://doi.org/10.1186/s12905-020-01041-2. 20(178), 2020, 1-9

[87.] C. Tantet, C. Aupiais, M. Bourdon, F.S. Adèle, D. Levy, B. Lafon-Desmurs, & A. Faye, *Female Genital Mutilation: An Evaluation of the Knowledge of French General and Specialized Travel Medicine Practitioners*, **J Travel Med.** https://doi.org/10.1093/jtm/tax090. 25(1), 2018, 1-7

[88.] M.M. Ziyada, R.E.B. Johansen, M. Berthelsen, L. Inger-Lise, & B. Bothild, *Factors Associated with General Practitioners' Routines and Comfortability with Assessing Female Genital Cutting: A Cross-Sectional Survey,* **BMC Health Serv Res**. https://doi.org/10.1186/s12913-023-09085-4. 23(82), 2023, 1-9

[89.] J. Young, K.K. Rodrigues, B. Imam, & C. Johnson-Agbakwu, *Female Genital Mutilation/Cutting-Pediatric Physician Knowledge, Training, and General Practice Approach*, **J Immigr Minor Health**. doi: 10.1007/s10903-019-00938-x. 22(4), 2020, 668-674

Lead City University Ibadan DO NOT COPY

[90.] B. Molina-Gallego, L. Mordillo-Mateos, G.M. de Corral, S. Gómez-Cantarino, B. Polonio-López, & M.I. Ugarte-Gurrutxaga, *Female Genital Mutilation: Knowledge and Skills of Health Professionals. Healthcare (Basel).* doi: 10.3390/healthcare9080974. 9(8), 2021, 1-9

[91.] A. González-Timoneda, V. Ruiz Ros, M. González-Timoneda, & C.A. Sánchez, *Knowledge, attitudes and practices of primary healthcare professionals to female genital mutilation in Valencia, Spain: Are we ready for this challenge?.* **BMC Health Services Research**, 18(1), 2018, 1-13. doi: 10.1186/s12913-018-3396-z

[92.] A.E.O. Adogho, K. Hinsliff-Smith, & J. McGarry, *Healthcare Professionals' Knowledge, Attitudes, and Experiences of FGM in Sub-Saharan Africa: A Systematic Scoping Review*, **International Journal of Africa Nursing Sciences**. ISSN 2214-1391. 14(100270), 2021, 1-10

[93.] S. Turkmani, C. Homer, N. Varol, & A. Dawson, *A Survey of Australian Midwives' Knowledge, Experience, and Training Needs in Relation to Female Genital Mutilation*, **Women and Birth**. DOI: 10.1016/j.wombi.2017.06.009. 31(1), 2018, 25-30

[94.] Z.B. Khalesi, S.P. Beiranvand, & F. Ebtekar, *Iranian Midwives' Knowledge of and Attitudes toward Female Genital Mutilation/Cutting* (FGM/C), **Electron Physician**. doi: https://doi.org/10.19082/3828. 9(2), 2017, 3828–3832

[95.] F. Abd-ELhakam, R. Ebrahim, M. Mohammed, & H. Hassan, *Female Genital Mutilation: Females' Related Knowledge*, **Biomedical Research and Clinical Reviews.** DOI:10.31579/2692-9406/139. 8(1), 2023, 1-6

[96.] H. Hassan, F. Abd-ELhakam, R. Ebrahim, & M. Mohammed, *Call for Change Enhancement Upper Egyptian Females' Knowledge Regarding Effect of Female Genital Mutilation*, **American Journal of Public Health Research**. DOI: 10.12691/ajphr-11-1-2. 11(1), 2023, 5-12

[97.] A. Mostafa, S.A. Gaballah, & G.E. Amin, *Determinants of Disagreement with Female Genital Mutilation/Cutting of Future Daughters and Awareness of the Ban Among Egyptian University Students*, **Reprod Health**. https://doi.org/10.1186/s12978-020-00941-8. 17(91), 2020, 1-11

[98.] J.L. Lane, C.E, Johnson-Agbakwu, N. Warren, C. Budhathoki, E.C. Cole, *Female Genital Cutting: Clinical Knowledge, Attitudes, and Practices from a Provider Survey in the US*, **J Immigr Minor Healt.** DOI: 10.1007/s10903-018-0833-3. 21(5), 2019, 954–964

[99.] H.M. Ahmed, S.A. Shabu, & N.P. Shabila, *A Qualitative Assessment of Women's Perspectives and Experience of Female Genital Mutilation in Iraqi Kurdistan Region*, **BMC Women's Health.** https://doi.org/10.1186/s12905-019-0765-7. 19(1), 2019, 1-12

Lead City University Ibadan DO NOT COPY

[100.] H.M. Ahmed, M.S. Kareem, N.P. Shabila, & B.Q. Mzori, *Knowledge and Perspectives of Female Genital Cutting among the Local Religious Leaders in Erbil Governorate, Iraqi Kurdistan Region*, **Reprod. Health.** https://doi.org/10.1186/s12978-018-0459-x. 15(1), 2018, 1-14

[101.] A.F. Galal, S. El Gelany, & K. Goma, *Female Genital Mutilation (FGM) in Egypt, Knowledge and Concepts of Egyptian Medical Students: A Cross-Sectional Study*. **J. Obstet. Gynaecol**. DOI: 10.1080/01443615.2022.2035335. 42(6), 2022, 2185–2189x\

[102.] B. M. Gbadebo, A.T. Salawu, R.F. Afolabi, M. M. Salawu, A. F. Fagbamigbe & A.S. Adebowale, *Cohort Analysis of the State of Female Genital Cutting in Nigeria: Prevalence, Daughter Circumcision and Attitude towards its Discontinuation,* **BMC Women's Health**. https://doi.org/10.1186/s12905-021-01324-2. 21(182), 2021, 1-12

[103.] A. Greis, T. Bärnighausen, M. Bountogo, L. Ouermi, A. Sié, & G. Harling, *Attitudes towards Female Genital Cutting Among Adolescents in Rural Burkina Faso: A Multilevel Analysis*, **Trop Med Int Health**. DOI: 10.1111/tmi.13338. 25(1), 2020, 119–131

[104.] K. Dalal, Z. Kalmatayeva, S. Mandal, G. Ussatayeva, M.S. Lee, & A. Biswas, *Adolescent Girls' Attitudes Toward Female Genital Mutilation: A Study in Seven African Countries*, **F1000 Res**. https://doi.org/10.12688/f1000 research.14142.1. 7(343), 2018, 1-10.

[105.] M.N. Igbineweka & B.U.C Ataha, *Influence of the Location of Mothers And Female Students on Their Attitudes Towards Female Genital Mutilation: Implications For Counselling*, **Journal of Nursing, Social Studies, Public Health and Rehabilitation**. ISSN 1804-7181 (On-line). 1(2), 2022, 26–32

[106.] N.B. Obijiofor, C. A. Enete, C.E. Nnonyelu, O.S. Umeononihu, E.A. Emeka, C.C. Okoro, J.C. Akabuike, C. B. Oguejiofor & G.U. Eleje, *Female Genital Mutilation: Prevalence, Awareness and Attitude among Igbo Women of Child-Bearing Age in Nigeria,* **Obstetrics and Gynecology Research**. DOI: 10.26502/ogr038. 3(3), 2020, 145-160.

[107.] F.I. Omorodion, *Knowledge and Perceptions of Female Genital Mutilation Among African Immigrant Women in Windsor, Canada,* **International Journal of Sociology and Anthropology,** 12(2), 2020, 43-50. DOI: 10.5897/IJSA2019.0839

[108.] L. Jahangiry, T. Pashaei, & K. Ponnet, *The Attitudes toward Female Genital Mutilation/ Circumcision: A Systematic Review and Meta-Analysis*, **Healthcare.** https://doi.org/10.3390/ healthcare9091184. 9(1184), 2021, 1-15

[109.] Statista Research Department, *Attitudes towards Female Genital Mutilation in Nigeria 2018, by Circumcision Status,* Available at https://www.statista.com/Feb 1, 2022

Lead City University Ibadan DO NOT COPY

[110.] C. Cappa, C. Thomson, & C. Murray, *Understanding the Association between Parental Attitudes and the Practice of Female Genital Mutilation among Daughters*. **PLoSONE**. https://doi.org/10.1371/journal.pone.0233344. 15(5), 2020, 1-10

[111.] A.D. Abathun, A.A. Gele & J. Sundby, *Attitude towards the Practice of Female Genital Cutting among School Boys and Girls in Somali and Harari Regions, Eastern Ethiopia,* **Hindawi Obstetrics and Gynecology International.** https://doi.org/10.1155/2017/1567368. 2017, 1-9

[112.] N.J. Hemuka, *The Continuation of Female Genital Mutilation in Nigeria: A Mixed Methods Study of Igbo Men's Views And Perpetuating Factors*, PhD Thesis, Faculty of Education Health and Wellbeing, University of Wolverhampton United Kingdom. https://wlv.openrepository.com. 2021

[113.] S.A. Aderibigbe, B.W. Alatishe-Muhammad, H.A. Ameen, A.G. Salaudeen, M.J. Saka, M.M.B. Uthman, O.A. Bolarinwa, T.M. Akande & H.O. Raji, *Practice of Female Genital Cutting Amongst Adults in Ilorin Metropolis, North-Central Nigeria,* **Tropical Journal of Health Sciences**. eISSN: 1117-4153. 25(1), 2018, 1-12

[114.] A.M. Akinsulure-Smith & T. Chu, *Knowledge and Attitudes Towards Female Genital Cutting Among West African Male Immigrants in New York City,* **Health Care for Women International**. doi: 10.1080/07399332.2017.1294593. 38(5), 2017, 463-477

[115.] M. Min, T. Wong, & A.M. Akinsulure-Smith, *Exploring Beliefs and Attitudes Toward Female Genital Mutilation/Cutting Among Healthcare Providers in New York City,* **Violence Against Women**. doi:10.1177/10778012211045710. 28(12-13), 2022, 3174–3193

[116.] H.K. Ghazy, B.E. Gowayed, N.I. Abd El-Ghany, L.M. Fouda, H. A. E. Ebrahim, *Effect of an Educational Program on Mothers' Knowledge and Attitudes about Female Genital Mutilation at Tanta City,* **International Egyptian Journal of Nursing Sciences and Research (IEJNSR).** DOI: 10.21608/ejnsr.2020.52545.1033. 1(2), 2020, 16-27

[117.] I. Ogadinma & P.C. Ezeah, *The Prevalence of Female Genital Mutilation/Cutting (Fgm/C) and Men's Role in its Practice in Southeast Nigeria,* **The Nigerian Journal of Medical Sociology**. https://www.nigerianjournalsonline.com. 2(1), 2020, 52-78

[118.] F. lwig, F. Ewerling & A.J.D. Barros, *Women's Empowerment as It Relates to Attitudes Towards and Practice of Female Genital Mutilation/ Cutting of Daughters: An Ecological Analysis of Demographic and Health Surveys From 12 African Countries.* **Front. Sociol.** doi: 10.3389/fsoc.2021.685329. 6(685329), 2022, 1-11

[119.] S. Yaya & B. Ghose, *Female Genital Mutilation in Nigeria: A Persisting Challenge for Women's Rights,* **Soc. Sci.** doi:10.3390/socsci7120244. 7(244), 2018, 1-13

Lead City University Ibadan DO NOT COPY

[120.] E.N. Ossai, E.C. Aniwada, E.A. Nwobi & U.E. Ezeoke, *Prevalence and Predictors of Female Genital Cutting in Nigeria: An Analysis of 2013 Nigeria Demographic and Health Survey,* **J Community Med Health Care**. https://austinpublishinggroup.com. 3(1), 2018, 1-8

[121.] A.O. Ashimi & T.G. Amole, *Perception and Attitude of Pregnant Women in a Rural Community North-West Nigeria to Female Genital Mutilation,* **Arch Gynecol Obstet**. doi: 10.1007/s00404-014-3478-z. 291(3), 2015, 695-700

[122.] E.S. Mohammed, A.E. Seedhom, & E.M. Mahfouz, *Female Genital Mutilation: Current Awareness, Believes and Future Intention in Rural Egypt*, **Reprod Health.** https://doi.org/10.1186/s12978- 018-0625-1 PMID: 30333019. 15(175), 2018, 1-10.

[123.] B.C. Kaprom, *Interventions By Government And Non-Governmental Organizations Towards Female Genital Mutilation (FGM) and the Attitude Portrayed by the Pokot Community on Repressing FGM,* **International Journal of Health and Psychology Research.** ISSN 2055-0057(Print), ISSN 2055-0065(Online). 5(2), 2017, 18-27

[124.] T. K. Axelsson & S. Strid, *Minority Migrant Men's Attitudes toward Female Genital Mutilation: Developing Strategies to Engage Men,* **Health Care for Women International**. DOI: 10.1080/07399332.2019.1687707. 41(6), 2020, 709-726

[125.] G. Besera, H. Goldberg, E. M. Okoroh, M.C. Snead, C.E. Johnson-Agbakwu & M.M. Goodwin, *Attitudes and Experiences Surrounding Female Genital Mutilation/Cutting in the United States: A Scoping Review,* Available at doi: https://doi.org/10.1101/2022.03.25.22272941. 2022, 1-51

[126.] A. M. Akinsulure-Smith, T. Chu & L.N. Krivitsky, *West African Immigrant Perspectives on Female Genital Cutting: Experiences, Attitudes, and Implications for Mental Health Service Providers*, **Journal of International Migration and Integration.** doi: 10.1007/s12134-018-0544-6. 19(2), 2018, 259–276.

[127.] K.A. Raheem, C. Udenze & I.A. Odetokun, *University female students' perception and prospective practice of female genital mutilation in Umudike, Southeast Nigeria,* **African Journal of Reproductive Health.** DOI: 10.29063/ajrh2023/v27i1.5. 27(1), 2023, 54-62

[128.] E. Keles, H.H. Eker, G. Bektemur, I.A. Hilowle, M.M. Kassim, M.A. Hassan-Kadle, A. Adali, & Ş. Karaketir, *Determinants of Disagreement with Female Genital Mutilation Among Mothers,* **International Journal of Women's Health**. https://doi.org/10.2147/IJWH.S391043. 14, 2022, 1863–1870

[129.] E. Gayawan, & R.S. Lateef, *Estimating geographic variations in the determinants of attitude towards the practice of female genital mutilation in Nigeria*, **Journal of Biosocial Science.** DOI: https://doi.org/10.1017/S0021932018000391. 51(5), 2019, 645–657

Lead City University Ibadan DO NOT COPY

[130.] R. Rawat, & N.N. Tirkey. *Female genital mutilation, associated factors, and its consequences on women's reproductive health in Senegal*, **International Journal of Population Studies.** https://doi.org/10.36922/ijps.v7i1.292. 7(1), 2021, 94–107.

[131.] O. Oladeji, A. E. Farah, & B. S. Aden, *Knowledge, attitudes and practices of female genital mutilation among health care workers in Somali region of Ethiopia*, **International Journal of Community Medicine and Public Health**. https://doi.org/10.18203/2394-6040.ijcmph20213517. 8(9), 2021, 4191–4196

[132.] M. Larsson, P. Cohen, G. Hann, S. M. Creighton, & D. Hodes, *An exploration of attitudes towards female genital mutilation (FGM) in men and women accessing FGM clinical services in London: A pilot study,* **Journal of Obstetrics and Gynaecology**. DOI: 10.1080/01443615.2018.1437718. 38(7), 2018, 1005-1009

[133.] H.J. Rehema, & Z. Chen, *Religious Leaders' Attitudes on Female Genital Mutilation in Tanzania,* **International Journal of Academic Multidisciplinary Research (IJAMR)**. ISSN: 2643-9670. 4(8), 2020, 163-173

[134.] H.E. Hassan, F.H. Abd-ELhakam. R.E. Ebrahim, & M.Z. Mohammed, *Study Females' Attitude toward Female Genital Mutilation,* **J Gynecol Women's Health**. DOI: 10.19080/JGWH.2022.24.556137. 24(3), 2022, 1-9

[135.] M.S. Abdou, I.M. Wahdan, N.A. El Nimr, *Prevalence of Female Genital Mutilation, and Women's Knowledge, Attitude, and Intention to Practice in Egypt: A Nationwide Survey,* **Journal of High Institute of Public Health.** Print ISSN: 2357-0601 Online ISSN: 2357-061X. 50(3), 2020, 139-145.

[136.] D. Alkhalaileh, S.R. Hayford, A.H, Norris, M.F. Gallo, *Prevalence and attitudes on female genital mutilation/cutting in Egypt since criminalisation in 2008,* **Cult Health Sex.** DOI: 10.1080/13691058.2017.1337927. 20(2), 2018, 173-182

[137.] A. Vercoutere, *Beliefs and attitudes regarding FGM in a rural village in Region Kankan, Guinea, before the start of an awareness campaign*, **Journal of Obstetrics and Gynaecology Canada.** DOI:10.1016/j.jogc.2019.11.033. 42(2), 2020, 19-20

[138.] H.E. Hassan, F.H. Abd-ELhakam, M. Zakria, & R. ElSyed, *Female genital mutilation in Northern Upper Egypt: Prospects reasons for performing and refusing*, **Nurse Care Open Acces J**. DOI: 10.15406/ncoaj.2023.09.00251. 9(1), 2023, 6-10.

[139.] O. Mahmoudi, & E. Hosseini, *The Attitudes toward Female Genital Mutilation: A Survey among the Residents of Uramanat Region*, **Iran. J Health Rep Technol.** doi: 10.5812/ijhls.94463. 7(1), 2021, 1-5

[140.] G. Gangoli, A. Gill, N. Mulvihill, & M. Hester, *Perception and Barriers: Reporting Female Genital Mutilation,* **J Aggression Conflict Peace Res**. https://doi.org/10.1108/JACPR-09-2017-0323. 10(4), 2018, 251–260

LeadCity University Ibadan DO NOT COPY

[141.] E. Mahgoub, M. Nimir, S. Abdalla, & D.A. Elhuda, *Effects of school-based health education on attitudes of female students towards female genital mutilation in Sudan*, **Eastern Mediterranean Health Journal**. https://doi.org/10.26719/emhj.18.053. 25(6), 2019, 406-412

[142.] F.H. Abd-Elhakam, E.R. El-Syed, M.Z. Mohammed, & H.E. Hassan, *Relationship between Women's Intention for Female Genital Mutilation and their Exposure to Complication and Pressure*, **J Comm Med and Pub Health Rep.** Doi.Org/10.38207/JCMPHR/202. 3(10), 2022, 1-8

[143.] M. M. Mwaila, *Men's Perception towards the Abandonment of Female Genital Mutilation (Cutting) in Kenya (2014)*, **The International Journal of Humanities & Social Studies,** 8(10), 2020, 88-103. https://doi.org/10.24940/theijhss/2020/v8/i10/HS2010-030

[144.] D.M. Abdulah, A. Dawson, & B.A. Sedo, *The impact of Health Education on Attitudes of Parents and Religious Leaders Towards Female Genital Mutilation*, **BMJ Sex Reprod Health**. http://dx.doi.org/10.1136/bmjsrh-2018-200211. 46(1), 2020, 51– 58

[145.] E.K. Ameyaw, S. Anjorin, B.O. Ahinkorah, A.A. Seidu, O.A. Uthman, M. Keetile, & S. Yaya, *Women's Empowerment and Female Genital Mutilation Intention for Daughters in Sierra Leone: A Multilevel Analysis*, **BMC Womens Health**. doi: 10.1186/s12905-021-01340-2. 21(1), 2021, 1-10

[146.] K.A. Raheem, C. Udenze, & I.A. Odetokun, *University Female Students' Perception and Prospective Practice of Female Genital Mutilation in Umudike, Southeast Nigeria,* **African Journal of Reproductive Health.** https://hdl.handle.net/10520/ejc-ajrh_v27_n1_a5. 27(1), 2023, 1-5

[147.] M.D. Balde, S. O'Neill, A.O. Sall, M.B. Balde, A.M. Soumah, B. Diallo, & C.C. Pallitto, *Attitudes of Health Care Providers Regarding Female Genital Mutilation and Its Medicalization in Guinea*, **PLoS ONE.** doi: 10.1371/journal.pone.0249998. 16(5), 2021, 1-9

[148.] O. El-Gibaly, M. Aziz, H.S. Abou, *Health Care Providers' and Mothers' Perceptions about the Medicalization of Female Genital Mutilation or Cutting in Egypt: A Cross-Sectional Qualitative Study*, **BMC Int. Health Hum. Rights.** https://doi.org/10.1186/s12914-019-0202-x. 19(26), 2019, 1-12.

[149.] A.T. Levy, J.K. Beausang, E.D. Finley, & S.M. Wolf, *Provider knowledge and attitudes about female genital mutilation/cutting in Philadelphia*, **Journal of Immigrant and Minority Health**. https://doi.org/10.1007/s10903-020-01018-1. 23(1), 2021, 45-53.

[150.] C.X. Marea, N. Warren, N. Glass, C. Johnson-Agbakwu, & N. Perrin, *Factors Associated with Health Care Provider Attitudes, and Confidence for the Care of Women and Girls Affected by Female Genital Mutilation/Cutting*, **Health Equity**. DOI: 10.1089/heq.2020.0130. 5(1), 2021, 329–337

Lead City University Ibadan DO NOT COPY

[151.] B.O. Ahinkorah, E.K. Ameyaw, A.A. Seidu, & C. Njue, *Effects of Antenatal Care Visits and Health Facility Delivery on Women's Choice to Circumcise their Daughters in Sub-Saharan Africa: Evidence from Demographic and Health Surveys*, **International Health**, 14(5), 2022, 519-529. DOI: 10.1093/inthealth/ihab066

[152.] S. Vogt, C. Efferson, & E. Fehr, *The Risk of Female Genital Cutting in Europe: Comparing Immigrant Attitudes toward Uncut Girls with Attitudes in a Practicing Country*, **SSM Popul Health**, 3, 2017, 283–293. DOI: 10.1016/j.ssmph.2017.02.002

[153.] R. Kawous, E. Allwood, A. Middelburg, A. Van der Kwaak, D. Geraci, M. Bos, & M. E. T. C. Van den Muijsenbergh, *Attitude and Intention of Migrant Populations in the Netherlands Regarding Female Genital Mutilation/Cutting*, **BMC Women's Health**, 22(405), 2022, 1-11. https://doi.org/10.1186/s12905-022-01979-5

[154.] E. Small, B.B. Sharma, S.P. Nikolova, B.C. Tonui, *Hegemonic masculinity attitudes toward female genital mutilation/cutting among a sample of College Students in Northern and Southern Sierra Leone*. **J Transcult Nurs**., 31(5), 2020, 468-478. DOI: 10.1177/1043659619875499

Lead City University Ibadan DO NOT COPY

Chapter Three

Methodology

This chapter describes the procedures that were used to carry out the study. It was discussed based on the following sub-headings:

3.1 Research Design

A cross-sectional study design was employed for this study. Cross-sectional studies are observational studies that analyze data from a population at a single point in time. They are often used to measure the prevalence of health outcomes (FGM), understand determinants of health (FGM), and describe features of a population (attitude, knowledge and practice of mothers towards FGM). Unlike other types of observational studies, cross-sectional studies do not follow individuals up over time. This design helps to assess the prevalence of a health situation or association of an exposure to an outcome in a population[1].

3.2 Study Area

The target areas for this study comprised of FGM prevalent communities in three local government areas (Oyo West, Kajola and Ibadan North) of Oyo State scattered across the three senatorial districts in the State. Oyo State is in the South-West geopolitical zone of Nigeria. It was one of the three States carved out of the former Western State of Nigeria in 1976. Oyo State consists of thirty-three (33) Local Governments and twenty-nine (29) Local Council Development Areas. Its capital is Ibadan which is the third most populous city in the country and formerly the second most populous city in Africa. It has a population of 5,580,894 (2006 census) 7,840,864 (2016 forecast) and a population density of 196. The State accounts for 3.9% of Nigeria's total population[2].

The State covers a total of 28,454 square Kilometres of land mass and it is bounded in the south by Ogun State, in the north by Kwara State, in the west it is partly bounded by

Heidelberg City University Ibadan DO NOT COPY

Ogun State and partly by the Republic of Benin, while in the East by Osun State. The landscape consists of old hard rocks and dome shaped hills, which rise gently from about 500 meters in the southern part and reaching a height of about 1,219 metres above sea level in the northern part. The indigenes mainly comprise the Oyos, the Ogbomosos, the Oke-Oguns, the Ibadans and the Ibarapas, all belonging to the Yoruba family and indigenous city in Africa, south of the Sahara. Occupation of indigenous Oyo State people are agriculture and handicrafts[2,3].

Landmarks include the University of Ibadan, Polytechnic Ibadan, University College Hospital, International Institute of Tropical Agriculture (IITA), Cocoa House (the first skyscraper built in Africa), NTA Ibadan (the first television station in Africa) and Liberty Stadium (the first stadium built in Africa). Other major tourist attractions in the State include: Agodi Gardens, Ado-Awaye Suspended Lake, Mapo Hall, University of lbadan Zoological Garden, Ido Cenotaph, Trans-Wonderland Amusement Park, Oke-Ogun National Park in Old Oyo-Ile, Iyamopo and Agbele Hill in Igbeti, Bowers Tower and the Cultural Centre, Mokola[3].

The FGM prevalent local government areas (LGAs) in Oyo State are - Oyo West LGA in Oyo Central Senatorial District, Kajola LGA in Oyo North Senatorial District and Ibadan North LGA in Oyo South Senatorial District. Headquarter for Oyo West is in Ojongbodu. It has an area of 526 km^2 and a population of one hundred and thirty-six thousand, two hundred and thirty-six (136,236) at the 2006 census. There are ten (10) wards in Oyo West LGA. Its towns are - Iseeke titun, Jaremily, Cele, Oke oroki, Owode, Ogbomoso road, Iya Ibaji, and Pakoyi.

Headquarter for Kajola is Okeho. It has an area of 609 km^2 and a population of two hundred thousand, nine hundred and ninety-seven (200,997) at the 2006 census. There are eleven (11) wards in Kajola LGA. Its towns are - Ilero, Imia, Ilua, Ayetoro-oke, Isemi ile,

Lead City University Ibadan DO NOT COPY

Iwere-oke, and Ilaji-oke. Headquarter for Ibadan North is in Agodi. It has an area of 27 km^2 and a population of 856,988 according to the Oyo State Government in 2017. There are twelve (12) wards in Ibadan North LGA. Major communities include – Yemetu, Agbadagbudu, Oke-Aremo, Isale-Alfa, Itutaba, Ago-Tapa, Idi-omo, Kube, Kannike and others[2].



Figure 3.1: Map of Oyo State Showing the Study Areas. **Source[2,3]**

3.3 Population of the Study

The target population of the study comprised all mothers and their daughters in Oyo West local government area in Oyo Central Senatorial district, Kajola local government area in Oyo North Senatorial district and Ibadan North in Oyo South Senatorial district of Oyo state, Nigeria.

3.3.1 Inclusion Criteria

- Mothers who have at least one daughter alive.
- Mothers who have had FGM done
- Mothers who have had FGM done for daughter(s)
- Mothers who are healthy
- Mothers who give their consent to respond to the study

3.3.2 Exclusion Criteria

- Mothers who are physically and mentally sick
- Mothers who do not give their consent

Table 3.1: Population of the Study (N= 1,194,221)

S/N	Senatorial Districts	Local Government Areas	Number of People including Mothers
1.	**Oyo Central**	Oyo West	136,236
2.	**Oyo North**	Kajola	200,997
3.	**Oyo South**	Ibadan North	856,988
		Total	**1,194,221**

Source[3]

Table 3.1 showed the population of people including Mothers in the three (3) highly FGM prevalent local government areas across the three senatorial districts to be one million, one hundred and ninety-four thousand, two hundred and twenty-one (1,194,221).

Ibadan DO NOT COPY

This number showed that many people including mothers live in the three local government areas in the State. The towns where the people are located is in appendix V.

3.4: Distribution of Respondents according to the Senatorial Districts, Local Government Areas, Wards and Communities in FGM prevalent LGAs in Oyo State

Table 3.2 showing: Number of selected Mothers from Oyo Central Senatorial District with the Selected LGAs. Wards and Communities.

Senatorial Districts	Local Government Areas	Wards	Selected Communities	Proposed Number of Respondents
Oyo Central	Oyo West	1. Ajokidero	Gboro	19
			Onkola	19
		2. Akeeta	Oloola	20
			Jagun	19
		3. Fashola	Soku	19
			Oloya	19
		4. Iseke	Alausa	19
			Oburo	19
		5. Isokun	Onireke	19
			Isokun	20
		6. Iyaji	Oniyun	19
			Mogba	19
		7. Ojogbondu	Olokemeje	19
			Laagbe	19
		8. Opapa/Fatuke	Opapa	20
			Kolobo	19
		9. Owode	Ladigbolu	19
			Alagbon	19
		10. Pakoyi/Idode	Olode Iyangba	19
			Onsa Idode	19
Total				**383**

Source: Oyo State master list of settlement.

Lead City University DO NOT COPY

Table 3.3 showing: Number of selected Mothers from Oyo North Senatorial District with the Selected LGAs, Wards and Communities.

Senatorial Districts	Local Government Areas	Wards	Selected Communities	Proposed Number of Respondents
Oyo North	Kajola	1. Ayetoro	Araromi	18
			Alagbon	17
		2. Elero	Ojete	17
			Erin-Omu	17
		3. Gbelekale	Alaparun	17
			Gbooro	17
		4. Iba-Ogan	Eleede	18
			Ogbugudu	17
		5. Ijo	Sangote	17
			Ajelanwa	18
		6. Ilaji-Oke	Maye-Oloola	18
			Ayegun-Oloola	17
		7. Imoba/Okeogun	Ogbinte	17
			Aberiwole	18
		8. Isemi/Ilua	Kelebe	18
			Abese/Balogun	17
		9. Isia	Meseole	17
			Ajegunle	18
		10. Kajola	Idofin	18
			Oke Ilero	17
		11. Olele/Gbonje	Ajana Oke/Isale	17
			Gbonje	18
Total				**383**

Source: Oyo State master list of settlement.

Lead City University DO NOT COPY

Table 3.4 showing: Number of selected Mothers from Oyo South Senatorial District with the Selected LGAs, Wards and Communities.

S/N	Senatorial Districts	Local Government Areas	Wards	Selected Communities	Proposed Number of Respondents
	Oyo South	Ibadan North	1. Agbowo	Alabede	16
				Aba Apata	16
			2. Ago Tapa	Ago Tapa	16
				Okunmade	16
			3. Agodi	Itutaba	16
				Kube	16
			4. Bashorun	Alagbagba	16
				Oluwo-Nla	16
			5. Inalende	Opoyiosa	16
				Oniyanrin	16
			6. Oke-Are	Kannike	16
				Isale-Alfa/Yerokun	16
			7. Oke-Itunu	Ayetoro	16
				Amisu	16
			8. Old Bodija	Obasa	16
				Aare Avenue	16
			9. Sabo	Gangari/Enalewa	16
				Oke Hausa	16
			10. Samonda	Abadina	16
				Samonda	16
			11. Sango	Ijokodo	16
				Alaro	16
			12. Yemetu	Oke Aremo	16
				Oje Igosun	16
Total					**384**

Source: Oyo State master list of settlement.

Lead City University, Ibadan DO NOT COPY

3.5 Sample Size Determination

The sample size for the study was determined using the sample size determination table by Krejcie and Morgan (1970). The formula for the table is shown below[4]:

$$s = \frac{X^2 N P (1 - P)}{d^2 (N - 1) + X^2 P (1\text{-}P)}$$

where s = required sample size,

X^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level

N = the population size (NPC, 2016)

P = the population proportion (assumed to be .50 since this would provide the maximum sample size), and

d = the degree of accuracy expressed as a proportion (.05)

The table value of chi-square (X^2) for 1 degree of freedom at four levels of precision (significance) is shown in the table 3.2 below:

Table 3.5: Value of Chi-square (X^2) for 1 degree of freedom at four levels of precision

Df	**Chi-square (X^2) Values**			
	e = 0.10	**e = 0.05**	**e = 0.01**	**e = 0.001**
1	2.71	3.84	6.64	10.83

Source[3]

Since the level of precision or significance for this study is 0.05 (e = 0.05), it therefore means that the value of chi-square (X^2) for 1 degree of freedom for this study is **3.84**. This chi-square (X^2) value is then used to calculate the sample size for each population in the six selected local government areas using the formula below:

$$s = \frac{X^2 N P (1 - P)}{d^2 (N - 1) + X^2 P (1\text{-}P)}$$

Lead City University Ibadan DO NOT COPY

According to the above Krejcie and Morgan sample size determination formula, the sample number of the population to represent the number of mothers that were chosen for the study in each selected local government area across the three senatorial districts in Oyo State is calculated below:

1. **Oyo West Local Government Area: Population = 136,236 (N)**

$$s = \frac{X^2NP\,(1-P)}{d^2\,(N-1) + X^2P\,(1\text{-}P)} = \frac{3.84 \times 136{,}236 \times 0.5\,(1-0.5)}{0.05^2\,(136{,}236\,\text{-}1) + 3.84 \times 0.5\,(1\text{-}0.5)}$$

$$= \frac{261573.12\,(0.5)}{340.5875 + 0.96} = \frac{130786.56}{341.5475} = 382.9 \approx \mathbf{383}$$

2. **Kajola Local Government Area: Population = 200,997 (N)**

$$s = \frac{X^2NP\,(1-P)}{d^2\,(N-1) + X^2P\,(1\text{-}P)} = \frac{3.84 \times 200{,}997 \times 0.5\,(1-0.5)}{0.05^2\,(200{,}997\,\text{-}1) + 3.84 \times 0.5\,(1\text{-}0.5)}$$

$$= \frac{385914.24\,(0.5)}{502.49 + 0.96} = \frac{192957.12}{503.45} = 383.2 \approx \mathbf{383}$$

3. **Ibadan North Local Government Area: Population = 856,988 (N)**

$$s = \frac{X^2NP\,(1-P)}{d^2\,(N-1) + X^2P\,(1\text{-}P)} = \frac{3.84 \times 856{,}988 \times 0.5\,(1-0.5)}{0.05^2\,(856{,}988\,\text{-}1) + 3.84 \times 0.5\,(1\text{-}0.5)}$$

$$= \frac{1645416.96\,(0.5)}{2142.4675 + 0.96} = \frac{822708.48}{2143.4275} = 383.8 \approx \mathbf{384}$$

Lead City University Ibadan. DO NOT COPY

Table 3.6: Sample Number of Mothers for the Study (n = 1,150)

S/N	Senatorial Districts	Local Government Areas	Number of People including Mothers	Number of Mothers to be selected
1.	**Oyo Central**	Oyo West	136,236	383
2.	**Oyo North**	Kajola	200,997	383
3.	**Oyo South**	Ibadan North	856,988	384
	Total		**1,194,221**	**1,150**

Source: Krejcie and Morgan sample size determination formula

3.6 Sampling Procedures

A multi-stage sampling technique was adopted for this study.

Stage I: Purposive sampling of Oyo State (Oyo State has high prevalence of FGM).

Stage II: Stratification of Oyo State into Senatorial Districts (Indicating three senatorial districts).

Stage III: Stratification of the senatorial districts into Local Government Areas (Indicating the 33 LGAs).

Stage IV: Simple random sampling technique was used to select three FGM prevalent LGAs from the three senatorial districts (1 LGA from each of the 3 senatorial districts). The LGAs selected were – Oyo West, Kajola and Ibadan North.

Stage V: Stratification of the LGAs into wards. Oyo West LGA has ten (10) wards. Kajola LGA has eleven (11) wards and Ibadan North LGA has twelve (12) wards.

Stage VI: Purposive sampling technique was used to select all the wards in the three selected LGAs since the kinds of mothers needed for the research were present in all the wards in the three LGAs.

Lead City University Ibadan DO NOT COPY

VII. Two communities were selected at random from each of the wards using the simple random sampling technique.

VIII. Nineteen (19) or twenty (20) mothers were purposively selected from each of the two selected communities in each of the 10 wards in Oyo West LGA to arrive at a sample size of 383 mothers. Seventeen (17) or eighteen (18) mothers were purposively selected from each of the two selected communities in each of the 11 wards in Kajola LGA to arrive at a sample size of 383 mothers. However, sixteen (16) mothers were purposively selected from each of the two selected communities in each of the 12 wards in Ibadan North LGA to make a sample size of 384 mothers. They were selected across the senatorial districts to have a wide spread of the respondents. The selected mothers thus made a total of one thousand, one hundred and fifty (1150) respondents required for the study. The table showing how the mothers were selected from each of the two selected communities in each wards in the various LGAs is shown in appendix IV.

The mothers were purposely selected to meet the inclusion criteria for the study. The purposive or judgmental sampling technique was thus used to select the respondents since they have specific characteristics (such as gender, age, health, and child-birth – must have given birth to at least one daughter) that are needed for the study. The homogenous type of purposive sampling technique was used since the respondents (mothers) share the same (or very similar) characteristics or traits in terms of age, gender, child births, background, and etcetera.

The mothers who took part in the in-depth interview were also selected using the above multi-stage sampling procedure. However, in stage VII, instead of two communities, one community was picked at random from each of the wards using the simple random sampling technique. In stage VIII, one mother was purposively selected from the each selected community in each ward in the three LGAs across the three senatorial districts to

Lead City University Ibadan DO NOT COPY

make a sample of thirty three respondents for the in-depth interview. This means that ten mothers were selected from the ten (10) wards in Oyo West LGA, eleven mothers were selected from the eleven (11) wards in Kajola LGA and twelve (12) mothers were selected from the twelve wards in Ibadan North LGA to make up thirty- three (33) mothers.

Thirty three (33) mothers are selected for the in-depth interview because according to research scholars, the most frequently observed range of sample size in qualitative research involving in-depth interview is between 20-50 participants based on factors such as the focus of the research, available resource and time, the type of research question, institutional committee requirements, the judgments of epistemic community in which a researcher is located, the nature of the selected group, the domain of inquiry, the experience of the researcher with qualitative research, and etcetera[5]. The homogenous purposive sampling technique was also the type used since the respondents (mothers) share the same (or very similar) characteristics or traits in terms of age, gender, child births, background, and etcetera. The sample for the in-depth interview is shown in table 3.4:

Table 3.7: Sample Number of Mothers for the In-depth Interview (n = 33)

S/N	Senatorial Districts	Local Government Areas	Number of Wards	Number of community selected from each ward	Number of Mothers Selected
1.	**Oyo Central**	Oyo West	10	1	10
2.	**Oyo North**	Kajola	11	1	11
3.	**Oyo South**	Ibadan North	12	1	12
	Total		**33**		**33**

Source: Multi-Stage Sampling Procedure

Lead City University Ibadan DO NOT COPY

3.7 Data Collection Instruments

Questionnaire and interview guide were used as instruments for obtaining quantitative and qualitative data respectively from the respondents. The questionnaire was self-constructed, close ended and well-structured instrument. It was used as a primary source of data collection. However, the interview was open ended and also well-structured. It was an in-depth interview guide used to collect qualitative information from the participants. The questionnaire and interview guide are discussed below:

3.7.1 Research Questionnaire

The questionnaire that was used in obtaining the quantitative data for the study is a self-constructed questionnaire titled – "Attitude, Knowledge and Practice of Female Genital Mutilation Questionnaire (AKPFGMQ)". The questionnaire was divided into nine (9) sections (A, B, C, D, E, F, and G) and consisted of structured items.

Section A was designed to collect demographic information of respondents (mothers) such as age, religion, ethnicity, marital status, marital type, family structure, educational status, occupation, socioeconomic status (income per month), family size, number of daughter (s) alive and age of daughter (s) alive.

Section B was designed to assess the level of practice of Female Genital Mutilation (FGM) among mothers in Oyo State. It consisted of seven (7) items. The rating technique was as follows: Yes = 3; No = 2; Undecided = 1; I Don't Know = 0.

Section C was designed to assess the reasons for the practice of Female Genital Mutilation (FGM) among mothers in Oyo State. It consisted of ten (10) items. The rating technique was as follows: Yes = 3; No = 2; Undecided = 1; I Don't Know = 0.

Lead City University Ibadan DO NOT COPY

Section D was designed to assess the experiences of mothers toward FGM practice and also of their daughters in Oyo State. It consisted of six (6) items. The rating technique was as follows: Yes = 3; No = 2; Undecided = 1; I Don't Know = 0.

Section E was designed to assess the attitude of mothers towards the practice of Female Genital Mutilation (FGM) in Oyo State. It consisted of six (6) items. The rating technique is based on the four Likert scale type as follows: Strongly Agree (SA) = 4; Agree (A) = 3; Disagree (D) = 2; Strongly Disagree (SD) = 1.

Section F was designed to assess the knowledge of mothers towards the practice of Female Genital Mutilation (FGM) in Oyo State. It consisted of seventeen (17) items. The rating scale of "I Don't Know (0) to Yes (3)" was used with the criterion mean set at 1.500. Any mean below 1.500 is regarded as poor or no knowledge of FGM while any mean above 1.500 is regarded as fair or good knowledge of FGM.

Section G was designed to assess the awareness or knowledge of mothers towards the laws against the practice of Female Genital Mutilation (FGM) in Oyo State. It consisted of seven (7) items. The rating scale of "I Don't Know (0) to Yes (3)" was used with the criterion mean set at 1.500. Any mean below 1.500 is regarded as poor or no knowledge of the laws against FGM while any mean above 1.500 is regarded as fair or good knowledge of the laws against FGM.

3.7.2 Interview Guide

An interview guide consisting of several questions relating to the variables of the research was also constructed. The interview guide was administered to women leaders in each of the selected communities to obtain qualitative data. The interview guide consisted of nine probing questions for in-depth interview which are as follows:

Lead City University Ibadan DO NOT COPY

1. Have you heard of FGM? If yes, how did you hear about it?
2. What do you think FGM is all about?
3. What are the reasons for the FGM practice in your community?
4. What do you think about the level of FGM practice in your community?
5. Have you undergone Female Genital Mutilation (Circumcision)?
6. How did you feel when FGM was done on you?
7. Did your daughter experienced any health complication after FGM was performed on her?
8. Are you aware of the laws against FGM practice?
9. Do you think or feel FGM should be continued? If yes, why?

3.7.3 Validity of the Instrument

A face and content validity evidence were ensured. This type of validity is done to determine the extent to which the measurement truly measures what it purports to measure[6]. To ensure that the instruments elicited the required responses from the respondents, the researcher showed the instruments to experts in the field of Public Health at Lead City University, Oyo State for their inputs and corrections. After all the crucial corrections were made, the instruments were also shown to the researcher's supervisor to make the final corrections.

3.7.4 Reliability of the Instrument

The reliability of the questionnaire was determined using Cronbach's Alpha. The reliability of the instrument was done to determine the internal consistency and stability of the responses to the items on the instruments[7]. Through a pilot test, the questionnaire was administered to one hundred and fifteen (115) mothers which is 10% of the total sample of the respondents in Kobomoje, Agbongbon and Odinjo communities all in Ibadan South East Local government area of Oyo State. Thirty nine (39) mothers were used in Kobomoje community, thirty eight (38) mothers at Abongbon community while thirty eight (38) mothers in Odinjo Community. These mothers were not part of the selected three Local

Lead City University Ibadan DO NOT COPY

Government Areas for the study. For scoring, the items on the questionnaire were coded and entered into Statistical Package for Social Science (SPSS), IBM version 29 and the reliability was estimated. An initial reliability coefficient value of .562 was obtained. However, the items were readjusted and subjected to another pilot study which gave a better reliability coefficient value of .865. This final value meant that the questionnaire (instrument) was reliable for the study.

Table 3.8: Cronbach's Alpha Result

Initial Pilot Test		Final Pilot Test	
Cronbach's Alpha	Number of Items	Cronbach's Alpha	Number of Items
.562	48	.865	53

City University Ibadan DO NOT COPY

3.8 Procedure for Data Collection

Six (6) research assistants were recruited and trained by the researcher for data collection. Data collection took a period of four (4) weeks. Three supervisors worked with the researcher to supervise the data collection.

3.9 Method of Data Analysis

Data obtained from the copies of the questionnaire were analysed using descriptive and inferential statistics. Demographic information of the mothers was analysed using descriptive statistics such as frequency and percentage. Research questions were answered using descriptive statistics such as frequency, percentage, mean and standard deviation. Hypotheses one and two were tested using inferential statistics such as multiple regression at 5% level of significance. Table 3.4 shows a summary of the statistics for the objectives (research questions and hypotheses) of the study. All analyses were done using the

Statistical Package for the Social Sciences, SPSS Version 29. The responses on the interview guide were subjected to thematic analysis by identifying and reporting repeated patterns.

Table 3.9: Variables and Methods of Analyses

Objectives	Variable	Measurement	Method of Analysis
1 (RQ)	Level of FGM practice among Mothers	Continuous	Descriptive Statistics (Frequency, Percentage, mean and SD)
2 (RQ)	Reasons for the FGM practice	Continuous	Descriptive Statistics (Frequency, Percentage, mean and SD)
3 (RQ)	FGM Experiences of Mothers and their daughters	Continuous	Descriptive Statistics (Frequency, Percentage, mean and SD)
4 (RQ)	Attitude of Mothers towards FGM	Continuous	Descriptive Statistics (Frequency, Percentage, mean and SD)
5 (RQ)	Knowledge of Mothers about FGM and Sources of knowledge of Mothers about FGM	Continuous	Descriptive Statistics (Frequency, Percentage, mean and SD)
6 (RQ)	Knowledge of Mothers about the Laws against FGM and Sources of knowledge of Mothers about the Laws against FGM	Continuous	Descriptive Statistics (Frequency, Percentage, mean and SD)
7 (Ho)	IV: Knowledge and attitude of Mothers about FGM DV: FGM practice among Mothers	IV: Continuous DV: Continuous	Multiple Regression (Anova)

NB: IV = Independent Variable; DV = Dependent Variable; SD = Standard Deviation

3.10 Ethical Considerations

Ethical approval was obtained from the Oyo State Ministry of Health Ethical Committee and from Lead City University Ethical Committee. The research was conducted following the proper ethical guidelines for carrying out researches in public health in Nigeria. The research was built on trust between the researcher and the respondents. They were told why the research is being carried out and their consent was approved and their

Lead City University Ibadan DO NOT COPY

confidentiality was strictly ensured. Deception was not allowed and their personalities were protected from risks or harm.

Lead City University Ibadan DO NOT COPY

Endnotes

1. X. Wang, & Z. Cheng, *Cross-Sectional Studies Strengths, Weaknesses, and Recommendations*, **Chest Journal,** 3(12), 2020, 65-71. DOI: https://doi.org/10.1016/j.chest.2020.03.012

2. https://en.wikipedia.org/wiki/Ibadan_North-East, Ibadan North, Akinyele, Afijio. 8 September 2022

3. T.A. Adagunodo, L.A. Sunmonu, O.P. Oladejo, O.S. Hammed, K.D. Oyeyemi, & O.T. Kayode, *Site characterization of Ayetoro Housing Scheme, Oyo, Nigeria*, **IOP Conference Series Earth and Environmental Science,** 173(1), 2018, 1-22. DOI:10.1088/1755-1315/173/1/012031.

4. G.P. Adhikari, *Calculating the Sample Size in Quantitative Studies,* **Scholars' Journal,** 4, 2021, 14-29. ISSN: 2645-8381

5. W.B. Bekele, & F.Y. Ago, *Sample Size for Interview in Qualitative Research in Social Sciences: A Guide to Novice Researchers,* **Research in Educational Policy and Management,** 4(1), 2022, 42-50. https://doi.org/10.46303/repam.2022.3

6. G. Mancuso, *Job Satisfaction and Turnover among Millennial Nurses in Public Hospitals,* PhD Dissertation in Public Policy and Administration, College of Social and Behavioral Sciences, Walden University. https://scholarworks.waldenu.edu/cgi/2020

7. K. Imasuen, *Sample Size Determination in Test-Retest and Cronbach Alpha Reliability Estimates,* **British Journal of Contemporary Education,** 2(1), 2022, 17-29. DOI: 10.52589/BJCEFY266HK9

Lead City University Ibadan DO NOT COPY

Chapter Four

Results and Discussion of Findings

This chapter presents the data analyzed using descriptive and inferential statistics for quantitative data collected from the questionnaires and thematic analysis for qualitative data collected from the interview guide. It includes the demographic data presentation of mothers and answers to research questions under the following sub headings:

4.1 Demographic Data Presentation

4.2 Answers to Research Questions

4.3 Test of Hypotheses

4.4 Discussion of Findings

4.1 Demographic Data Presentation

The table 4.2 revealed that 74 (6.5%) of the mothers are less than 20 years of age, 116 (10.1%) are within 20-24 years of age, 127 (11.1%) are within 25-29 years of age, 119 (10.4%) are within 30-34 years of age, 243 (21.3%) are within 35-39 years of age, 170 (14.9%) are within 40-44 years of age, 145 (12.7%) are within 45-49 years of age and the remaining 149 (13.0%) of the mothers are 50 years of age and above. This result implied that majority of the mothers are in their mid-ages.

It was also revealed that 536 (46.9%) of the mothers are Christians by religion, 521 (45.6%) are Islam by religion while the remaining 86 (7.5%) are into traditional religion. This result implied that majority of the mothers are either Christians or Muslims. Most of the mothers, 911 (79.7%) are Yoruba by ethnicity, 95 (8.3%) are Igbos, 86 (7.5%) are Hausa/Fulani while the remaining 51 (4.5%) belong to other ethnic groups such as Edo, Ebira, Tapa, Benue and so on and forth. This result also implies that majority of the mothers are Yoruba probably because the study was conducted in Southwest which is a Yoruba region.

Lead City University Ibadan DO NOT COPY

In terms of their marital status, most of the mothers, 1000 (87.5%) are married, 75 (6.6%) are separated, 43 (3.8%) are co-habiting, 12 (1.0%) are divorced and 13 (1.1%) are widows. This result showed that most of the mothers are married either by tradition, custom, religion or law. It was also revealed from the table below that 702 (63.8%) are or were in monogamous marriage in terms of their marital type, which comprises of one husband and one wife while 398 (36.2%) are or were in polygamous marriage which comprises of one husband and more than one wife. However, those who are co-habiting indicated 'not applicable' in their marital type which means they are not yet married by tradition, custom, religion or law.

In terms of their family structure, 748 (65.4%) are in nuclear family structure which comprises of father, mother, and children while 395 (34.6%) are in extended family structure which comprises of father, mother, children, aunts, uncles, nephews, nieces, cousins and other relatives. This result could suggest that many of the mothers are into the nuclear family structure in Oyo State. However, some families still practice extended families where their relatives reside with them.

The table 4.3 below also showed that 62 (5.4%) have no formal education, 166 (14.5%) have primary education, 469 (41.0%) have secondary education while 446 (39.0%) have tertiary education. These shows that majority of the mothers have secondary or tertiary education as their highest form of education. In terms of the mothers' occupation, 80 (7.0%) of the mothers are into farming, 412 (36.0%) are into skilled labour, 168 (14.7%) are into unskilled labour, 416 (36.4%) are into trading, 25 (2.2%) are housewives, 11 (1.0%) are unemployed while 31 (2.7%) are students. This shows that the occupation of most of the mothers are trading and skilled labour.

In terms of their socio-economic status measured by their income per month, 169 (14.8%) earn within the range of 1000-20,000 monthly, 277 (24.2%) earn within the range

Lead City University Ibadan DO NOT COPY

of 21,000-40,000 monthly, 320 (28.0%) earn within the range of 41,000-60,000 monthly, 155 (13.6%) earn within the range of 61,000-80,000 monthly, 145 (12.7%) earn within the range of 81,000-100,000 monthly while 77 (6.7%) earn above 100,000 monthly. This result implied that major fraction of the mothers earns 60,000 and below monthly which portray a little below average socio-economic status.

In terms of their family size, 720 (63.0%) of the mothers have a family size of 1-5, 400 (35.0%) have a family size of 6-10, 19 (1.7%) have a family size of 11-15 while 4 (0.3%) have a family size of 16 and above. This implies that major fraction of the mothers have a small family size. In terms of number of daughters alive, 286 (25.0%) have one daughter, 479 (41.9%) have two daughters, 227 (19.9%) have three daughters, 104 (9.1%) have four daughters, 28 (2.4%) have five daughters, 11 (1.0%) have six daughters and 8 (0.7%) have seven daughters.

Lastly, in terms of the ages of their daughters, most of the mothers, 427 (37.4%) have daughters who are within 0 month – 5 years of age, 240 (21.0%) have daughters who are within 6-10 years of age, 128 (11.2%) have daughters who are within 11-15 years of age, 104 (9.1%) have daughters who are within 16-20 years of age, 108 (9.4%) have daughters who are within 21-25 years of age, 53 (4.6%) have daughters who are within 26-30 years of age while the remaining 83 (7.3%) have daughters who are 31 years and above. This result implied that majority of the mothers have daughters who are below 10 years of age.

Lead City University Ibadan DO NOT COPY

Table 4.1: Demographic Data of Mothers

Demographic Variables	Frequency (n)	Percentage (%)
Age Group (Years)		
Less than 20	74	6.5
20-24	116	10.1
25-29	127	11.1
30-34	119	10.4
35-39	243	21.3
40-44	170	14.9
45-49	145	12.7
50 and above	149	13.0
Religion		
Christianity	536	46.9
Islam	521	45.6
Traditional	86	7.5
Ethnicity		
Yoruba	911	79.7
Igbo	95	8.3
Hausa/Fulani	86	7.5
Others	51	4.5
Marital Status		
Married	1000	87.5
Separated	75	6.6
Co-habiting	43	3.8
Divorced	12	1.0
Widowed	13	1.1
Marital Type		
Monogamous	702	63.8
Polygamous	398	36.2
Total	**1,143**	**100.0**

Source: Field Data, 2023

Lead City University Ibadan DO NOT COPY

Table 4.1: Demographic Data of Mothers Cont'd

Demographic Variables	Frequency (n)	Percentage (%)
Family Structure		
Nuclear	748	65.4
Extended	395	34.6
Highest Level of Education		
No formal Education	62	5.4
Primary Education	166	14.5
Secondary Education	469	41.0
Tertiary Education	446	39.0
Occupation		
Farming	80	7.0
Skilled Labour	412	36.0
Unskilled Labour	168	14.7
Trading	416	36.4
Housewife	25	2.2
Unemployed	11	1.0
Students	31	2.7
Socio Economic Status (Income per month)		
1000-20,000	169	14.8
21,000-40,000	277	24.2
41,000-60,000	320	28.0
61,000-80,000	155	13.6
81,000-100,000	145	12.7
Above 100,000	77	6.7
Family Size		
1-5	720	63.0
6-10	400	35.0
11-15	19	1.7
16 and above	4	0.3
Total	**1,143**	**100.0**

Source: Field Data, 2023

Lead City University Ibadan DO NOT COPY

Table 4.1: Demographic Data of Mothers Cont'd

Demographic Variables	Frequency (n)	Percentage (%)
Number of Daughters Alive		
One daughter	286	25.0
Two daughters	479	41.9
Three daughters	227	19.9
Four daughters	104	9.1
Five daughters	28	2.4
Six daughters	11	1.0
Seven daughters	8	0.7
Age of Daughters		
0 month - 5 years	427	37.4
6-10 years	240	21.0
11-15 years	128	11.2
16-20 years	104	9.1
21-25 years	108	9.4
26-30 years	53	4.6
31 years and above	83	7.3
Total	**1,143**	**100.0**

Source: Field Data, 2023

Lead City University Ibadan DO NOT COPY

4.2 Answer to Research Questions

Research Question One: What is the level of practice of Female Genital Mutilation (FGM) among Mothers in Oyo State?

Table 4.2a revealed the level of practice of female genital mutilation among mothers in Oyo State. Majority (69.5%) of the mothers stated that female genital mutilation is an aged long tradition in their families, however 28.5% of the study participants disclosed that female genital mutilation is still currently being practiced in their homes. Furthermore, 70.7% of the respondents re-counted that majority of the females in their community have undergone female genital mutilation, whereas 27.2% of the respondents pointed out that they have either practiced or intend to practice female genital mutilation. In addition, 71.4% noted that female genital mutilation is no longer mandatory for females in their homes and communities. The other details on the level of practice of female genital mutilation is shown in table 4.2a. Table 4.2b summarizes the level of FGM practice among the mothers whether it is high or low. The table revealed that high level of FGM practice is at 46.2% indicated by mothers who responded yes while low level of FGM practice is at 53.8% indicated by mothers who responded no. The grand mean ($\overline{x} = 1.462$) generally showed that the practice is at a low level. This showed that the FGM practice in the study areas is reducing however, the practice is still common.

Interview guide questions were also distributed to the mothers in order to ascertain qualitative responses on the level of FGM practice in their community. Interview guide questions were also distributed to the mothers in order to ascertain qualitative responses on the level of FGM practice in their community. Many also stated that it is reducing especially due to western education. Many of the women also Stated that FGM practice has been stopped. Some said it is little while some said it is plenty, much and bad. Many of the

Lead City University Ibadan DO NOT COPY

mothers gave 30% to the level of FGM practice while others gave 20%, 35%, 40% and 50% to the level of FGM practice.

Few mothers noted that FGM practice is increasing, plenty, high, bad, rampant and getting worse while some wrote that it is minimal, decreasing, average level and not many again. Very few stated that they cannot say much on the level of FGM practice in the State.

One of the respondents said that:

> "*FGM practice seems to be eradicated little by little through various awareness programs and campaigns"*

Another mother said that:

> *"FGM practice is low because a lot of hospitals are against FGM practice. Therefore, there is general opposition against it from various corners"*

Qualitatively, it can also be summarized that the level of FGM practice in Oyo State is low or reducing probably due to education, awareness and objection of hospitals (including doctors, nurses and health works) to the FGM practice in many communities.

Lead City University Ibadan DO NOT COPY

Table 4.2a: Level of FGM practice among Mothers in Oyo State

Items	Frequency (n)	Percentage (%)	Mean	Std. Dev.
FGM is still practiced in my home				
Yes	282	28.5	1.285	.94
No	706	71.5		
FGM is a long-aged tradition in my family				
Yes	704	69.5	1.695	.90
No	309	30.5		
I have or intend to carry out FGM practice on my daughter (s)				
Yes	271	27.2	1.272	.95
No	727	72.8		
Majority of females in my community have undergone FGM				
Yes	701	70.7	1.697	.89
No	290	29.3		
FGM is mandatory for females in my home and community				
Yes	291	28.6	1.286	.94
No	726	71.4		
All types of FGM practice is carried out in my community				
Yes	308	34.0	1.340	.93
No	597	66.0		
FGM is performed at an early age in my community				
Yes	591	65.9	1.659	.90
No	306	34.1		
Grand Mean ($\bar{x}$) = 1.462; Std. Dev. = .92; Overall Decision = No				

Source: Field Data, 2023

KEY: Yes = 2, No = 1; Std. Dev. = Standard Deviation;
***Threshold:** mean value of 1.000-1.500 = No; 1.501-2.000 = Yes

Table 4.2b: Overall Level of Practice of Female Genital Mutilation

Indicators	Frequency	Percentage (%)	Grand Mean	Overall Decision
High Level (Yes)	450	46.2	1.462	No (Low Level)
Low Level (No)	523	53.8		

Lead City University Ibadan DO NOT COPY

Research Question Two: What are the perceived reasons for the continued practice of Female Genital Mutilation (FGM) in Oyo State?

Table 4.3 showed the perceived reasons for the continued practice of female genital mutilation among mothers in Oyo State. Most (71.1%) of the mothers stated that cultural and religious beliefs were the reasons for continued practice of female genital mutilation, this was followed by fear of early pregnancy and promiscuity (57.8%), hygiene maintenance (48.5%), reduced desire for sex (45.5%), initiation into womanhood (41.0%), better marital opportunity (35.9%) and so on and forth. The rest of the statistics is as shown in table 4.3. The grand mean of 1.357 showed that the mothers generally responded 'No' to the reasons listed in table 4.3. Interview guide questions were also distributed to the mothers in order to ascertain qualitative responses on the reasons for the FGM practice in their communities.

Few of the mothers noted that they do not know the reason for the continued FGM practice. However, many of the mothers responded that:

> *"FGM is practiced because of our cultural and religious beliefs. Our tradition permits it and Islam too does not forbid it. It is an olden culture and our community belief"*

Some mothers also noted that:

> *"FGM is practiced to prevent adultery and fornication. It is done to prevent prostitution and promiscuity among women and so they do not flirt around"*

Few of them responded that:

> *"FGM is practiced because it is a myth and to make a teen acceptable among her peer group"*

Few mothers noted that:

> *"FGM is done to increase male sexual pleasure, promote decency in women and reduce female waywardness"*

Lead City University Ibadan DO NOT COPY

One of the mothers said that:

"FGM is done because of the side effect of it on women during child bearing."

Another stated that:

"FGM is practiced for female children to have self-control of their sexual urges, not to be flirting around and to conserve their virginity till marriage"

Few of the mothers noted that:

"FGM is done continually because those who practice it believe it is necessary to help the female child in future. It is therefore normal and cultural, good and acceptable as it makes females complete women"

A woman noted that:

"FGM is done for culture and discipline as girls who do not do it will like sexual intercourse. It also enhances fertility in females and helps to curb unwanted pregnancy"

Few mothers replied that:

"FGM is done for marriageability, social convention, rite of passage, initiation of woman into womanhood, enhancement of sexual pleasure to a minimal extent, respect for tradition and cleanliness and beauty"

Very few mothers noted that FGM prevents high libido in women and early pregnancy and also a baby can die if a woman is not circumcised hence it helps the woman during child bearing and labour. Qualitatively, it can be summarized that few to some of the mothers have awkward or wrong reasons for the continued FGM practice in Oyo State. However, many of them object to the wrong or awkward reasons for the FGM practice in Oyo State which is good.

Lead City University Ibadan DO NOT COPY

Table 4.3: Perceived Reasons for the Continued Practice of FGM

Items	Frequency (n)	Percentage (%)	Mean	Std. Dev.
Fear of early pregnancy and promiscuity				
Yes	628	57.8	1.446	.91
No	314	28.9		
I don't Know	144	13.3		
To maintain cleanliness and good health				
Yes	520	48.5	1.417	.92
No	480	44.7		
I don't know	73	6.8		
To Preserve family honour				
Yes	449	41.7	1.358	.95
No	565	52.5		
I don't Know	63	5.8		
For better marital opportunity				
Yes	389	35.9	1.280	.96
No	611	56.3		
I don't Know	85	7.8		
For womanhood initiation				
Yes	438	41.0	1.332	.94
No	547	51.2		
I don't Know	83	7.8		
Acceptance among peers				
Yes	410	39.6	1.321	.95
No	549	53.0		
I don't Know	77	7.4		
To increase male sexual pleasure				
Yes	268	25.1	1.156	.98
No	700	65.5		
I don't Know	101	9.4		
Enhance fertility and child survival				
Yes	352	33.2	1.224	.96
No	592	55.9		
I don't Know	115	10.9		
Reduce desire for sex				
Yes	458	45.5	1.391	.94
No	483	48.0		
I don't Know	65	6.5		
Cultural and religious beliefs				
Yes	791	71.1	1.642	.87
No	246	22.1		
I don't Know	76	6.8		
Grand Mean = 1.357; Std. Dev. = .94; Overall Decision = No				

Source: Fieldwork, 2023

KEY: Yes = 2, No = 1; I don't Know = 0; Std. Dev. = Standard Deviation;

*****Threshold:** mean value of 0.000-0.700 = I don't Know; 0.701-1.400 = No; 1.401-2.000 = Yes

Lead City University Ibadan DO NOT COPY

Research Question Three: What are the Female Genital Mutilation experiences of mothers and their daughters in Oyo State?

Table 4.4 showed the female genital mutilation experiences of mothers and their daughters in Oyo State. More than half (67.3%) of the respondents indicated that female genital mutilation was performed on them. Most (60.9%) of the study participants admitted to the experience being a painful one, with only 13.9% stating that they experienced health complications following the female genital mutilation. The result further demonstrates that female genital mutilation was performed mostly by traditional circumciser (90.1%) compared to Health care providers (3.8%). However, the grand mean of 1.332 showed that the mothers generally responded 'No' to the items listed in table 4.4. Interview guide questions were also distributed to the mothers in order to ascertain qualitative responses on their experiences of FGM. They were asked – "if they had undergone FGM? How did they feel when FGM was done on them? And did their daughter (s) experience health complication after FGM was performed on them?

Many of the mothers noted that yes, they have undergone FGM while few to some of them responded No to whether they have undergone the practice. However, few of them wrote that they were small so they do not know whether it was performed on them or not. Few noted undecided to the experience of FGM.

In terms of how they felt when the procedure was done on them, some of them said it was seriously painful. Some of them said it was normal which means they felt no pain. Few responded that they were small or still a baby when FGM may have been carried out on them so they cannot tell what or how they felt. Some of the mothers responded that they were not happy about it. Few of the mothers noted that it was painful and there were excessive bleeding/blood flow. Few responded that it was a normal experience for them while very few responded that they do not know hence cannot tell their experience.

Lead City University Ibadan DO NOT COPY

Some of the mothers responded that:

"They felt bad, struggle, sad, hurt, not comfortable, shameful, unsatisfied and unhappy"

With regards to their daughter (s)' experience of FGM, some of the mothers Responded that no, their daughter (s) did not experience health complications after FGM was performed on them. However, some of them responded that yes, their daughters did experience severe health complications. Few of the mothers noted that they do not know if their daughters experience any form of complications on their health after the procedure was done on them.

Qualitatively, it can also be summarized that most of the mothers have undergone FGM practice and majority of them felt pain when it was performed on them. Few of them experienced excessive bleeding alongside the pain after undergoing the procedure. Many of the mothers were circumcised by a traditional circumciser not a health care provider. However, some of them did not experience health complications while some did. Also, some of their daughters experienced health complications while others did not after FGM was performed on them.

Lead City University Ibadan DO NOT COPY

Table 4.4: Experience of Female Genital Mutilation

Items	Frequency (n)	Percentage (%)	Mean	Std. Dev.
FGM was performed on me				
Yes	769	67.3	1.534	.92
No	215	18.8		
I don't know	159	13.9		
FGM was performed on me by Traditional circumciser				
Yes	693	90.1	1.865	.90
No	48	6.2		
I don't know	28	3.6		
FGM was performed on me by Healthcare Provider				
Yes	29	3.8	0.995	.99
No	707	91.9		
I don't know	33	4.3		
Was FGM a painful experience for me?				
Yes	468	60.9	1.354	.94
No	105	13.7		
I don't know	196	25.5		
I experienced health complications after FGM was practiced on me				
Yes	107	13.9	0.910	1.01
No	486	63.2		
I don't know	176	22.9		
Grand Mean = 1.332; Std. Dev. = .95; Overall Decision = No				

Source: Field Data, 2023

KEY: Yes = 2, No = 1; I don't Know = 0; Std. Dev. = Standard Deviation;
***Threshold:** mean value of 0.000-0.700 = I don't Know; 0.701-1.400 = No; 1.401-2.000 = Yes

Lead City University Ibadan DO NOT COPY

Research Question Four: What is the level of knowledge that mothers have about the practice of Female Genital Mutilation (FGM) in Oyo State?

Table 4.5a presents the level of knowledge of Mothers about the practice of female genital mutilation in Oyo State. More than half (53.5%) of the respondents indicated that they know female genital mutilation. Most (59.6%) of the study participants admitted to the fact that female genital mutilation exposes the circumcised to infection, results in severe complication (54.4%) and prolonged labour (44.4%). Furthermore, over half of the respondents (52.6%) know that female genital mutilation is the removal of the erectile part of female organ. 54.9% were also correct that female genital mutilation is dangerous. 43.5% of the respondents know that there are different types of female genital mutilation. The rest of the statistics is as shown in table 4.5a. However, table 4.5b showed that overall knowledge of mothers towards female genital mutilation. From the table, 50.2% of the mothers have good level of knowledge of female genital mutilation (FGM) procedure and practice while 49.8% have poor knowledge of FGM. The grand mean ($\overline{x} = 2.251$) confirmed that the mothers generally have good level of knowledge of FGM.

Lead City University Ibadan DO NOT COPY

Table 4.5a: Knowledge towards Female Genital Mutilation

Items	Frequency (n)	Percentage (%)	Mean	Std. Dev.
I know FGM				
Yes (correct)	612	53.5	2.134	.87
No	192	16.8		
Undecided	219	19.2		
I don't Know	120	10.5		
There are different types of FGM				
Yes (correct)	497	43.5	1.855	.92
No	189	16.5		
Undecided	251	22.0		
I don't Know	206	18.0		
FGM is the removal of the erectile part of female genital				
Yes (correct)	601	52.6	2.194	.85
No	273	23.9		
Undecided	159	13.9		
I don't Know	110	9.6		
FGM is not the tightening of the vagina				
Yes (Correct)	613	53.6	2.166	.86
No	235	20.6		
Undecided	167	14.6		
I don't Know	128	11.2		
Clitoris will not grow large like a penis if not removed				
Yes (correct)	654	57.2	2.192	.88
No	187	16.4		
Undecided	169	14.8		
I don't Know	133	11.6		
FGM is dangerous				
Yes (correct)	627	54.9	2.136	.86
No	214	18.7		
Undecided	132	11.5		
I don't Know	170	14.9		
FGM does not promote hygiene				
Yes (correct)	446	39.0	1.965	.89
No	389	34.0		
Undecided	130	11.4		
I don't Know	178	15.6		
FGM does not necessarily help to conserve virginity				
Yes (correct)	604	52.8	2.102	.88
No	239	20.9		
Undecided	113	9.9		
I don't Know	187	16.4		

Lead City University Ibadan DO NOT COPY

Table 4.5a: Knowledge towards Female Genital Mutilation Cont'd

Items	Frequency	%	Mean	Std. Dev.
FGM does not prevent promiscuity				
Yes (correct)	656	57.4	2.256	.80
No	255	22.3		
Undecided	101	8.8		
I don't Know	131	11.5		
FGM does not make a woman fit for marriage				
Yes (correct)	673	58.9	2.192	.83
No	184	16.1		
Undecided	118	10.3		
I don't Know	168	14.7		
FGM can cause infertility				
Yes (correct)	539	47.2	2.059	.82
No	258	22.6		
Undecided	221	19.3		
I don't Know	125	10.9		
FGM is not necessary because a baby cannot die				
If the head touches the clitoris at birth				
Yes (correct)	689	60.3	2.211	.81
No	167	14.6		
Undecided	126	11.0		
I don't Know	161	14.1		
FGM results in severe complications				
Yes (correct)	622	54.4	2.191	.82
No	226	19.8		
Undecided	186	16.3		
I don't Know	109	9.5		
FGM exposes females to risks of infection				
Yes (correct)	681	59.6	2.253	.80
No	206	18.0		
Undecided	120	10.5		
I don't Know	136	11.9		
FGM may not result in STDs				
Yes (correct)	206	18.0	1.802	.91
No	657	57.5		
Undecided	128	11.2		
I don't Know	152	13.3		
FGM can prolong labour during childbirth				
Yes (correct)	508	44.4	2.056	.82
No	320	28.0		
Undecided	186	16.3		
I don't Know	129	11.3		
FGM makes a difference during childbirth				
Yes (correct)	489	42.8	1.942	.88
No	290	25.4		
Undecided	173	15.1		
I don't Know	191	16.7		
Grand Mean = 2.251; Std. Dev. = .85; Overall Decision = No (poor knowledge)				

Source: Field Data, 2023

KEY: Yes = 3, No = 2; Undecided = 1; I don't Know = 0; Std. Dev. = Standard Deviation;

***Threshold:** mean value of 0.000-0.750 = I don't Know; 0.751-1.500 = Undecided; 1.501-2.25 = No; 2.251-3.000 = Yes

Lead City University Ibadan DO NOT COPY

Table 4.5b: Overall Knowledge of Mothers towards Female Genital Mutilation

Indicator	Frequency	Percentage (%)	Grand Mean	Overall Decision
Good Knowledge	574	50.2	2.251	Good knowledge
Poor Knowledge	569	49.8		

Research Question Five: What is the attitude of mothers towards the practice of Female Genital Mutilation (FGM) in Oyo State?

Table 4.6a displays the attitude of mothers towards the practice of female genital mutilation among mothers in Oyo State. 66.4% of the mothers strongly disagreed to the maintainance of female genital mutilation whereas only 14.8% agreed that female circumcision should be encouraged. 60.6% of the respondents strongly disagreed that girls that have not undergone FGM should be discriminated. However, 20.6% of the mothers agreed that FGM should be made legal. 61.4% of the respondents strongly disagreed that female genital circumcision is necessary. Furthermore, 22.8% agreed that it is in the woman's best interest to be circumcised. Table 4.6b summarizes that level of attitude of the mothers towards FGM whether it is weak or strong. From the table, it revealed that majority (82.7%) of the respondents showed weak attitude towards the practice of female genital mutilation, while only 17.3% showed strong attitude towards the practice of female genital mutilation. The grand mean ($\bar{x}$ = 1.556) generally showed that the mothers have weak attitude towards FGM which implies that they generally do not support the practice.

Interview guide questions were also distributed to the respondents in order to ascertain qualitative responses on attitude towards FGM from them. They were asked "if they think or feel FGM should be continued? If yes why?" Many of the mothers think or feel that FGM should be discontinued. Some Responded that:

"No to the continuation of FGM because of health hazard"

Some of the mothers also remarked that:

Lead City University Ibadan DO NOT COPY

"No to the continuation of FGM so as to avoid death and diseases and also there is no gain in cutting the erectile tissue or clitoris in females"

Few of the mothers also noted that FGM can close the part of the baby and pose detrimental effect to women's fertility, child-bearing and labour in the delivery room.

A mother noted that:

"No because FGM has no function"

Many of the mothers noted that:

"FGM should be stopped because it has lots of implications which poses complications and threats to the life of females"

A mother remarked that:

"FGM has no importance in the life of females. It does not initiate girls into womanhood nor make them clean or preserve their virginity. A lady who wants to be promiscuous would be promiscuous regardless of whether they are cut or not"

Another mother noted that:

"FGM is not a good practice neither is it in the best interest of a woman to be circumcised as it adds no form of health, physical or even financial value to the females. It is simply a violation of their rights as many women including me were circumcised even before we reached the age to decide whether we wanted it or not".

Some of the mothers noted that FGM should be strictly discouraged as it is causes pain, trauma and even depression among females. It should be abolished for whatever reasons it was practiced in the first place and all culprits should be brought to book and made to face the law for such criminal act.

A mother also reported that:

"FGM whatever type it may be is dangerous to the life and future of the female child and must therefore be stopped. Also those traditional

Lead City University Ibadan DO NOT COPY

circumcisers should be made aware of the complications to the females and made to stop such dangerous practice"

However, some women also encouraged the continuation of the FGM practice. They responded "yes" that FGM should be continued and gave several reasons.

A mother noted that:

"FGM should be continued to help our female children not to be exposed to what is not good at a stage where they are supposed to face their studies or think about their future"

Another mother noted that:

"Yes to the continuation of FGM for it is the removal of what is not good from the female"

One mother responded that:

"Yes, FGM has important value in girls and that's why they are removing it (clitoris)"

Many of the mothers responded that:

"Yes, FGM should be continued to prevent or reduce the level of promiscuity/prostitution among women"

Some mothers noted that:

"Yes, FGM is not forbidden in Islam as it is legalized in Islam. Therefore, my religion (Islam) supports it and it should be done to keep the scripture word of Islam".

A mother responded that:

"Yes, FGM should be continued because I see nothing bad in it"

Some mothers also noted that:

"Yes to the continuation of FGM in order for females to maintain their sexual urge, have self-control and reduce waywardness of the female child"

Lead City University Ibadan DO NOT COPY

Some of the mothers also responded that:

Yes, FGM should not be stopped but should rather continue as it is our culture and tradition.

Some felt that FGM should be continued as it promotes cleanliness in women, helps to conserve virginity till marriage thus making them fit for marital life and it prevents prostitution among females.

One of the mothers responded that:

"Women who are circumcised will not be promiscuous and hence they are less likely to catch sexually transmitted diseases or infections"

Some of the mothers noted that:

"*FGM is important for us as we believe it helps to promote cleanliness in females, conserve virginity till marriage and prevent wayward living".*

A mother noted that:

"Yes, because my husband's parents are those that circumcise babies so I have no power over him not to do that."

Another one responded that:

"Yes, because it will help our female not to contact infection"

Qualitatively, it can be summarized that although some mothers responded that they want FGM to continue for several reasons, however, most of them mothers indicated they do not want FGM to continue. This also supports the quantitative results that most of the mothers have weak or negative attitude towards FGM which means that they abhor the practice and would not want to carry it out on their daughters. In order words, they do not support the practice of female genital mutilation.

Lead City University Ibadan DO NOT COPY

Table 4.6a: Attitude of Mothers towards Female Genital Mutilation

Items	Frequency (n)	Percentage (%)	Mean	Std. Dev.
FGM is a good practice that must be maintained				
Agree	211	18.8	1.524	.87
Disagree	166	14.8		
Strongly Disagree	745	66.4		
Female circumcision should be encouraged				
Agree	165	14.8	1.588	.84
Disagree	326	29.2		
Strongly Disagree	624	56.0		
Girls that have not undergone FGM should be discriminated				
Agree	145	13.6	1.531	.86
Disagree	275	25.8		
Strongly Disagree	645	60.6		
FGM should be made legal				
Agree	225	20.6	1.566	.85
Disagree	168	15.4		
Strongly Disagree	698	64.0		
Female Genital circumcision is necessary				
Agree	146	13.0	1.517	.89
Disagree	287	25.6		
Strongly Disagree	688	61.4		
It is in the woman's best interest to be circumcised				
Agree	245	22.8	1.609	.82
Disagree	165	15.3		
Strongly Disagree	666	61.9		
Grand Mean = 1.556; Std. Dev. = .86; Overall Decision = Strongly Disagree				

Source: Field Data, 2023

KEY: Agree = 3, Disagree = 2; Strongly Disagree = 1; Std. Dev. = Standard Deviation;
***Threshold:** mean value of 1.000-1.700 = Strongly Disagree; 1.701-2.400 = Disagree; 2.401-3.000 = Agree

Table 4.6b: Overall Attitude of Mothers towards Female Genital Mutilation

Indicator	Frequency	Percentage (%)	Grand Mean	Overall Decision
Weak attitude	909	82.7	1.556	Strongly Disagree (Weak Attitude)
Strong attitude	190	17.3		

Lead City University Ibadan DO NOT COPY

Research Question Six: What is the perception of the laws against Female Genital Mutilation among mothers in Oyo State?

Table 4.7a revealed the perception of the laws against the practice of female genital mutilation among mothers in Oyo State. More than half (70.3%) of the respondents perceived that there are laws against female genital mutilation, while 53.5% believed that there are criminal consequences of performing or assisting in FGM in Oyo State. 59.1% of the respondents perceive that circumcision of a girl child is not accepted in Oyo State and 51.1% are aware that offenders are being caught and punished in Oyo State for carrying out FGM. The rest of the statistics is as shown in Table 4.7a. However, table 4.7b showed the overall perception of mothers of the laws against the practice of female genital mutilation. From the table, 53.4% of the mothers have good perception of the laws against female genital mutilation (FGM) procedure and/or practice while 46.6% have poor perception of the laws against FGM. The grand mean ($\bar{x}$ = 2.260) confirmed that the mothers generally have good perception of the laws against FGM in Oyo State.

Lead City University Ibadan DO NOT COPY

Table 4.7a: Perception of the Laws against Female Genital Mutilation

Items	Frequency (n)	Percentage (%)	Mean	Std. Dev.
There are laws against FGM practice in Oyo State				
Yes (Correct)	804	70.3	2.424	.79
No	95	8.3		
Undecided	169	14.8		
I don't Know	75	6.6		
FGM is a traditional harmful practice in Oyo State				
Yes (Correct)	483	42.3	1.984	.91
No	339	29.7		
Undecided	141	12.3		
I don't know	180	15.7		
Circumcision of a girl child is not accepted in Oyo State				
Yes (Correct)	676	59.1	2.171	.82
No	190	16.6		
Undecided	74	6.5		
I don't know	203	17.8		
Have women who have undergone FGM broken any laws in Oyo State				
Yes (Correct)	558	48.8	2.076	.86
No	301	26.3		
Undecided	97	8.5		
I don't know	187	16.4		
Laws against FGM practice is strictly followed in Oyo State				
Yes (Correct)	570	49.9	2.177	.82
No	362	31.7		
Undecided	54	4.7		
I don't know	157	13.7		
There are criminal consequences of performing or assisting in FGM in Oyo State				
Yes (Correct)	611	53.5	2.088	.85
No	195	17.1		
Undecided	164	14.3		
I don't know	173	15.1		
Offenders are being caught and punished in Oyo State for carrying out FGM				
Yes (Correct)	584	51.1	2.131	.84
No	272	23.8		
Undecided	140	12.2		
I don't know	147	12.9		
Grand Mean = 2.260; Std. Dev. = .84; Overall Decision = Yes (Good Perception)				

Source: Field Data, 2023

KEY: Yes = 3, No = 2; Undecided = 1; I don't Know = 0; Std. Dev. = Standard Deviation;

*****Threshold:** mean value of 0.000-0.750 = I don't Know; 0.751-1.500 = Undecided; 1.501-2.25 = No; 2.251-3.000 = Yes

Lead City University Ibadan DO NOT COPY

Table 4.8b: Overall Perception of Mothers of the Laws against FGM

Variable	Frequency	Percentage	Grand Mean	Overall Decision
Good	610	53.4	2.260	Good Perception
Poor	533	46.6		

4.3 Test of Hypothesis

H_A1: There will be a significant joint contribution of perceived knowledge and attitude to Female Genital Mutilation practice among mothers in Oyo State

Table 4.8 revealed a significant joint contribution of knowledge and attitude to the practice of Female Genital Mutilation (FGM) among mothers in Oyo State (Anova value $F_{2, 1140} = 4.171$, $P<0.05$). This result showed that the model is a good fit of the data. It also revealed that the mothers' knowledge and attitude jointly contribute to their FGM practice. The alternate hypothesis that states that there will be a significant joint contribution of knowledge and attitude to the practice of Female Genital Mutilation (FGM) among mothers in Oyo State is therefore accepted. Under the model summary, the coefficient of correlation, $R = 0.085$ indicated a good level of prediction (good correlation between the observed and predicted values of dependent variable). The R square value (coefficient of determination) of 0.007 indicated that the proportion of variance in female genital practice by mothers that can be explained by the independent variables (mothers' knowledge and attitude) is 0.7%. However, the adjusted R square value gives a more accurate report. The Adjusted $R^2 = .006$ showed that mothers' knowledge and attitude (independent variables) explain 0.6% variability in mothers' FGM practice. The remaining 99.4% could be caused by factors other than the predictors included in this model. The discrepancy between the R^2 value and adjusted R^2 value (.007-.006 = .001) also indicated a good fit of the model since the value is very small. The standard error of estimate shows a value of 2.27242 which is small enough to be ignored meaning that the precision or accuracy of the model is good.

Lead City University Ibadan DO NOT COPY

Table 4.8: Multiple Regression Analysis and Model Summary for the joint contribution of perceived knowledge and attitude to Female Genital Mutilation practice among mothers in Oyo State

ANOVA							
Model		**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**	**Decision**
1 (Joint contribution of mothers' knowledge and attitude to FGM practice)	Regression	43.078	2	21.539	4.171	.016	Significant
	Residual	5886.840	1140	5.164			
	Total	5929.918	1142				

Model summary

Coefficient of Correlation (R) = 0.085

Coefficient of Determination (R Square) = 0.007

Adjusted R Square = 0.006

Standard Error of the Estimate = 2.27242

Dependent Variable: FGM practice
Predictors: (Constant), knowledge towards FGM, attitude towards FGM
F-value is significant at 0.05 **(Field Data, 2023)**

Lead City University COPY

4.4 Discussion of Findings

This research work was carried out to investigate Attitude, Knowledge and Practice of Female Genital Mutilation (FGM) among Mothers in Oyo State. Previous studies related to the result of this study are discussed in this section.

4.4.1 Demographic Information

The demographic data of the mothers revealed that most of them, 21.3% are within 35-39 years of age, 46.9% are Christians while 45.6% are Islam, 79.7% are Yorubas by ethnicity, 87.5% are married, 63.8% are in monogamous marriage while 65.4% have a nuclear family structure. Also, most of them, 41.0% have secondary education as their highest level of education, 36.4% are traders, 28.0% of the mothers earn within #41,000-60,000 monthly, 63.0% have a family size of 1-5, 41.9% have two daughters while 37.4% have daughters whose ages is within 0 months-5 years. These results almost completely disagree with a study on "Female genital mutilation/cutting among women of reproductive age (15-49 years) in communities in Imo State, South-East, Nigeria" which revealed that most of the mothers, 42.7% are within 40-44 years of age, 87.4% are Igbos by tribe, 94.5% are Christians (Catholics, Pentecostals and Orthodox) by religion,70.4% are married, 34.2% have primary school education as their highest form of education, 79.6% have above 4 children, 31.5% earn less than 10,000 and 70.3% are employed[1]. The results may be different from that of this present study because they were carried out in different geo-political zones (southwest and southeast) of Nigeria.

Furthermore, these results partially disagree with that of a study carried out on "Awareness, Perception and Practice of Female Genital Mutilation among Woman of Reproductive Age in Akure South Local Government Area, Ondo State" which revealed that majority of the women of reproductive age, 58.6% are less than 30 years of age, 69.3% are Christians by religion, Yoruba by ethnicity, 58.3% are currently employed, 48.3% are

Lead City University Ibadan DO NOT COPY

single by marital status, 88.6% are monogamous by marital type, 25.8% are professionals by occupation and 48.6% have tertiary education as highest form of education[2]. The little differences observed in both results could be because they were carried out in different States in Southwest, Nigeria.

These results almost completely agree with the study on "Socio-Demographic Characteristics Associated with the Practice of Family Planning among Women of Reproductive Age in Selected Mother and Child Hospitals, Lagos State" which showed that majority of the women, 49.7% are above 30 years of age, 36.6% have 3-4 children, 76.4% are married, 61.4% are in monogamous family type, 69.8% are Christians, 55% are Yorubas by ethnicity, 45.9% have secondary education as their highest form of education and 50.1% are into Business/trading as their occupation[3]. The similarities observed in both results could be that they were carried in Southwest, Nigeria and among mostly married women of which most are mothers.

The result also partially agrees with a study on "Knowledge and Attitude of Female Genital Mutilation among Mothers Living in Afao Community, Ekiti State" which revealed most of the mothers, 40.0% are within 21-30 years of age, 42.7% are married, 54.5% are Christians by religion, 64.8% have tertiary education as their highest form of education, 63.9% are into trading as occupation and 63.9% are Yorubas by ethnicity[4]. The minor differences between the results could be that they were both carried out in two different States although both are in Southwest, Nigeria.

4.4.2 Practice of Female Genital Mutilation

Research question one revealed that the level of FGM practice in Oyo State is reducing but still common at the time of this study as 28.5% disclosed that female genital mutilation is still currently being practiced in their homes. Also, majority of them, 71.4% noted that female genital mutilation is no longer mandatory for females in their homes and

Lead City University Ibadan DO NOT COPY

communities. . The grand mean ($\bar{x}$ = 1.462) generally showed that the practice is at a low level. The result of this study disagrees with the work on "Knowledge and Attitude towards Female Genital Mutilation and its Health Implications among Women in a Community in Osun State" which revealed that majority of the women (86%) practice female genital mutilation while 14% do not, 79% of the women would willingly circumcise their female children while 21% would not, and lastly, 64% of the women practice FGM because their culture permits it[5]. The differences in the result could be that they were both conducted at different Southwest States.

This result is also not in agreement with the study on "Assessment of Knowledge of Health Consequences and Practice of Female Genital Mutilation among Parents in Ibadan South East Local Government Area of Oyo State, Nigeria" which revealed that most parents, 61.1% were found to be practicing FGM[6]. The differences in the results could be because the latter was carried out in 2017 when the laws against the practice was not as strict as it is now and also on parents (both fathers and mothers) and in just one local government area of Oyo State.

4.4.3 Perceived Reasons for the Practice of Female Genital Mutilation

Research question two revealed that most (71.1%) of the mothers responded that cultural and religious beliefs were the reasons for continued practice of female genital mutilation, this was followed by fear of early pregnancy and promiscuity (57.8%), hygiene maintenance (48.5%), reduced desire for sex (45.5%), initiation into womanhood (41.0%), better marital opportunity (35.9%) and so on and forth. These results corroborated with the findings of Keredei, 2022 that majority (70.3%) of the households (mothers) practiced FGM because of cultural and traditional beliefs while others (43.9%) do so to prevent a girl child from being promiscuous later in life. They thought it controlled the sexual behaviour of girls. Also, majority of the respondents, 80.1% felt it was a religious obligation[7]. The

Lead City University Ibadan DO NOT COPY

similarities observed in the result could be because both studies were carried out in Yoruba dominated regions of the country. However, the different States could be the cause for the minor differences observed in the results.

4.4.4 Experience of Female Genital Mutilation

Research question three revealed that more than half (67.3%) of the respondents indicated that female genital mutilation was performed on them. Most (60.9%) of the study participants admitted to the experience being a painful one, with only 13.9% stating that they experienced health complications following the female genital mutilation. The result further demonstrates that female genital mutilation was performed mostly by traditional circumciser (90.1%) compared to Health care providers (3.8%). This result agreed with the study of Olaitan, 2022 that majority of women (82%) in Osun State experienced painful female genital mutilation and bleeding for a number of days after the procedure was performed on them[5]. The similarities in the result could be because they were carried out on women and within the same geo-political zone (Southwest) in Nigeria. This result is also in agreement with the findings of Amodu etal, 2019 on "Practice of Female Genital Cutting amongst Adults in Ilorin Metropolis, North-Central Nigeria" which revealed that most of the cutting on the females was done in the traditional practitioner's home (79%). The most experienced complication among respondents was severe bleeding (57.5%) while the females also experienced painful menstrual period, painful intercourse and urinary incontinence. However, these complications did not seem to bother them as it marks for them strict following of religious injunctions despite absence of link between FGM and Islam[7]. The similarities observed in the result could be because both studies were carried out in Yoruba dominated regions of the country. However, the different States could be the cause for the variations observed in the results.

Lead City University Ibadan DO NOT COPY

4.4.5 Attitude of Mothers towards Female Genital Mutilation

Research question four revealed that majority (82.7%) of the respondents showed weak attitude towards the practice of female genital mutilation, while only 17.3% showed strong attitude towards the practice of female genital mutilation. The grand mean ($\overline{x}$ = 1.556) generally showed that the mothers have weak attitude towards FGM which implies that they generally do not support the practice. This result suggests that majority of the mothers are against the practice in other words, they showed unfavourable attitude towards it which disagreed with the findings of Ibebuike etal, 2018 on "Female genital mutilation/cutting among women of reproductive age (15-49 years) in communities in Imo State, South-East, Nigeria" revealed that most of the women, 62.6% in the State have positive (good) attitude towards the FGM practice. The difference may be as a result of the studies beings carried out in different geo-political zones (southwest and southeast) of the nation.

Furthermore, the findings from this study is agreement with the findings of Akintola etal, 2022 on "Knowledge and Attitude of Female Genital Mutilation among Mothers Living in Afao Community, Ekiti State" showed that most of the mothers, 66.0% have negative attitude towards the practice which means they abhor the FGM practice[4]. The similarities observed in the results could be because they were both carried out among mothers in Southwest, Nigeria. These mothers of who majority are Yoruba by tribe may have similar feelings, thoughts and perception towards the FGM practice. This result is also inconsistent with the work on "Knowledge and Attitude towards Female Genital Mutilation and its Health Implications among Women in a Community in Osun State" which revealed that majority of the women (93%) in Osun State believe that female genital mutilation is a safe procedure which must be done to protect child whereas 3% of them do not agree so. This shows that most of the women in the State have positive or strong attitude towards the

Lead City University Ibadan DO NOT COPY

practice[5]. The differences in the result could be that they were both conducted at different Southwest States.

A study on "Factors associated with the knowledge and attitude towards Female Genital Mutilation among antenatal clinic attendees in Southern Nigeria" also revealed that 75.5% of the antenatal attendees (women) have negative (weak) attitude while 24.5% have positive (strong) attitude towards the practice of female genital mutilation[8]. Although both studies were carried out in two different States (the former in Edo State, Southern Nigeria and the latter in Oyo State, Southwest Nigeria), it was carried out on women who may have similar feelings, thoughts and perception towards the practice.

4.4.6 Knowledge of Mothers towards Female Genital Mutilation

Research question five revealed that 50.2% of the mothes have good level of knowledge of female genital mutilation (FGM) procedure and practice, 49.8% have poor knowledge of FGM. The grand mean ($\bar{x} = 2.251$) confirmed that the mothers generally have good level of knowledge of FGM. This result agrees with that of a study carried out in Ekiti State which revealed that the mothers (56.7%) have "good knowledge" of FGM[4]. The similarities observed in both studies could be because they were both carried out in Southwest, Nigeria.

Furthermore, the result also corroborated with the findings of Famuyiwa, 2017, Oladimeji, 2019 and Akinola etal, 2022 that majority of the women had good knowledge of FGM. The similarities observed in these studies could be because they were all carried out in Southwest, Nigeria. This result also corroborates the work on "Assessment of Knowledge of Health Consequences and Practice of Female Genital Mutilation among Parents in Ibadan South East Local Government Area of Oyo State, Nigeria" which revealed good knowledge of parents on knowledge of FGM and its health consequences[6].

Lead City University Ibadan DO NOT COPY

4.4.7 Perception of Mothers of the Laws against Female Genital Mutilation

Research question six revealed that 53.4% of the mothers have good perception of the laws against female genital mutilation (FGM) procedure and/or practice, 46.6% have poor perception of the laws against FGM. The grand mean ($\overline{x}$ = 2.260) confirmed that the mothers generally have good perception of the laws against FGM in Oyo State. This result is in agreement with the findings of Uzondu, 2020, Nananatu etal, 2020 and Leasure, 2022 that revealed good perception of the law against the FGM practice by women. The similarities between the results might be because that all the studies were carried out Nigeria where the law was enacted.

Hypothesis revealed a significant joint contribution of knowledge and attitude to the practice of Female Genital Mutilation (FGM) among mothers in Oyo State ($F_{2, 1140}$ = 4.171, P<0.05). This result is consistent with that of a study which revealed significant influence of awareness (knowledge) and perception (attitude) on the practice of female genital mutilation (FGM) among woman of reproductive age in Akure South Local Government Area, Ondo State[2]. The results could be similar because they were both carried out in Southwest, Nigeria.

Lead City University Ibadan DO NOT COPY

Endnotes

1. C.B. Duru, K. Achigbu, F.A. Andibanbang, F. Onuoha, I.M. Nwachukwu, & C.A. Duru, *Female genital mutilation/cutting among women of reproductive age (15-49 years) in communities in Imo State, South-East, Nigeria: Prevalence, pattern and determinants*, **International Research Journal of Public and Environmental Health,** 10(2), 2023, 52-68. ISSN: 2360-8803(e), ISSN: 2814-3817(p), DOI: https://doi.org/10.15739/irjpeh.23.006

2. M.O. Tomori, *Awareness, Perception and Practice of Female Genital Mutilation among Woman of Reproductive Age in Akure South Local Government Area, Ondo State*, **International Journal of Scientific Engineering and Applied Science (IJSEAS),** 7(8), 2021, 50-77. ISSN: 2395-3470

3. A.A. Oluwasegun, M.O. Obeka, A.A. Oluwaseyi, A. Abubakar, U.J. Uzoma, I.B. Mohammed, C.G. Azuka, F.E. Ugba, D.T. Akande, T.F. Akinpelu, & S. O. Okijiola, *Socio-Demographic Characteristics Associated with the Practice of Family Planning among Women of Reproductive Age in Selected Mother and Child Hospitals, Lagos State,* **Central Asian Journal of Medical and Natural Sciences**, 3(5), 2022, 440-471. ISSN: 2660-4159

4. F.V. Akinola, T.V. Ogunlade, H.K. Nasiru, & M.O. Nasiru, *Knowledge and Attitude of Female Genital Mutilation among Mothers Living in Afao Community,* **Ekiti State, Journal of Advanced Education and Sciences,** 2(4), 2022, 116-123. ISSN: 2583-2360

5. T. Oladimeji, *Knowledge and Attitude towards Female Genital Mutilation and Its Health Implications among Women in a Community in Osun State,* A paper presented at 8th African Population Conference, Entebbe, Uganda, 18th-22nd November, 2019. https://uaps2019.popconf.org/abstracts/190418.

6. S.A. Famuyiwa, *Assessment of Knowledge Of Health Consequences And Practice Of Female Genital Mutilation Among Parents In Ibadan South East Local Government Area Of Oyo State, Nigeria,* **Educational Journal of Multi-Disciplinary Studies, University of Port-Harcourt**, 6(1), 2017, 1-8. ISSN: 0796-8162.

7. S.A. Aderibigbe, B.W. Alatishe-Muhammad, H.A. Ameen, A.G. Salaudeen, M.J. Saka, M.M.B. Uthman, O.A. Bolarinwa, T.M. Akande, & H.O. Raji, *Practice of Female Genital Cutting Amongst Adults in Ilorin Metropolis, North-Central Nigeria,* **The Tropical Journal of Health Sciences,** 25(1), 2018, 1-12. eISSN: 1117-4153

8. A.I. Obi, O.E. Obarisiagbon, O.L. Igbinadolor, K.M. Fatai, & O.O. Adesoye, *Factors associated with the knowledge and attitude towards Female Genital Mutilation among antenatal clinic attendees in Southern Nigeria*, **Annals of Health Research**, 5(2), 2019, 183-192. doi:10.30442/ahr.0502-20-50

Lead City University Ibadan DO NOT COPY

Chapter Five

Conclusion

This chapter presents the summary of findings, conclusion and recommendations based on the findings, contribution to knowledge and suggested area for further research.

5.1 Summary of Findings

This research work was carried out to investigate Knowledge, Attitude and Perception of Female Genital Mutilation (FGM) among Mothers in Oyo State. The demographic findings of the mothers revealed that most of them, 243 (21.3%) are within the ages of 35-39 years, 536 (46.9%) of the mothers are Christians, 911 (79.7%) of the mothers are Yoruba by ethnicity, 1,000 (87.5%) are married, 702 (63.8%) are or were in monogamous marriage, 748 (65.4%) are in nuclear family structure, 469 (41.0%) have secondary education, 416 (36.4%) are into trading as their occupation, 320 (28.0%) earn #41,000-60,000 monthly, 720 (63.0%) of the mothers have a family size of 1-5, 479 (41.9%) have two daughters alive and 427 (37.4%) have daughters who are within 0 month – 5 years of age.

Research questions revealed that level of FGM practice in Oyo State is reducing but still common at the time of this study as 28.5% disclosed that female genital mutilation is still currently being practiced in their homes. Also, majority of them, 71.4% noted that female genital mutilation is no longer mandatory for females in their homes and communities. Most (71.1%) of the mothers responded that cultural and religious beliefs were the reasons for continued practice of female genital mutilation, this was followed by fear of early pregnancy and promiscuity (57.8%), hygiene maintenance (48.5%), reduced desire for sex (45.5%), initiation into womanhood (41.0%), better marital opportunity (35.9%) and so on and forth.

Lead City University Ibadan DO NOT COPY

Research questions further revealed that more than half (67.3%) of the respondents indicated that female genital mutilation was performed on them. Most (60.9%) of the study participants admitted to the experience being a painful one, with only 13.9% stating that they experienced health complications following the female genital mutilation. Majority (82.7%) of the respondents showed weak attitude towards the practice of female genital mutilation, while only 17.3% showed strong attitude towards the practice of female genital mutilation. 50.2% of the mothers have good level of knowledge of female genital mutilation (FGM) procedure and practice, 49.8% have poor knowledge of FGM. 53.4% of the mothers have good perception of the laws against female genital mutilation (FGM) procedure whereas 46.6% have poor perception of the laws against FGM. Test of Hypothesis revealed a significant joint contribution of knowledge and attitude to the practice of Female Genital Mutilation (FGM) among mothers in Oyo State ($F_{2, 1140} = 4.171$, $P<0.05$).

5.2 Conclusion

This research work was carried out investigate Attitude, Knowledge and Practice of Female Genital Mutilation (FGM) among Mothers in Oyo State. First, most of the mothers are within the ages of 35-39 years, Christians, Yoruba by ethnicity, married, in monogamous marriage, nuclear family structure, have secondary education, into trading as their occupation, earn 41,000-60,000 monthly, have a family size of 1-5, have two daughters alive and have daughters who are within one month – 5 years of age. It can be concluded from the demographic data of the mothers that most of them are young, vibrant, responsible for a family, Christians, doing something to earn a living, earn average income monthly (above the minimum wage of the nation) and have a form of education which may positively impact on their FGM practice.

Secondly, findings of the study revealed that most mothers in Oyo State have unfavourable attitude towards the FGM practice**,** have "good knowledge" of FGM and good

Lead City University Ibadan DO NOT COPY

perception of FGM laws, and do not agree to the reasons for the continued FGM practice such as – to enhance better chances of marriage in girls, initiate girls into womanhood, make females acceptable among peers in social meetings/functions in the community, done to increase male sexual pleasure, to preserve family honor and promotes social morality and decency in women, to enhance fertility and promote child survival and lastly because the presence of the clitoris makes a lady to desire having sex always. It further revealed that the mothers now have low FGM practice and majority of them and their daughters experience painful FGM procedure.

Lastly, the study findings showed a significant joint contribution of perceived knowledge and attitude to Female Genital Mutilation (FGM) practice among mothers in Oyo State. Based on the above findings, it can therefore be concluded that the good level of knowledge and weak attitude of the mothers towards FGM could be the cause of their reduced level of FGM practice in Oyo State.

5.3 Recommendations

Based on the findings and conclusions of the study, the following recommendations are therefore made:

1. Need for enlightenment campaign by leaders in the communities where FGM is prevalent in order to change attitude of the mothers from positive to negative towards FGM, and improve their knowledge about the existence of the law and the sanctions attached to violation.
2. Religious leaders should include campaign against the FGM practice in their preaching during religious programmes.
3. Adequate information and education through various forms of communication medium should be provided for the communities in order to enlighten them on the need to eradicate Female Genital Mutilation.

Lead City University Ibadan DO NOT COPY

4. Government at all levels should enact specific laws against FGM and ensure strict compliance by proper enforcement of such laws.
5. Government should provide law enforcement agents to ensure that violators are appropriately sanctioned.
6. The government should put in place policies protecting people's identity when they report offenders.

5.4 Contribution to Knowledge

Contribution to knowledge has to do with creating new knowledge based on the previous available knowledge by doing extensive and innovative research. In this sense, this research added to knowledge in the following ways:

1. **Theoretical Contribution**

Two major theories were used for this study. They are – "Health Belief Model" and "Theory of Planned Behaviour". Health Belief Model (HBM) states that people's perception or awareness or knowledge about the benefits and consequences of various health programs determined their participation in it or not. This theory has also been used for various studies but rarely used for the influence of mothers' knowledge on their FGM practice.

Theory of Planned Behaviour outlines relationships among personal attitude towards behaviour, subjective norm, perceived behavioural control, intention, and behaviour. According to the theory, behavioural intention is a function of attitude towards the behaviour, subjective norm, and perceived behavioural control. This theory has been used for several type of studies in the past but has been rarely used for attitude of mothers towards the FGM practice. A thorough search of literature shows scarcity of studies that adopted health belief model and theory of planned behaviour to support knowledge, attitude

Lead City University Ibadan DO NOT COPY

and perception of FGM among mothers. This study therefore added theoretically to knowledge by showing that theories such as health belief model and theory of planned behaviour can be used to support knowledge, attitude and perception of FGM among mothers and has not been critically used in previous studies or literatures.

2. Conceptual Contribution

Useful concepts that were used in this study include –knowledge, attitude, perception, female genital mutilation (FGM), laws against FGM, reasons for the FGM practice and experience of FGM. This study has contributed conceptually to knowledge by providing richer, better and in-depth clarifications to the above concepts.

3. Empirical Contribution

A thorough search of literature showed a dearth of studies on the joint contribution of knowledge and attitude on the FGM practice by mothers. It also shows scarcity of studies on the perception of the laws against FGM. This study therefore contributed empirically to knowledge by showing a joint influence of perceived knowledge and attitude of mothers towards FGM practice with a specific focus to Oyo State. This study therefore identified and filled this empirical gap in knowledge.

5.5 Suggested Area of Further Research

Although this study utilized both quantitative and qualitative research methods/approaches, probably research designs such as correlational, ex post-facto etcetera could be used in further studies. There were no moderating variables in this study which means subsequent studies should examine the influence of moderating variables on the relationship between the independent (predictor) and the dependent (criterion) variables. For instance, demographic characteristics of the mothers such as their age, marital status educational background, religion and socio-economic status could be used as moderating variables in further studies. These moderating demographic variables could moderate the

Lead City University Ibadan DO NOT COPY

influence of knowledge and attitude on the FGM practice by mothers. This study can be applicable to males or men in Oyo State and other parts of the nation to enable generalization of the results of the study.

Lead City University Ibadan DO NOT COPY

Bibliography

Books

Ajzen, I. & Albarracin, D. *Predicting And Changing Behaviour: A Reasoned Action Approach*, In I. Ajzen, D. Albarracin, & R. Hornik (Eds.), Prediction and Change of Health Behaviour: Applying the Reasoned Action Approach, **Taylor and Francis: USA**, 2012, 3-21. https://doi.org/10.4324/9780203937082

Ajzen, I. *Attitude structure and Behaviour*. In Attitude Structure and Function; Pratkanis, A.R., Breckler, S.J., Greenwald, A.G., Eds.; **Lawrence Erlbaum Associates: Mahwah**, **NJ**, **USA**, 2020, 241–274. ISBN 9780805803235

Ajzen, I., & Schmidt, P. *Changing Behaviour Using the Theory of Planned Behaviour,* In M. S. Hagger, L. D. Cameron, K. Hamilton, N. Hankonen, & T. Lintunen (Eds.), The handbook of Behaviour change, **Cambridge University Press**: **USA**, 2020, 17–31. https://doi.org/10.1017/9781108677318.002

Bandura, A. *Self-Efficacy,* **W. H. Freeman and Company: New York**, **NY**. https://doi.org/10.4278/0890-1171-12.1.8. 1997

Hochbaum, G.M. *Public Participation in Medical Screening Programs: A Sociopsychological Study. (Public Health Service, PHS Publication 572*), **U. S. Government Printing Office: Washington**, **DC**, 1958, 1-23. https://search.library.wisc.edu/catalog/999694547302121

Mberu, B.U. *Female Genital Mutilation/Cutting in Nigeria: A Scoping Review, Evidence to End FGM/C: Research to Help Women Thrive,* **Population Council: New York**, 2017, 1-65. http://www.popcouncil.org/uploads/pdfs/2017RH_FGMC-NigeriaScopingReview.pdf.

Dissertations/Theses

Alameen, T.M. *Knowledge About Female Genital Mutilation Among Females Attending Wad Nubawe Health Center,* An MBBS degree Thesis, Thesis, Department of community medicine, Faculty of Medicine, University of Science and Technology, 2020, 5. DOI: http://196.202.134.58:8080/xmlu

Hemuka, N.J. *The Continuation of Female Genital Mutilation in Nigeria: A Mixed Methods Study of Igbo Men's Views And Perpetuating Factors*, PhD Thesis, Faculty of Education Health and Wellbeing, University of Wolverhampton United Kingdom, 2021. https://wlv.openrepository.com.

Hussein, S.I. *Knowledge and Perceptions of Complications Associated with Female Genital Mutilation/Cutting among Somali Community in Wajir County, Kenya,* Master of Public Health Dissertation, School of Public, University of Nairobi, 2018, 4. http://erepository.uonbi.ac.ke

Lead City University Ibadan DO NOT COPY

Keredei, R. *The effects of female genital mutilation among teenage girls and young women in Nigeria,* PhD Thesis in International Affairs, Linnaeus University, Sweden, 2022, 1-45. http://lnu.diva-portal.org

Mancuso, G. Job Satisfaction and Turnover among Millennial Nurses in Public Hospitals, PhD Dissertation in Public Policy and Administration, College of Social and Behavioral Sciences, Walden University. https://scholarworks.waldenu.edu/cgi/2020, 131

Mohamed, S.M. *Knowledge, Attitude and Practice of Female Genital Mutilation among Traditional Birth Attendants in Mogadishu-Somalia,* PhD Thesis, Benadir University, Somalia, 2020, 4. https://www.umu.se.

Ogbuoji, R. *Understanding the Predictors of Female Genital Mutilation in Nigeria,* A paper presented to the faculty of the University of North Carolina at Chapel Hill in partial fulfilment of the requirements for the degree of Masters of Public Health in the department of Maternal and Child Health. Chapel Hill, North Carolina, 2017, 3. https://cdr.lib.unc.edu

Journals

Abathun, A.D., Gele, A.A. & Sundby, J. *Attitude towards the Practice of Female Genital Cutting among School Boys and Girls in Somali and Harari Regions, Eastern Ethiopia,* **Hindawi Obstetrics and Gynecology International**, 2017, 1-9. https://doi.org/10.1155/2017/1567368.

Abd-ELhakam, F. H., Ebrahim, R.E., Mohammed, M.Z. & Hassan, H.E. *Female Genital Mutilation: Impact on Knowledge, Attitude, Sexual Score Domains and Intention of Females in Northern Upper Egypt*, **Archives of Medical Case Reports and Case Study**, 6(5), 2022, 1-8. DOI:10.31579/2692-9392/161

Abd-ELhakam, F., Ebrahim, R., Mohammed, M., & Hassan, H. *Female Genital Mutilation: Females' Related Knowledge*, **Biomedical Research and Clinical Reviews**, 8(1), 2023, 1-6. DOI:10.31579/2692-9406/139

Abd-Elhakam, F.H., El-Syed, E.R., Mohammed, M.Z., & Hassan, H.E. *Relationship between Women's Intention for Female Genital Mutilation and their Exposure to Complication and Pressure*, **J Comm Med and Pub Health Rep.**, 3(10), 2022, 1-8. Doi.Org/10.38207/JCMPHR/202

Abdelmoaty, A.M., Sabry, H.A., & Elamir, R.Y. *Knowledge, Attitude and Intention to Future Practice of Female Genital Mutilation among Medical Students, Egypt,* **Egyptian Family Medicine Journal (EFMJ)**, 4(2), 2020, 7-21. http://efmj.journals.ekb.eg.

Lead City University Ibadan DO NOT COPY

Abdou, M.S., Wahdan, I.M., El Nimr, N.A. *Prevalence of Female Genital Mutilation, and Women's Knowledge, Attitude, and Intention to Practice in Egypt: A Nationwide Survey,* **Journal of High Institute of Public Health**, 50(3), 2020, 139-145. Print ISSN: 2357-0601 Online ISSN: 2357-061X

Abdulah, D.M., Dawson, A., & Sedo, B.A. *The impact of Health Education on Attitudes of Parents and Religious Leaders Towards Female Genital Mutilation*, **BMJ Sex Reprod Health**, 46(1), 2020, 51– 58. http://dx.doi.org/10.1136/bmjsrh-2018-200211

Abun, D., Magallanes, T., Foronda, S.L. & Incarnacion, M.J. *The Attitude of Graduate students toward Research and their Intention to Conduct Research in the Future,* **International Journal of Modern Research in Engineering & Management (IJMREM)**, 2(11), 2019, 74-87. ISSN: 2581-4540.

Adagunodo, T.A., Sunmonu, L.A., Oladejo, O.P., Hammed, O.S., Oyeyemi, K.D., & Kayode, O.T. *Site characterization of Ayetoro Housing Scheme, Oyo, Nigeria*, **IOP Conference Series Earth and Environmental Science**, 173(1), 2018, 1-22. DOI:10.1088/1755-1315/173/1/012031.

Adeline, N., Ojiakor, I.C. & Onovo, J.C. *Awareness, Knowledge and Perception of Female Genital Mutilation and Cutting (FGM/C) Radio Campaign and Practice Among Women in Imo State*, **Archives of Current Research International**, 16(4), 2019, 1-11. DOI:10.9734/acri/2019/v16i430095

Aderibigbe, S.A., Alatishe-Muhammad, B.W., Ameen, H.A., Salaudeen, A.G., Saka, M.J., Uthman, M.M.B., Bolarinwa, O.A., Akande, T.M., & Raji, H.O. *Practice of Female Genital Cutting Amongst Adults in Ilorin Metropolis, North-Central Nigeria,* **Tropical Journal of Health Sciences**, 25(1), 2018, 1-12. eISSN: 1117-4153.

Adhikari, G.P. *Calculating the Sample Size in Quantitative Studies,* **Scholars' Journal**, 4, 2021, 14-29. ISSN: 2645-8381

Adigüzel, C., Baş, Y., Erhan, M.D. & Gelle, M.A. *The Female Genital Mutilation/Cutting Experience in Somali Women: Their Wishes, Knowledge and Attitude,* **Gynecol Obstet Invest**, 2018, 1-11. DOI: 10.1159/000493130.

Adimula, R.A. & Ijere, I.N. *Psycho-Social Traumatic Events among Women in Nigeria,* **Madridge J AIDS**, 2(1), 2018, 17-28. doi: 10.18689/mja-1000104

Adogho, A.E.O., Hinsliff-Smith, K., & McGarry, J. *Healthcare Professionals' Knowledge, Attitudes, and Experiences of FGM in Sub-Saharan Africa: A Systematic Scoping Review*, **International Journal of Africa Nursing Sciences**, 14(100270), 2021, 1-10. ISSN 2214-1391.

Ahinkorah, B., Hagan, J., Seidu, A., Bolarinwa, O., Budu, E., Adu, C., Okyere, J., Archer, A.G. & Schack, T. *Association Between Female Genital Mutilation and Girl-Child*

Lead City University Ibadan DO NOT COPY

Marriage in Sub-Saharan Africa, **Journal of Biosocial Science**, 55(1), 2022, 1-12. doi:10.1017/S0021932021000687

Ahinkorah, B.O., Ameyaw, E.K., Seidu, A.A., & Njue, C. *Effects of Antenatal Care Visits and Health Facility Delivery on Women's Choice to Circumcise their Daughters in Sub-Saharan Africa: Evidence from Demographic and Health Surveys*, **International Health**, 14(5), 2022, 519-529. DOI: 10.1093/inthealth/ihab066.

Ahmed, H.M., Shabu, S.A., & Shabila, N.P. *A Qualitative Assessment of Women's Perspectives and Experience of Female Genital Mutilation in Iraqi Kurdistan Region*, **BMC Women's Health**, 19(1), 2019, 1-12. https://doi.org/10.1186/s12905-019-0765-7

Ahmed., H.M., Kareem, M.S., Shabila, N.P., & Mzori, B.Q. *Knowledge and Perspectives of Female Genital Cutting among the Local Religious Leaders in Erbil Governorate, Iraqi Kurdistan Region*, **Reprod. Health**, 15(1), 2018, 1-14. https://doi.org/10.1186/s12978-018-0459-x

Ajzen, I. *Perceived Behavioural Control, Self-Efficacy, Locus of Control, and the Theory of Planned Behaviour*, **J. Appl. Soc. Psychol**., 32(4), 2002, 665–683. DOI:10.1111/j.1559-1816.2002.tb00236.x

Ajzen, I. *The Theory of Planned Behaviour*, **Organizational Behaviour and Human Decision Processes**, 50(2), 1991, 179-211. DOI:10.1016/0749-5978(91)90020-T

Akinola, F.V., Ogunlade, T.V., Nasiru, H.K., & Nasiru, M.O. *Knowledge and Attitude of Female Genital Mutilation among Mothers Living in Afao Community,* **Ekiti State**, **Journal of Advanced Education and Sciences**, 2(4), 2022, 116-123. ISSN: 2583-2360

Akinsulure-Smith, A. M., Chu, T. & Krivitsky, L.N. *West African Immigrant Perspectives on Female Genital Cutting: Experiences, Attitudes, and Implications for Mental Health Service Providers*, **Journal of International Migration and Integration**, 19(2), 2018, 259–276. doi: 10.1007/s12134-018-0544-6

Akinsulure-Smith, A.M. & Chu, T. *Knowledge and Attitudes Towards Female Genital Cutting Among West African Male Immigrants in New York City,* **Health Care for Women International**, 38(5), 2017, 463-477. doi: 10.1080/07399332.2017.1294593

Akintoye, E.O., Akintoye, O.P. & Adjene, J.O. *Knowledge, Attitudes and Perception of the Public on Female Genital Mutilation,* **Journal of Medical Clinical Case Reports**, 3(1), 2021, 1-5. https://unisciencepub.com

Al Awar, S., Al-Jefout, M., Osman, N., Balayah, Z., Al Kindi, N. & Ucenic, T. *Prevalence, Knowledge, Attitude and Practices of Female Genital Mutilation and Cutting*

Lead City University Ibadan DO NOT COPY

(FGM/C) Among United Arab Emirates Population, **BMC Women's Health**, 20(79), 2020, 1-12. https://doi.org/10.1186/s12905-020-00949-z

Al Awar, S., Zareba, K., Sallam, G.S., Osman, N., Ucenic, T., Khair, H., Shdefat, S.A., Fattah, H.A., & Maki, S. *Legal Awareness and Practices of Female Genital Mutilation/Cutting (FGM/C) among United Arab Emirates Medical Practitioners*, **Int. J. Environ. Res. Public Health**, 20(4710), 2023, 1-13. doi.org/10.3390/ijerph20064710

Alege, M.A. *Impacts of Communication Strategies in Combating the Practice of Female Genital Mutilation (FGM) and its Multiplier Effects on Women,* **Sapientia Foundation Journal of Education**, **Sciences and Gender Studies (SFJESGS)**, 2(4), 2020, 155 – 172. ISSN: 2734-2522 (Print); ISSN: 2734-2514 (Online)

Alkhalaileh, D., Hayford, S.R., Norris, A.H., Gallo, M.F. *Prevalence and attitudes on female genital mutilation/cutting in Egypt since criminalisation in 2008,* **Cult Health Sex**, 20(2), 2018, 173-182. DOI: 10.1080/13691058.2017.1337927

Ameyaw, E.K., Anjorin, S., Ahinkorah, B.O., Seidu, A.A., Uthman, O.A., Keetile, M., & Yaya, S. *Women's Empowerment and Female Genital Mutilation Intention for Daughters in Sierra Leone: A Multilevel Analysis*, **BMC Womens Health**, 21(1), 2021, 1-10. doi: 10.1186/s12905-021-01340-2

Amodu, M., Bolori, M., Kuchichi, A., Ngoshe, I. & Bukar, F. *Female Genital Mutilation in Northeastern Nigeria*, **Open Access Library Journal**, 6(11), 2019, 1-10. doi: 10.4236/oalib.1105827

Anjos, F.A.D. *The Intrinsic Relationship between Belief and Attitude: A Qualitative Study with Some Brazilian Undergraduate Students of English,* **Rev. EntreLínguas**, **Araraquara**, 6(2), 2020, 391-404. e-ISSN: 2447-3529, DOI: https://doi.org/10.29051/el.v6i2.13721

Anmut, W., Toru, T., Yeshambel, A., & Mesele, M. *Knowledge, Attitude and Practice Towards Female Genital Mutilation Among Reproductive Age Women in Amad Imam Town, Jarso District, East Hararge Zone, Oromia Region, Ethiopia: A Community Based Study,* **Journal of Medicine**, **Physiology and Biophysics: An International Peer-Reviewed Journal**, 66, 2020, 14-21. ISSN 2422-8427

Anyanwu, C.E., Torpey, K., Abiodun, O.P., Sanni, O.F., & Anyanwu, I.D. *Variations in the Prevalence of Female Genital Mutilation Among Reproductive-aged Women in Nigeria Across Three Generations,* **International Journal of Maternal and Child Health and AID**. https://doi.org/10.21106.ijma.548. 11(2), 2022, 1-10

Ashimi, A.O. & Amole, T.G. *Perception and Attitude of Pregnant Women in a Rural Community North-West Nigeria to Female Genital Mutilation,* **Arch Gynecol Obstet**, 291(3), 2015, 695-700. doi: 10.1007/s00404-014-3478-z.

Lead City University Ibadan DO NOT COPY

Ateko, B.C. & Petinrin, J.O. *The perspective of Women on Female Genital Mutilation in Osun State, South West Nigeria,* **International Journal of Advances in Engineering and Management (IJAEM)**, 4(6), 2022, 2476-2482. ISSN: 2395-5252.

Axelsson, T. K. & Strid, S. *Minority Migrant Men's Attitudes toward Female Genital Mutilation: Developing Strategies to Engage Men,* **Health Care for Women International**, 41(6), 2020, 709-726. DOI: 10.1080/07399332.2019.1687707.

Bakanauskas, A.P., Kondrotienė, E., Puksas, A. *The Theoretical Aspects of Attitude Formation Factors and Their Impact on Health Behaviour,* **Sciendo Organizacijų Vadyba: Sisteminiai Tyrimai**, 83, 2020, 15-36. https://doi.org/10.1515/mosr-2020-0002

Balde, M.D., O'Neill, S., Sall, A.O., Balde, M.B., Soumah, A.M., Diallo, B., & Pallitto, C.C. *Attitudes of Health Care Providers Regarding Female Genital Mutilation and Its Medicalization in Guinea*, **PLoS ONE**, 16(5), 2021, 1-9. doi: 10.1371/journal.pone.0249998

Batyra, E., Coast, E., Wilson, B. & Cetorelli, V. *The Socioeconomic Dynamics of Trends in Female Genital Mutilation/Cutting across Africa*, **BMJ Global Health**, 5, 2020, 1-9. doi:10.1136/ bmjgh-2020-003088.

Beausang, J., & Mama, S. T. *A Summary of Female Genital Mutilation/Cutting for the Pediatric and Adolescent Care Provider*, **Journal of Pediatric and Adolescent Gynecology**, 36(2), 2023, 97-102. https://doi.org/10.1016/j.jpag.2022.11.002

Bekele, W.B., & Ago, F.Y. *Sample Size for Interview in Qualitative Research in Social Sciences: A Guide to Novice Researchers,* **Research in Educational Policy and Management**, 4(1), 2022, 42-50. https://doi.org/10.46303/repam.2022.3

Belda, S.S., & Tololu, A.K. *Knowledge, attitude and practice of mothers towards female genital mutilation in South West Shoa zone, Oromia region, Ethiopia,* **MOJ Public Health**, 6(2), 2017, 279–286. DOI: 10.15406/mojph.2017.06.00162

Cappa, C., Thomson, C., & Murray, C. *Understanding the Association between Parental Attitudes and the Practice of Female Genital Mutilation among Daughters*, **PLoSONE**. https://doi.org/10.1371/journal.pone.0233344. 15(5), 2020, 1-10

Connell, J., Carlton, J., Grundy, A., Buck, E.T., Keetharuth, A.D., Ricketts, T., Barkham, M., Robotham, D., Rose, D. & Brazier, J. *The Importance of Content and Face Validity in Instrument Development: Lessons Learnt From Service Users When Developing The Recovering Quality of Life Measure (Reqol),* **Quality of Life Research**, 27, 2018, 1893–1902. https://doi.org/10.1007/s11136-018-1847-y.

Dalal, K., Kalmatayeva, Z., Mandal, S., Ussatayeva, G., Lee, M.S., & Biswas, A. *Adolescent Girls' Attitudes Toward Female Genital Mutilation: A Study in Seven*

Lead City University Ibadan DO NOT COPY

African Countries, **F1000 Res**., 7(343), 2018, 1-10. https://doi.org/10.12688/f1000research.14142.1

Damianus, A., Luciano, A., Ubasa, A., Magallanes, T., Encarnacion, M.J. & Ranay, F.B. *Attitude toward the work and its influence on the Individual work performance of employees: Basis for Attitude Management*, **Technium Social Science Journal**. 18(1), 2021, 378-394. https://techniumscience.com/index.php/socialsciences/article/view/2966

Daniyan, B., Sunday-Adeoye, I., Ekwedigwe, K. & Dantani, D. *Female Genital Mutilation: Prevalence and Perception of Patients in South-East Nigeria,* **European Journal of Pharmaceutical and Medical Research**, 5(11), 2018, 1-4. ISSN: 2394-3211

Duru, C.B., Achigbu, K., Andibanbang, F.A., Onuoha, F., Nwachukwu, I.M., & Duru, C.A. *Female genital mutilation/cutting among women of reproductive age (15-49 years) in communities in Imo State, South-East, Nigeria: Prevalence, pattern and determinants*, **International Research Journal of Public and Environmental Health**, 10(2), 2023, 52-68. ISSN: 2360-8803(e), ISSN: 2814-3817(p), DOI: https://doi.org/10.15739/irjpeh.23.006

Egbodo, O., Akunaeziri, U., Edugbe, A., Shambe, H., Kahansim, M. & Ocheke, A. *Female Genital Mutilation: Opinion of Outpatients of a Department of Obstetrics and Gynaecology in North Central Nigeria*, **African Journals OnLine**, 12, 2019, 48-60. https://www.ajol.info/index.php/jjm/article/view/184147

Eguvbe, A.O., Alabrah, P.W., Allagoa, D.O., & Agbo, J.A. *Awareness, Prevalence And Practice of Female Genital Mutilation Amongst Students in a Tertiary Institution in South-South Nigeria,* **European Journal of Public Health Studies**, 5(1), 2022, 18-28. DOI: 10.46827/ejphs.v5i2.121

El-Gibaly, O., Aziz, M., Abou, H.S. *Health Care Providers' and Mothers' Perceptions about the Medicalization of Female Genital Mutilation or Cutting in Egypt: A Cross-Sectional Qualitative Study*, **BMC Int. Health Hum. Rights**, 19(26), 2019, 1-12. https://doi.org/10.1186/s12914-019-0202-x

Esmeal, E.A., Ahmed, A.E.E.M., Waggiallah, H.A., & Almosaad, Y.M. *Knowledge, Attitude, And Practice Among Mothers Towards Female Circumcision Ombada Province Khartoum State, Sudan*, **Int J Community Med Public Health**, 3(7), 2016, 1788-1794. DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20162043

Fagbamigbe, A.F., Morhason-Bello, I.O., Kareem, Y.O. & Idemudia, E.S. *Hierarchical Modelling of Factors Associated with the Practice and Perpetuation of Female Genital Mutilation in the Next Generation of Women in Africa*, **PLoS ONE**, 16(4), 2021, 1-18. https://doi.org/10.1371/journal.pone.0250411

Lead City University Ibadan DO NOT COPY

Famuyiwa, S.A. *Assessment of Knowledge of Health Consequences and Practice of Female Genital Mutilation among Parents in Ibadan South East Local Government Area of Oyo State, Nigeria,* **Educational Journal of Multi-Disciplinary Studies**, **University of Port-Harcourt**, 6(1), 2017, 1-8. ISSN: 0796-8162.

Gaiseanu, F. *Attitude as an Expressible Info-Operational Reaction to a Perceived/Purposed Object/Objective,* **International Journal on Neuropsychology and Behavioural Sciences**, 1(1), 2020, 12-16. DOI: 10.51626/ijnbs.2020.01.00002

Galal, A.F., El Gelany, S., & Goma, K. *Female Genital Mutilation (FGM) in Egypt, Knowledge and Concepts of Egyptian Medical Students: A Cross-Sectional Study*. **J. Obstet. Gynaecol.**, 42(6), 2022, 2185–2189. DOI: 10.1080/01443615.2022.2035335

Gangoli, G., Gill, A., Mulvihill, N., & Hester, M. *Perception and Barriers: Reporting Female Genital Mutilation,* **J Aggression Conflict Peace Res**., 10(4), 2018, 251–260. https://doi.org/10.1108/JACPR-09-2017-0323

Gayawan, E., & Lateef, R.S. *Estimating geographic variations in the determinants of attitude towards the practice of female genital mutilation in Nigeria*, **Journal of Biosocial Science**, 51(5), 2019, 645–657. DOI: https://doi.org/10.1017/S0021932018000391

Gbadebo, B. M., Salawu, A.T., Afolabi, R.F., Salawu, M. M., Fagbamigbe, A. F. & Adebowale, A.S. *Cohort Analysis of the State of Female Genital Cutting in Nigeria: Prevalence, Daughter Circumcision and Attitude towards its Discontinuation,* **BMC Women's Health**, 21(182), 2021, 1-12. https://doi.org/10.1186/s12905-021-01324-2

Ghazy, H.K., Gowayed, B.E., Abd El-Ghany, N.I., Fouda, L.M., Ebrahim, H. A. E. *Effect of an Educational Program on Mothers' Knowledge and Attitudes about Female Genital Mutilation at Tanta City,* **International Egyptian Journal of Nursing Sciences and Research (IEJNSR)**, 1(2), 2020, 16-27. DOI: 10.21608/ejnsr.2020.52545.1033

González-Timoneda, A., González-Timoneda, M., Sánchez, A.C. & Ros, V.R. *Female Genital Mutilation Consequences and Healthcare Received among Migrant Women: A Phenomenological Qualitative Study,* **International Journal of Environmental Research and Public Health**, 18(13), 2021, 71-95. Doi: 10.3390/ijerph18137195

González-Timoneda, A., Ruiz Ros, V., González-Timoneda, M., & Sánchez, C.A. *Knowledge, attitudes and practices of primary healthcare professionals to female genital mutilation in Valencia, Spain: Are we ready for this challenge?*. **BMC Health Services Research**, 18(1), 2018, 1-13. doi: 10.1186/s12913-018-3396-z

Greis, A., Bärnighausen, T., Bountogo, M., Ouermi, L., Sié, A., & Harling, G. *Attitudes towards Female Genital Cutting among Adolescents in Rural Burkina Faso: A*

Lead City University Ibadan DO NOT COPY

Multilevel Analysis, **Trop Med Int Health**, 25(1), 2020, 119–131. DOI: 10.1111/tmi.13338

Haruna, R. & Hassan, I.M. *Female Genital Mutilation in Some Selected Communities in Borgu Local Government Area of Niger State, Nigeria,* **African Journal of Humanities & Contemporary Education Research**, 6(1), 2022, 71-81. ISSN: 2760-5689X

Hassan, H., Abd-ELhakam, F., Ebrahim, R., & Mohammed, M. *Call for Change Enhancement Upper Egyptian Females' Knowledge Regarding Effect of Female Genital Mutilation*, **American Journal of Public Health Research**, 11(1), 2023, 5-12. DOI: 10.12691/ajphr-11-1-2

Hassan, H.E., Abd-ELhakam, F.H., Ebrahim, R.E., & Mohammed, M.Z. *Study Females' Attitude toward Female Genital Mutilation,* **J Gynecol Women's Health**, 24(3), 2022, 1-9. DOI: 10.19080/JGWH.2022.24.556137

Hassan, H.E., Abd-ELhakam, F.H., Zakria, M., & ElSyed, R. *Female genital mutilation in Northern Upper Egypt: Prospects reasons for performing and refusing*, **Nurse Care Open Acces J**., 9(1), 2023, 6-10. DOI: 10.15406/ncoaj.2023.09.00251

Ibebuike, J.E., Nwokike, G.I., Alagwu, S.C. & Kalu, N.P. *Mother's Perception of Female Genital Mutilation among Mothers in Owerre - Ebiri Community in Orlu L.G.A,* **International Journal of Advanced Research in Biological Sciences**, 5(12), 2018, 87-94. ISSN: 2348-8069, DOI: 10.22192/ijarbs

Igbineweka, M.N. & Ataha, B.U.C. *Influence of the Location of Mothers and Female Students on Their Attitudes towards Female Genital Mutilation: Implications For Counselling*, **Journal of Nursing**, **Social Studies**, **Public Health and Rehabilitation**, 1(2), 2022, 26–32. ISSN 1804-7181 (On-line).

Imasuen, K. *Sample Size Determination in Test-Retest and Cronbach Alpha Reliability Estimates,* **British Journal of Contemporary Education**, 2(1), 2022, 17-29. DOI: 10.52589/BJCEFY266HK9

Jahangiry, L., Pashaei, T., & Ponnet, K. *The Attitudes toward Female Genital Mutilation/ Circumcision: A Systematic Review and Meta-Analysis*, **Healthcare**, 9(1184), 2021, 1-15. https://doi.org/10.3390/ healthcare9091184

Johansen, R.E.B. *Virility, pleasure and female genital mutilation/cutting. A qualitative study of perceptions and experiences of medicalized defibulation among Somali and Sudanese migrants in Norway,* **Reprod Health**, 14(1), 2017, 1-25. doi: 10.1186/s12978-017-0287-4

Kaprom, B.C. *Interventions By Government And Non-Governmental Organizations Towards Female Genital Mutilation (FGM) and the Attitude Portrayed by the Pokot*

Lead City University Ibadan DO NOT COPY

Community on Repressing FGM, **International Journal of Health and Psychology Research**, 5(2), 2017, 18-27. ISSN 2055-0057(Print), ISSN 2055-0065(Online).

Kawous, R., Allwood, E., Middelburg, A., Van der Kwaak, A., Geraci, D., Bos, M., & Van den Muijsenbergh, M. E. T. C. *Attitude and Intention of Migrant Populations in the Netherlands Regarding Female Genital Mutilation/Cutting*, **BMC Women's Health**, 22(405), 2022, 1-11. https://doi.org/10.1186/s12905-022-01979-5

Keles, E., Eker, H.H., Bektemur, G., Hilowle, I.A., Kassim, M.M., Hassan-Kadle, M.A., Adali, A., & Karaketir, Ş. *Determinants of Disagreement with Female Genital Mutilation among Mothers,* **International Journal of Women's Health**, 14, 2022, 1863–1870. https://doi.org/10.2147/IJWH.S391043

Khalesi, Z.B., Beiranvand, S.P., & Ebtekar, F. *Iranian Midwives' Knowledge of and Attitudes toward Female Genital Mutilation/Cutting* (FGM/C), **Electron Physician**, 9(2), 2017, 3828–3832. doi: https://doi.org/10.19082/3828

Khan, M.A., Danish, R.Q. & Ali, H.F. *Role of Attitude towards Knowledge Sharing, Perceived Norms and Perceived Control to Predict Knowledge Sharing Behaviour among Auditors in Service Organizations of Pakistan*, **The Business and Management Review**, 10(3), 2019, 356-365. https://cberuk.com

Klein, E., Helzner, E., Shayowitz, M., Kohlhoff, S., & Smith-Norowitz, T.A. *Female Genital Mutilation: Health Consequences and Complications—A Short Literature Review,* **Obstetrics and Gynecology International**, 2018, 1-7. doi.org/10.1155/2018/7365715

Krischler, M. & Pit-ten, I.M.C. *Pre- and in-service teachers' attitudes toward students with learning difficulties and challenging behaviour*, **Front. Psychol.**, 10(327), 2019, 1-10. doi: 10.3389/fpsyg.2019.0032

Lane, J.L., Johnson-Agbakwu, C.E., Warren, N., Budhathoki, C., Cole, E.C. *Female Genital Cutting: Clinical Knowledge, Attitudes, and Practices from a Provider Survey in the US*, **J Immigr Minor Healt.**, 21(5), 2019, 954–964. DOI: 10.1007/s10903-018-0833-3

Larsson, M., Cohen, P., Hann, G., Creighton, S. M., & Hodes, D. *An exploration of attitudes towards female genital mutilation (FGM) in men and women accessing FGM clinical services in London: A pilot study,* **Journal of Obstetrics and Gynaecology**, 38(7), 2018, 1005-1009. DOI: 10.1080/01443615.2018.1437718

Leasure, E., Roth, C., Yegon, E., Anderson, E., Datta, N. & Izugbara, C. *Women's empowerment and attitudes towards female genital mutilation abandonment in Nigeria: A cross-sectional analysis of the Nigeria demographic health survey*, **African Journal of Reproductive Health**, 26(12s), 2022, 127-137. DOI: 10.29063/ajrh2022/v26i12s.14

Lead City University Ibadan DO NOT COPY

Leo´n-Mantero, C., Casas-Rosal, J.C., MazMachado, A. & Rico, M.E.V. *Analysis of attitudinal components towards statistics among students from different academic degrees*, **PLoS ONE**, 15(1), 2020, 1-13. https://doi.org/10.1371/journal.pone.0227213

Levy, A.T., Beausang, J.K., Finley, E.D., & Wolf, S.M. *Provider knowledge and attitudes about female genital mutilation/cutting in Philadelphia*, **Journal of Immigrant and Minority Health**, 23(1), 2021, 45-53. https://doi.org/10.1007/s10903-020-01018-1

Lwig, F., Ewerling, F. & Barros, A.J.D. *Women's Empowerment as It Relates to Attitudes Towards and Practice of Female Genital Mutilation/ Cutting of Daughters: An Ecological Analysis of Demographic and Health Surveys from 12 African Countries.* **Front. Sociol.**, 6(685329), 2022, 1-11. doi: 10.3389/fsoc.2021.685329

Mahgoub, E., Nimir, M., Abdalla, S., & Elhuda, D.A. *Effects of school-based health education on attitudes of female students towards female genital mutilation in Sudan*, **Eastern Mediterranean Health Journal**, 25(6), 2019, 406-412. https://doi.org/10.26719/emhj.18.053

Mahmoudi, O., & Hosseini, E. *The Attitudes toward Female Genital Mutilation: A Survey among the Residents of Uramanat Region*, **Iran. J Health Rep Technol.**, 7(1), 2021, 1-5. doi: 10.5812/ijhls.94463

Malak, M., Basalem, D., Aleiidi, S., Helabi, N., Almutairi, M., & Alhamed, A. *Awareness of Female Genital Mutilation/Cutting among the General Population in 2019: A Survey based Study in Saudi Arabia,* **Cureus**, 12(1), 2020, 1-10. DOI 10.7759/cureus.6651

Marea, C.X., Warren, N., Glass, N., Johnson-Agbakwu, C., & Perrin, N. *Factors Associated with Health Care Provider Attitudes, and Confidence for the Care of Women and Girls Affected by Female Genital Mutilation/Cutting*, **Health Equity**, 5(1), 2021, 329–337. DOI: 10.1089/heq.2020.0130

Melese, G., Tesfa, M., Sharew, Y., & Mehare, T. *Knowledge, Attitude, Practice, and Predictors of Female Genital Mutilation in Degadamot District, Amhara Regional State, Northwest Ethiopia*, **BMC Women's Health**, 20(178), 2020, 1-9. https://doi.org/10.1186/s12905-020-01041-2

Min, M., Wong, T., & Akinsulure-Smith, A.M. *Exploring Beliefs and Attitudes Toward Female Genital Mutilation/Cutting Among Healthcare Providers in New York City,* **Violence Against Women**, 28(12-13), 2022, 3174–3193. doi:10.1177/10778012211045710.

Mohammed, A.Y., Ermeko, T. & Wodera, A.L. *Assessment of Knowledge, Attitude and Practice towards Female Genital Mutilation Among community of Agarfa Town,*

Lead City University Ibadan DO NOT COPY

Southeast Ethiopia, **J Comm Pub Health Nursing**, 6(3), 2021, 1-6. Doi: 10.4172/2471-9846.1000273

Mohammed, E.S., Seedhom, A.E., & Mahfouz, E.M. *Female Genital Mutilation: Current Awareness, Believes and Future Intention in Rural Egypt*, **Reprod Health**, 15(175), 2018, 1-10. https://doi.org/10.1186/s12978- 018-0625-1 PMID: 30333019

Molina-Gallego, B., Mordillo-Mateos, L., de Corral, G.M., Gómez-Cantarino, S., Polonio-López, B., & Ugarte-Gurrutxaga, M.I. *Female Genital Mutilation: Knowledge and Skills of Health Professionals,* **Healthcare (Basel)**, 9(8), 2021, 1-9. doi: 10.3390/healthcare9080974.

Mostafa, A., Gaballah, S.A., & G.E. Amin, *Determinants of Disagreement with Female Genital Mutilation/Cutting of Future Daughters and Awareness of the Ban Among Egyptian University Students*, **Reprod Health**, 17(91), 2020, 1-11. https://doi.org/10.1186/s12978-020-00941-8.

Muchene, K.W., Mageto, I.G., & Cheptum, J.J. *Knowledge and Attitude on Obstetric Effects of Female Genital Mutilation among Maasai Women in Maternity Ward at Loitokitok Sub-County Hospital, Kenya*, **Obstet Gynecol Int.**, 1(1), 2018, 1–5. DOI: 10.1155/2018/8418234

Mudawi, A.M.E., Yousif, A.E.A., & Abdulmajid, E.A.A. *Knowledge, Attitude and Practice of Female Genital Mutilation and the Associated Stigma in Al Undub Abo-Kleio Area in Gezira State Central Sudan in 2018,* **Gynecology & Obstetrics**, 10(1), 2020, 1-10. ISSN 2161-0932.

Mwaila, M. M. *Men's Perception towards the Abandonment of Female Genital Mutilation (Cutting) in Kenya (2014)*, **The International Journal of Humanities & Social Studies**, 8(10), 2020, 88-103. https://doi.org/10.24940/theijhss/2020/v8/i10/HS2010-030

Ndikom, C.M., Ogungbenro, F.A. & Ojeleye, O.A. *Perception and Practice of Female Genital Cutting Among Mothers in Ibadan, Nigeria*, **International Journal of Nursing and Health Science**, 4(6), 2017, 71-80. ISSN: 2381-4861 (Print), ISSN: 2381-4888 (Online).

Njoku, D.C., Heba, A. & Njoku, U. *The History, Sexual, and Reproductive Consequences of Female Genital Mutilation on Women: A Focus on Sub-Saharan Africa,* **Sapientia Foundation Journal of Education**, **Sciences and Gender Studies (SFJESGS)**, 2(4), 2020, 265 – 290. ISSN: 2734-2522 (Print); ISSN: 2734-2514 (Online)

Nnanatu, C.C., Atilola, G., Komba, P., Mavatikua, L., Moore, Z., Matanda, D., Obianwu, O., & Kandala, N. *Evaluating changes in the prevalence of female genital mutilation/cutting among 0-14 years old girls in Nigeria using data from multiple*

Lead City University Ibadan DO NOT COPY

surveys: A novel Bayesian hierarchical spatio-temporal model, **PLoS ONE**, 16(2), 2021, 1-31. https://doi.org/ 10.1371/journal.pone.0246661

Nwaokoro, J.C., Ede, A.O., Dozie, I.J., Onwuliri, C.D., Nwaokoro, A.A. & Ebiriekwe, S.C. *Attitude and Perception on the Impact of Female Genital Mutilation on Health and Sex Drive among Married Women in Ebenebe, Awka North L.G.A., Anambra State,* **Austin J Public Health Epidemiol.**, 3(4), 2016, 1-7. ISSN : 2381-9014

Obi, A.I. & Igbinadolor, O.L. *Prevalence of Female Genital Mutilation and its Determinants among Pregnant Women in Benin City, Nigeria,* **Journal Of Community Medicine and Primary Health Care**, 30(2), 2018, 12-21. https://www.researchgate.net/publication/335910727

Obi, A.I., Adesoye, A.O. & Adelosoye, A. *Awareness and Knowledge of Female Genital Mutilation among Women in a Sub-Urban Community in Edo State, Nigeria*, **Annals of Biomedical Sciences**, 15(1), 2016, 1-8. eISSN: 1596-6569

Obi, A.I., Obarisiagbon, O.E., Igbinadolor, O.L., Fatai, K.M., & Adesoye, O.O. *Factors associated with the knowledge and attitude towards Female Genital Mutilation among antenatal clinic attendees in Southern Nigeria*, **Annals of Health Research**, 5(2), 2019, 183-192. doi:10.30442/ahr.0502-20-50

Obijiofor, N.B., Enete, C. A., Nnonyelu, C.E., Umeononihu, O.S., Emeka, E.A., Okoro, C.C., Akabuike, J.C., Oguejiofor, C. B. & Eleje, G.U. *Female Genital Mutilation: Prevalence, Awareness and Attitude among Igbo Women of Child-Bearing Age in Nigeria,* **Obstetrics and Gynecology Research**, 3(3), 2020, 145-160. DOI: 10.26502/ogr038

Odukogbe, A.A., Afolabi, B.B., Bello, O.O., & Adeyanju, A.S. *Female genital mutilation/cutting in Africa*, **Translational Andrology and Urology**, 6(2), 2017, 138-148. https://tau.amegroups.com

Ogadinma, I. & Ezeah, P.C. *The Prevalence of Female Genital Mutilation/Cutting (Fgm/C) and Men's Role in its Practice in Southeast Nigeria,* **The Nigerian Journal of Medical Sociology**, 2(1), 2020, 52-78. https://www.nigerianjournalsonline.com

Ogunsiji, O., Ogbeide, A.E., & Ussher, J., *Experiences of Primary Healthcare Workers in Australia towards Women and Girls Living with Female Genital Mutilation/Cutting (FGM/C): A Qualitative Study*, **Healthcare**, 11(702), 2023, 1-15. https://doi.org/10.3390/ healthcare11050702

Oladeji, O., Farah, A. E., & Aden, B. S. *Knowledge, attitudes and practices of female genital mutilation among health care workers in Somali region of Ethiopia*, **International Journal of Community Medicine and Public Health**, 8(9), 2021, 4191–4196. https://doi.org/10.18203/2394-6040.ijcmph20213517

Lead City University Ibadan DO NOT COPY

Olaoye, S.O. *Socio-Cultural Factors and the Continuity of Female Genital Mutilation (FGM) among Mothers in Obiangwu Community, Ngor-Okpala LGA, in Imo State,* **Research and Reviews Journal of Social Sciences**, 6(2), 2020, 1-11. https://www.rroij.com

Olopha, O.O. *Practice, Perception and Attitude of Childbearing Age Women towards Female Genital Mutilation in Ibadan Metropolis, Oyo State, Nigeria,* **Journal of Positive Psychology and Counselling**, 5, 2020, 39-57. https://www.ppacjournals.org

Oluwadamilare, A. & Babajide, A.O. *Female Genital Mutilation Assessment in Nigeria: The Adequacy of the Law,* **UNIZIK Journal of Public and Private Law**, 12, 2022, 36-47. ISSN: 2174-2865

Oluwasegun, A.A., Obeka, M.O., Oluwaseyi, A.A., Abubakar, A., Uzoma, U.J., Mohammed, I.B., Azuka, C.G., Ugba, F.E., Akande, D.T., Akinpelu, T.F., & Okijiola, S. O. *Socio-Demographic Characteristics Associated with the Practice of Family Planning among Women of Reproductive Age in Selected Mother and Child Hospitals, Lagos State,* **Central Asian Journal of Medical and Natural Sciences**, 3(5), 2022, 440-471. ISSN: 2660-4159

Omigbodun, O., Bella-Awusah, T., Groleau, D., Abdulmalik, J., Emma-Echiegu, N., Adedokun, B. & Omigbodun, A. *Perceptions of the Psychological Experiences Surrounding Female Genital Mutilation/Cutting (FGM/C) among the Izzi in Southeast Nigeria*, **Transcultural Psychiatry**, 57(1), 2020, 212–227. DOI: 10.1177/1363461519893141

Omorodion, F.I. *Knowledge and Perceptions of Female Genital Mutilation among African Immigrant Women in Windsor, Canada,* **International Journal of Sociology and Anthropology**, 12(2), 2020, 43-50. DOI: 10.5897/IJSA2019.0839

Ossai, E.N., Aniwada, E.C., Nwobi, E.A. & Ezeoke, U.E. *Prevalence and Predictors of Female Genital Cutting in Nigeria: An Analysis of 2013 Nigeria Demographic and Health Survey,* **J Community Med Health Care**, 3(1), 2018, 1-8. https://austinpublishinggroup.com

Owojuyigbe, M., Bolorunduro, M.E. & Busari, D. *Female Genital Mutilation as Sexual Disability: Perceptions of Women and Their Spouses in Akure, Ondo State, Nigeria*, **Reproductive Health Matters**, 25(50), 2017, 80-91. https://doi.org/10.1080/09688080.2017.1331685

Ozuri, R. *Attitude of Mothers and Female Secondary School Students towards Female Genital Mutilation in Ika North East Local Government Area of Delta State*, **Sokoto Educational Review**, 20(1&2), 2021, 40-49. https://sokedureview.org/index.php/SER/article/view/438.

Lead City University Ibadan DO NOT COPY

Philipson, S., & Kjellström, E. *When Objects Are Talking: How Tacit Knowing Becomes Explicit Knowledge*, **Journal of Small Business Strategy**, 30(1), 2020, 68-82. ISSN: 1081-8510 (Print) 2380-1751 (Online).

Raheem, K.A., Udenze, C. & Odetokun, I.A. *University female students' perception and prospective practice of female genital mutilation in Umudike, Southeast Nigeria,* **African Journal of Reproductive Health**, 27(1), 2023, 54-62. DOI: 10.29063/ajrh2023/v27i1.5

Rawat, R., & Tirkey. N.N. *Female genital mutilation practice, associated factors, and its consequences on women's reproductive health in Senegal*, **International Journal of Population Studies**, 7(1), 2021, 94–107. https://doi.org/10.36922/ijps.v7i1.292

Rehema, H.J., & Chen, Z. *Religious Leaders' Attitudes on Female Genital Mutilation in Tanzania,* **International Journal of Academic Multidisciplinary Research (IJAMR)**, 4(8), 2020, 163-173. ISSN: 2643-9670

Robinson, R., Ojajuni, O.P., Owolabi, I.O., Olunuga, O., & Oni, E.I. *Assessing the Knowledge and Intention towards the Continuation of FGM Practice among Young Girls in South West Nigeria,* **Open Journal of Social Sciences**, 10, 2022, 271-283. https://doi.org/10.4236/jss.2022.104020.

Shaheen, H.M., Kasemy, Z.A., & Salah, E.F.M. *The Current Situation Regarding Awareness About Female Genital Mutilation Among Men Working in Schools of Benha City, Qaluobia Governorate*, **Menoufia Med J.**, 30(1), 2017, 23-27. DOI: 10.4103/mmj.mmj_542_15

Small, E., Sharma, B.B., Nikolova, S.P., Tonui, B.C. *Hegemonic masculinity attitudes toward female genital mutilation/cutting among a sample of College Students in Northern and Southern Sierra Leone*. **J Transcult Nurs**, 31(5), 2020, 468-478. DOI: 10.1177/1043659619875499

Tantet, C., Aupiais, C., Bourdon, M., Adèle, F.S., Levy, D., Lafon-Desmurs, B., & Faye, A. *Female Genital Mutilation: An Evaluation of the Knowledge of French General and Specialized Travel Medicine Practitioners*, **J Travel Med.**, 25(1), 2018, 1-7. https://doi.org/10.1093/jtm/tax090

Tomori, M.O. *Awareness, Perception and Practice of Female Genital Mutilation among Woman of Reproductive Age in Akure South Local Government Area, Ondo State*, **International Journal of Scientific Engineering and Applied Science (IJSEAS)**, 7(8), 2021, 50-77. ISSN: 2395-3470

Turkmani, S., Homer, C., Varol, N., & Dawson, A. *A Survey of Australian Midwives' Knowledge, Experience, and Training Needs in Relation to Female Genital Mutilation*, **Women and Birth**, 31(1), 2018, 25-30. DOI: 10.1016/j.wombi.2017.06.009

Lead City University Ibadan DO NOT COPY

Vercoutere, A. *Beliefs and attitudes regarding FGM in a rural village in Region Kankan, Guinea, before the start of an awareness campaign*, **Journal of Obstetrics and Gynaecology Canada**, 42(2), 2020, 19-20. DOI:10.1016/j.jogc.2019.11.033

Vogt, S., Efferson, C., & Fehr, E. *The Risk of Female Genital Cutting in Europe: Comparing Immigrant Attitudes toward Uncut Girls with Attitudes in a Practicing Country*, **SSM Popul Health**, 3, 2017, 283–293. DOI: 10.1016/j.ssmph.2017.02.002

Yaya, S. & Ghose, B. *Female Genital Mutilation in Nigeria: A Persisting Challenge for Women's Rights,* **Soc. Sci**., 7(244), 2018, 1-13. doi:10.3390/socsci7120244

Young, J., Rodrigues, K.K., Imam, B., & Johnson-Agbakwu, C. *Female Genital Mutilation/Cutting-Pediatric Physician Knowledge, Training, and General Practice Approach*, **J Immigr Minor Health**, 22(4), 2020, 668-674. doi: 10.1007/s10903-019-00938-x

Zangeneh, H. *Teachers' Attitudes toward Teaching-Learning Methods of Entrepreneurship Education in Elementary Education,* **Educ Strategy Med Sci.**, 12(6), 2020, 1-7. URL: http://edcbmj.ir/article-1-1746-en.html

Ziyada, M.M., Johansen, R.E.B., Berthelsen, M., Inger-Lise, L., & Bothild, B. *Factors Associated with General Practitioners' Routines and Comfortability with Assessing Female Genital Cutting: A Cross-Sectional Survey,* **BMC Health Serv Res**., 23(82), 2023, 1-9. https://doi.org/10.1186/s12913-023-09085-4

Online Resources

Adebowale-Tambe, N., & Olufemi, A. *Female Genital Mutilation thrives in Oyo despite laws banning it*, https://www.premiumtimesng.com/June 1, 2019

Besera, G., Goldberg, H., Okoroh, E. M., Snead, M.C., Johnson-Agbakwu, C.E. & Goodwin, M.M. *Attitudes and Experiences Surrounding Female Genital Mutilation/Cutting in the United States: A Scoping Review,* 2022, 1-51. Available at doi:https://doi.org/10.1101/2022.03.25.22272941https://en.wikipedia.org/wiki/Ibadan_North-East, Ibadan North, Akinyele, Afijio. 8 September 2022

Kumar, M. *The Relationship between Beliefs, Values, Attitudes and Behaviour*, Available at https://owlcation.com/social-sciences/Teaching-and-Assessing-Attitudes June 25, 2022

Merriam-Webster, *Knowledge, Merriam-Webster.com Dictionary,* https://www.merriam-webster.com/dictionary/knowledge. Accessed 24 Nov. 2022

Lead City University Ibadan DO NOT COPY

New Step for African Community, NESTAC, *The Effects of FGM on Women's Health,* Available at https://nestac.org.uk/2020/02/04/the-effects-of-fgm-on-womens-health. 2020, 1

Olaitan, K. *UN Report: Female Genital Mutilation Practice Still Prevalent in Oyo, Osun and Ekiti*, Available at https://www.thisdaylive.com. Wednesday, 16th November, 2022

Othowa, M.O. *Knowledge and Attitudes towards the Practice of Female Genital Mutilation,* A research project among pregnant women attending maternity wing in Dagahaley Médecins Sans Frontières Hospital, Available at https://globalhistorydialogues.org/projects/knowledge-and-attitudes-towards-the-practice-of-female-genital-mutilation. 2021, 1-5

Statista Research Department, *Attitudes towards Female Genital Mutilation in Nigeria 2018, by Circumcision Status,* Available at https://www.statista.com/Feb 1, 2022

United Nations International Children's Emergency Fund (UNICEF), *Child Protection from Violence, Exploitation and Abuse: Female Genital Mutilation/Cutting*, Available at https://www.unicef.org/protection/57929_58002.html April 10th, 2016

Van Eck, T. *The Psychological Impact of FGM,* Available at https://www.fawco.org/global-issues/target-program/health/blog-health-matters/4632-tharien-van-eck-and-martha-canning, 11, October, 2021

Wikipedia, *Attitude (Psychology),* Available at https://en.wikipedia.org/wiki/Attitude_(psychology), 21 November 2022

Wikipedia, *Female Genital Mutilation,* Available at https://en.wikipedia.org/wiki/Female_genital_mutilation 17 November 2022

Wikipedia, *Knowledge,* Available at https://en.wikipedia.org/wiki/Knowledge (22 November 2022)

World Health Organisation (WHO), Female Genital Mutilation. 2022. Available at https://www.who.int/newsroom/fact-sheets/detail/female-genital-mutilation 24/03/2022.

World Health Organisation (WHO), *Health Risks of Female Genital Mutilation (FGM).* Available at https://www.who.int/teams/sexual-and-reproductive-health-and-research-(srh)/areas-of-work/female-genital-mutilation/health-risks-of-female-genital-mutilation, 21 January, 2022

Papers

Oladimeji, T. *Knowledge and Attitude towards Female Genital Mutilation and its Health Implications among Women in a Community in Osun State,* A paper presented at the

Lead City University Ibadan DO NOT COPY

8th African Population Conference, Entebbe, Uganda, 18th to 22nd November, 2019, Available at http://uaps2019.popconf.org/abstracts/190418

Statistical Reports

Uzondu, C. *Situation Assessment and Analysis of Female Genital Mutilation/Cutting in Imo and Ebonyi States,* A Baseline Report Civil Resource Development and Documentation Centre (CIRDDOC) in Partnership with the Coalition of Eastern Non-Governmental Organisations (CENGOS) and with Funding Support from Amplify Change, 2020, 1-55. Available at https://cirddoc.org, December, 2020

Lead City University Ibadan DO NOT COPY

Appendices

Appendix 1 (Research Instruments)

Research Questionnaire

Title: Knowledge, Attitude and Perception of Female Genital Mutilation Questionnaire (KAPFGMQ)

Department of Public Health, Lead City University, Ibadan, Oyo State.

Dear Respondent,

Request to Participate in a Research

I am a Post Graduate student at the above mentioned university and am investigating the knowledge, attitude and perception of FGM among mothers. Your honest responses are needed as they are deemed important for the outcome of this research work. Thank you for your cooperation.

Yours Faithfully,

Researcher

Section A: Background Characteristics

1. **Age (years):** _____
2. **Religion:** Christianity ( ) Islam ( ) Traditional ( ) Others (specify)……...
3. **Ethnicity:** Yoruba ( ) Igbo ( ) Hausa ( ) Edo ( ) Others (specify)……..
4. **Marital Status:** Married ( ) Separated ( ) Divorced ( ) Others (specify)……
5. **Marital Type:** Monogamous ( ) Polygamous ( )
6. **Family Structure:** Nuclear Family ( ) Extended Family ( )
7. **Highest Level of Education:** No formal education ( ) Primary education ( ) Secondary education ( ) Tertiary education ( ) Others (specify)……...
8. **Occupation:** Farming ( ) Skilled Labour ( ) Unskilled Labour ( ) Trading ( ) Housewife ( ) Unemployed ( )
9. **Income Per Month:** ……..
10. **Family size…**……

Lead City University Ibadan DO NOT COPY

11. **No Daughters alive……..**

12. **Age of Daughters:**

1	2	3	4

Section B: Practice of Female Genital Mutilation

KEY: Yes = 3, No = 2, Undecided = 1, I Don't Know = 0

		3	**2**	**1**	**0**
S/N	**Items**	**Yes**	**No**	**Undecided**	**I Don't Know**
1.	FGM is still practiced in my home				
2	FGM is a long-aged tradition in my family				
3.	I have or intend to carry out FGM practice on my daughter (s)				
4	Majority of females in my community have undergone FGM				
5.	FGM is mandatory for females in my home and community				
6.	All types of FGM practice is carried out in my community				
7	FGM is performed at an early age in my community				

Section C: Perceived Reasons for the Practice of Female Genital Mutilation

KEY: Yes = 3, No = 2, Undecided = 1, I Don't Know = 0

		3	**2**	**1**	**0**
S/N	**Items**	**Yes**	**No**	**Undecided**	**I Don't Know**
1.	Female genital mutilation is practiced because of fear of early pregnancy and promiscuity among womenfolk				

Lead City University Ibadan DO NOT COPY

2	FGM is also practiced to maintain cleanliness (hygiene) and good health in women folk				
3	Female Genital mutilation preserves family honor and promotes social morality and decency in women				
4	FGM enhances better chances of marriage in girls				
5	Female Genital mutilation is done to initiate girls into womanhood				
6	Female Genital mutilation is done to make them acceptable among peers in social meetings/functions in my community				
7	Female Genital mutilation is done to increase male sexual pleasure				
8	Female Genital mutilation enhances fertility and promotes child survival				
9	The presence of clitoris makes a lady to desire having sex always				
10.	Female Genital mutilation is done because of my cultural and religious beliefs				

Section D: Experience of Female Genital Mutilation

1. FGM was performed on me. Yes ( ) No ( ) Undecided ( ) I Don't Know ( )
2. FGM was performed on me by Traditional circumciser. Yes ( ) No ( ) Undecided ( ) I Don't Know ( )
3. FGM was performed on me by Healthcare Provider. Yes ( ) No ( ) Undecided ( ) I Don't Know ( )
4. **Was** FGM a painful experience for me? Yes ( ) No ( ) Undecided ( ) I Don't Know ( )
5. I experienced health complications after FGM was practiced on me Yes ( ) No ( ) Undecided ( ) I Don't Know ( )
6. Did my daughter experience any health complication after FGM was performed on her? Yes ( ) No ( ) Undecided ( ) I Don't Know ( )

Lead City University Ibadan DO NOT COPY

Section E: Knowledge towards Female Genital Mutilation

KEY: Yes = 3, No = 2, Undecided = 1, I Don't Know = 0

		3	2	1	0
S/N	**Items**	**Yes**	**No**	**Undecided**	**I Don't Know**
1.	I know about Female Genital circumcision				
2	There are different types of Female Genital circumcision				
3	Female circumcision is the removal of the erectile part of the female genital				
4	Female circumcision is not the tightening of the vagina				
5	If the clitoris is not removed it will not grow large like a penis				
6	Female Genital Circumcision is dangerous				
7	Female circumcision does not promote cleanliness in a woman				
8	Female circumcision does not help to conserve virginity till marriage				
9	Female circumcision does not prevent promiscuity among women				
10	Female circumcision does not make a woman fit for marriage				
11	Female Genital Circumcision can cause infertility				
12	Female circumcision is not necessary because a baby cannot die if its head touches the clitoris at birth				
13	Female Genital Circumcision can give severe complications				
14	Female circumcision exposes the female to the risk of infections				

Lead City University Ibadan DO NOT COPY

15	Circumcised women are less likely to catch sexually transmitted infections				
16	Female Genital Circumcision can prolong labor during childbirth				
17	Being circumcised makes a difference during childbirth				

Section F: Attitude towards Female Genital Mutilation

KEY: SA=Strongly Agree (4), A= Agree (3), SD= Strongly Disagree (2), D= Disagree (1)

		4	**3**	**2**	**1**
S/N	**Items**	**SA**	**A**	**D**	**SD**
1.	FGM is a good practice that must be maintained				
2	Female circumcision should be encouraged				
3	Girls that have not undergone FGM should be discriminated				
4	FGM should be made legal				
5	Female Genital Circumcision is necessary				
6	It is in the woman's best interest to be circumcised				

Section G: Perception of the laws against Female Genital Mutilation

KEY: Yes = 3, No = 2, Undecided = 1, I Don't Know = 0

		3	**2**	**1**	**0**
S/N	**Items**	**Yes**	**No**	**Undecided**	**I Don't Know**
1	There are laws against FGM practice in Oyo State				
2	FGM is a traditional harmful practice in Oyo State				
3	Circumcision of a girl child is accepted in Oyo State.				

Lead City University Ibadan DO NOT COPY

4	Have women who have undergone FGM broken any laws in Oyo State				
5	Laws against FGM practice is strictly followed in Oyo State				
6	There are criminal consequences of performing or assisting in FGM in Oyo State				
7	Offenders are being caught and punished in Oyo State for carrying out FGM				

INTERVIEW GUIDE QUESTIONS

Dear Respondent (Mothers),

Please take few minutes to answer the questions Responded below. Thank You

1. Have you heard of FGM? If yes, how did you hear about it?
2. What do you think FGM is all about?
3. What are the reasons for the FGM practice in your community?
4. What do you think about the level of FGM practice in your community?
5. Have you undergone Female Genital Mutilation (Circumcision)?
6. How did you feel when FGM was done on you?
7. Did your daughter experienced any health complication after FGM was performed on her?
8. Are you aware of the laws against FGM practice?
9. Do you think or feel FGM should be continued? If yes, why?

Lead City University Ibadan DO NOT COPY

Appendix 1I: Research Questionnaire (Yoruba Language version)

Iwe ibeere Iwadi

Akọle: Iwe Ibeere lori Iwa, Imọ ati Ise/Asa ti Didabẹ (Gige Abẹ) fun Obinrin (AKPFGMQ)

Ẹka ti Ilera Awujọ, Lead City Yunifasiti, Ibadan, Ipinlẹ Ọyọ.

Eyin Oludahun,

Ibeere lati kopa ninu isẹ-Iwadi kan

Mo je akekọ fun agbakun oye imọ ijinlẹ kini ni ile-ẹkọ giga ti a mẹnuba loke ati pe mo nse iwadi Iwa, Imọ ati Asa (Ise) ti Didabẹ/Gige Abẹ fun Obinrin laarin awọn iya. Awon idahun rẹ ni a nilo bi wọn ti se pataki to fun aseyọri isẹ iwadi yii. O seun fun ifọwọsowọpọ rẹ.

Emi ni tiẹ ni tootọ,

Oluwadi

Abala A: Apejuwe Ipile Awọn Abuda

1. Ọjọ-ori (ọdun): ……..

2. Ẹsin: Kirisiteni ( ) Isilamu ( ) Ibilẹ ( ) Awọn miiran (Sọ nipato) …….

3. Eya: Yoruba ( ) Igbo ( ) Hausa ( ) Edo ( ) Awọn miiran (Sọ nipato) ……

4. Ipo Igbeyawo: Mo ti se igbeyawo ( ) Iyapa ( ) Ikọraenisilẹ ( ) Awọn miiran (Sọ nipato) ……

5. Iru igbeyawo wo: Oniyawo kan ( ) Oniyawo pupọ ( )

6. Eto Idile: Idile aladanikangbe ( ) Idile to gbooro ( )

7. Ipele ti o ga julo ti Ẹkọ: Ẹkọ ti ile-iwe giga ( ) Awọn miiran (Sọ nipato) …….

8. Isẹ: Agbẹ ( ) Isẹ akọsẹmọsẹ ( ) Isẹ afarase ( ) Isowo ( ) Iyawo ile ( )

Alaini isẹ lọwọ ( )

9. Ipo ọrọ-aje lawujọ (Owo to n wọle ni osu kan):
……..

10. Bi ẹbi se tobi to: ……

Lead City University Ibadan DO NOT COPY

11. Onka (iye) ọmọbinrin to wa laaye ……..

12. Ọjọ-ori awọn ọmọbinrin

1	2	3	4

Abala B: Ise ti Didabẹ (Ikọla abẹ) fun obinrin

KOKO: FG=Faramọ Gidigidi (4), F=Faramọ (3), SR=Salaifaramọ Rara (2), S=Salaifaramọ (1)

		3	**2**	**1**	**0**
ONKA NI TẸLENTẸLE	**Awọn Alaye**	Bẹẹni	**Bẹẹkọ**	**Aiseipinnu**	**Emi ko mọ**
1	Didabẹ (Gige abẹ) fun obinrin ni a si nse ni ile mi				
2	Didabẹ (Gige abẹ) fun obinrin jẹ ise (asa) ti o ti pẹ ni idile mi				
3	Mo ti se tabi pinnu lati se isẹ didabẹ obinrin fun (awọn) ọmọbinrin mi				
4	Pupọ ninu awon obinrin ni agbegbe mi ni o ti se isẹ idabẹ obinrin				
5	Didabẹ (Gige abẹ) obinrin jẹ dandan fun awọn obinrin ni ile ati agbegbe mi				
6	Awọn orisirisi isẹ (asa) didabẹ (gige abẹ) obinrin ni a nse ni agbegbe mi				
7	Didabẹ (Gige abẹ) obinrin ni wọn nse ni ọjọ-ori kekere ni agbegbe mi				

Abala D: Awọn idi fun naa fun ise (asa) didabẹ/ gige abẹ fun obinrin

KOKO: Bẹẹni = 3, Bẹẹkọ = 2, Aisepinnu = 1, Emi ko mọ = 0

		3	**2**	**1**	**0**
ONKA NI	**Awọn Alaye**	**Bẹẹni**	**Bẹẹkọ**	**Aiseipinnu**	**Emi ko mọ**

Lead City University Ibadan DO NOT COPY

TẸLENTẸLE					
1	Didabẹ (Gige abẹ) fun obinrin ni a nse nitori ibẹru oyun kutukutu ati pansaga laarin awujọ awọn obinrin				
2	Didabẹ (Gige abẹ) fun obinrin ni a nse lati se itoju-mimọ ati ilera ti o dara ni agbo awọn obinrin				
3	Didabẹ (Gige abẹ) fun obinrin se abo-itọju iyi idile ati igbelarugẹ ekọ-iwa lawujọ ati ọmọluwabi ninu obinrin				
4	Didabẹ (Gige abẹ) fun obinrin mu iseese ilọsiwaju to dara ba igbeyawo awọn ọmọbinrin				
5	Didabẹ (Gige abẹ) fun obinrin ni wọn nse lati se ifilọlẹ awọn ọmọbinrin sinu arin ojulowo obinrin				
6	Didabẹ (Gige abẹ) fun obinrin ni wọn nse lati jẹ ki wọn jẹ itẹwọgba laarin awọn ẹlẹgbẹ wọn ni awon awujọ ipade/awọn ode ni agbegbe mi				
7	Didabẹ (Gige abẹ) fun obinrin ni wọn nse lati mu ki pipọsi ba igbadun ibalopọ ọkunrin				
8	Didabẹ (Gige abẹ) fun obinrin mu ore-ofẹ iloyun ati igbega ba iwalaaye ọmọ				
9	Wiwa naa ti idọ abẹ jẹ ki ọdọbinrin beere fun ibalopọ nigbagbogbo				
10	Didabẹ (Gige abẹ) fun obinrin ni a nse nitori asa ibilẹ ati awọn igbagbọ ninu ẹsin				

Abala E: Iriri ti didabẹ (gige abẹ) fun obinrin

1. Didabẹ (Gige abẹ) fun obinrin ni a se fun mi. Bẹẹni ( ) Bẹẹkọ ( ) Aiseipinnu ( ) Emi ko mọ ( )

Lead City University Ibadan DO NOT COPY

2. Didabẹ (Gige abẹ) fun obinrin ni a se fun mi nipasẹ Oloola (Onisẹ-abẹ) ibilẹ. Bẹẹni ( ) Bẹẹkọ ( )

Aiseipinnu ( ) Emi ko mọ ( )

3. Didabẹ (Gige abẹ) fun obinrin ni a se fun mi nipasẹ Eleto Ilera. Bẹẹni ( ) Bẹẹkọ ( )

Aiseipinnu ( ) Emi ko mọ ( )

4. Njẹ didabẹ (gige abẹ) fun obinrin jẹ iriri irora fun mi? Bẹẹni ( ) Bẹẹkọ ( )

Aiseipinnu ( ) Emi ko mọ ( )

5. Mo ni iriri awon ikọlu ipenija ilera leyin sise isẹ didabẹ (gige abẹ) obinrin fun mi Bẹẹni ( )

Bẹẹkọ ( ) Aiseipinnu ( ) Emi ko mọ ( )

6. Njẹ omobinrin mi ni iriri eyikeyi ikolu ipenija ilera leyin ti o se isẹ idabẹ (gige abẹ) obinrin fun

ọmọbinrin mi? Bẹẹni ( ) Bẹẹkọ ( ) Aiseipinnu ( ) Emi ko mọ ( )

Abala E: Imo si Didabẹ/Gige abẹ fun obinrin

KOKO: Bẹẹni = 3, Bẹẹko = 2, Aisepinnu = 1, Emi ko mọ = 0

		3	**2**	**1**	**0**
ONKA NI TẸLEN TẸLE	**Awọn Alaye**	**Beeni**	**Beeko**	**Aisepinnu**	**Emi ko mọ**
1	Mo ni imo nipa asa abe dida fun omobinrin				
2	Orisirisi iru isẹ idabẹ fun obinrin lo wa				
3	Idabẹ/Gige abẹ fun obinrin ni yiyọ diẹ ni apakn ẹya abẹ obinrin to ma n gbera dide				
4	Idabẹ/ Gige abẹ fun obinrin ni fifale/didele oju abẹ obinrin				
5	Ti wọn ko ba yọ/ge idọ yoo dagba ni fifẹ bi oko				
6	Didabẹ/ Gige abẹ fun obinrin lewu				

Lead City University Ibadan DO NOT COPY

7	Didabẹ/ Gige abẹ fun obinrin se igbelarugẹ fun imọtoto fun obinrin				
8	Didabẹ/ Gige abẹ fun obinrin n se iranlọwọ fun idabobo wundia obinrin titi di akoko igbeyawo				
9	Didabẹ/ Gige abẹ fun obinrin se idena pansaga laarin awọn obinrin				
10	Didabẹ/ Gige abẹ fun obinrin jẹ ki obinrin yẹ fun igbeyawo				
11	Didabẹ/ Gige abẹ fun obinrin le jẹ okunfa airọmọbi (ailesabiyamọ)				
12	Didabẹ/ Gige abẹ fun obinrin se pataki nitori ọmọ le ku ti o ba fi ori rẹ kan idọ obinrin lakoko ibimọ				
13	Didabẹ/ Gige abẹ fun obinrin le yọri si awọn ikọlu ipenjia buburuju				
14	Didabẹ/ Gige abẹ fun obinrin se ifarahan obinrin si ewu akọran awọn arun				
15	Awon obinrin to dabẹ ki saba gbe atagba awọn arun akọran				
16	Didabẹ/ Gige abẹ fun obinrin le fa ki akoko ikunlẹ gun si lakoko ibimọ				
17	Didabẹ ko (ni ipa iyato) mu iyatọ sẹlẹ lakoko ibimọ				

Lead City University Ibadan DO NOT COPY

Abala Ẹ: Iwa si Didabẹ/Gige abẹ fun Obinrin

KOKO: FG=Faramọ Gidigidi (4), F=Faramọ (3), SR=Salaifaramọ Rara (2), S=Salaifaramọ (1)

		4	**3**	**2**	**1**
ONKA NI	**Awọn Alaye**	**FG**	**F**	**SR**	**S**

TẸLEN TẸLE					
1.	Didabẹ/Gige abẹ fun obinrin jẹ ise (asa) todara ti a gbọdọ tọju				
2.	Idabẹ fun obinrin ni o yẹ ki a se iwuri fun				
3.	Ọmọbinrin ti ko ti se isẹ idabẹ ni o yẹ ki a dẹyẹsi				
4.	Didabẹ/Gige abẹ fun ọmọbinrin ni o nilo ki a fi ofin gbero				
5.	Didabẹ/Gige abẹ fun ọmọbinrin se Pataki				
6.	O jẹ nitori anfani to dara julọ ti obinrin to se isẹ idabẹ				

Abala G: Imọ nipa awọn ofin naa ti o lodi si Didabẹ/ Gige abẹ fun obinrin

KOKO: Bẹẹni = 3, Bẹẹkọ = 2, Aisepinnu = 1, Emi ko mọ = 0

		3	**2**	**1**	**0**
ONKA NI TẸLENTẸLE	**Awon Alaye**	**Bẹẹ ni**	**Bẹẹk ọ**	**Aisepin nu**	**Emi ko mọ**
1	Njẹ o mọ awọn ofin to lodi si ise (asa) didabẹ/ gige abẹ fun obinrin ni Naijiria?				
2	Se o mọ pe awọn ofin wa to lodi si ise (asa) didabẹ/ gige abẹ fun obinrin ni Ipinlẹ Ọyọ?				
3	Njẹ awọn eniyan gba awọn ofin to lodi si ise (asa) didabẹ/ gige abẹ fun obinrin?				
4	Njẹ awọn ofin ti o lodi si ise (asa) didabẹ/ gige abẹ fun obinrin wa ni imuse ni agbegbe rẹ?				
5	Njẹ awọn ofin ti se iranlọwọ lati se atunse si ise (asa) didabẹ/ gige abẹ fun obinrin ni agbegbe rẹ bi?				

Lead City University Ibadan DO NOT COPY

AWỌN IBEERE IFỌRỌWANILẸNUWO

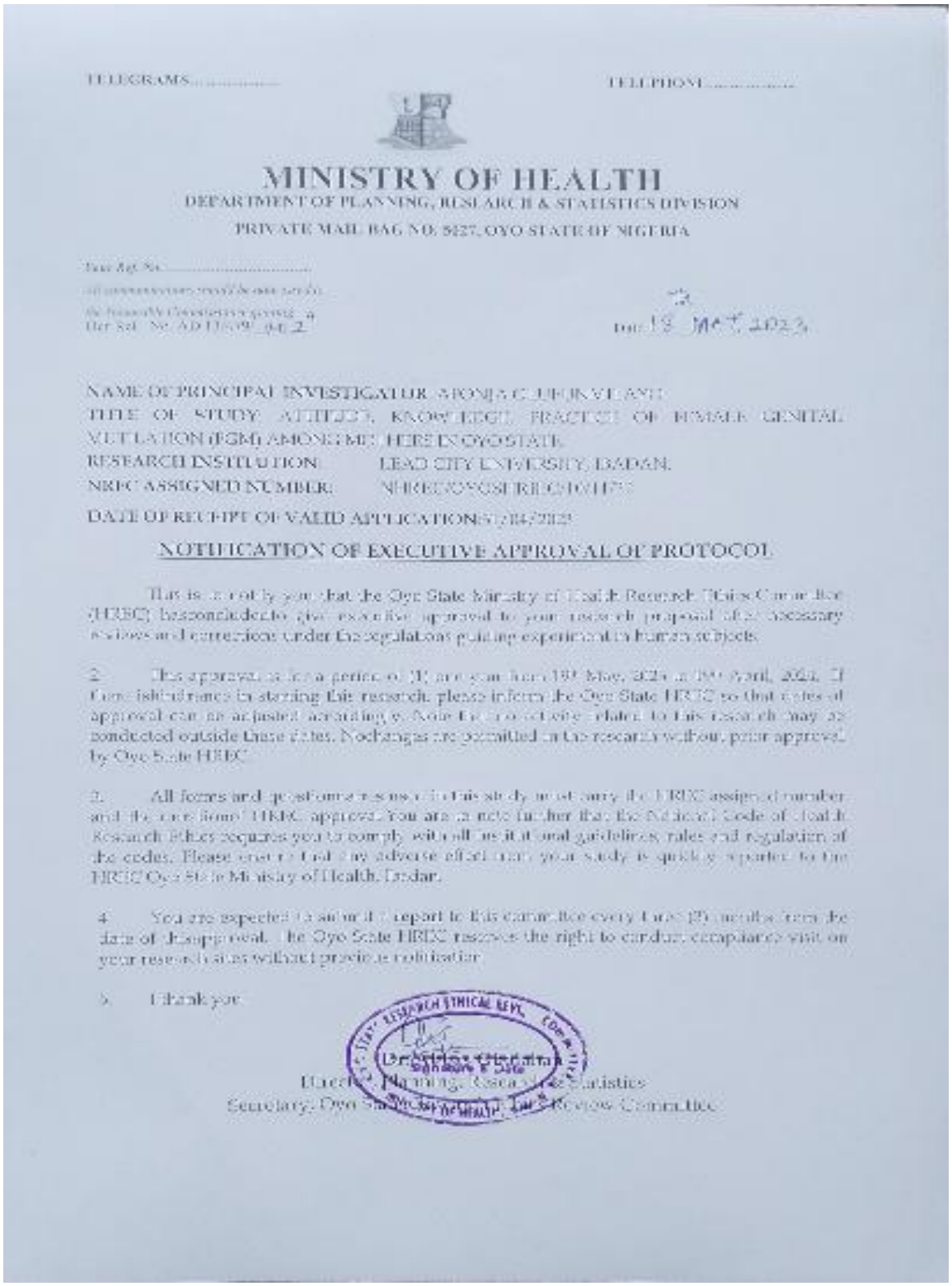
Eyin Oludahun (Awọn Iya),

Jọwọ lo akoko diẹ lati dahun si awọn ibeere ti a salaye ni isalẹ. O Seun

1. Njẹ o ti gbọ ise idabẹ (gige abẹ) fun obinrin ri? Ti o ba jẹ bẹẹni, bawo ni o ti gbọ nipa rẹ?
2. Kini o ro pe ise idabẹ (gige abẹ) obinrin gbogbo jẹ?
3. Kini awọn idi ti wọn fi nse ise idabẹ (gige abẹ) obinrin ni adugbo rẹ?
4. Kini o ro nipa ipele ti ise idabẹ (Gige abẹ) obinrin ni agbegbe rẹ?
5. Njẹ o ti se ise idabẹ (gige abẹ) fun obinrin bi?
6. Bawo lo se ri ni ara rẹ nigba ti wọn se iṣẹ idabẹ (gige abẹ) obinrin fun ọ?
7. Njẹ ọmọbinrin rẹ ni iriri eyikeyi ikọlu ipenija ilera leyin ti wọn se iṣẹ idabẹ (gige abẹ) obinrin fun?
8. Njẹ o mọ awọn ofin ti o lodi si ise idabẹ (gige abẹ) fun obinrin?
9. Se o ro pe tabi lero pe ise idabẹ (gige abẹ) fun obinrin yẹ ki o tẹsiwaju bi? Ti o ba jẹ bẹẹni, kilode?

Lead City University Ibadan DO NOT COPY

Appendix III: Notification of Executive Approval of Protocol



TELEGRAMS..... TELEPHONE.....

MINISTRY OF HEALTH

DEPARTMENT OF PLANNING, RESEARCH & STATISTICS DIVISION

PRIVATE MAIL BAG NO. 5127, OYO STATE OF NIGERIA

Your Ref. No.....

Our Ref. No. AD 13/479/Vol.2

Date: 13 MAY 2023

NAME OF PRINCIPAL INVESTIGATOR: AYONIJA OLUFUNKE VICTORIA

TITLE OF STUDY: ATTITUDES, KNOWLEDGE, PRACTICES OF FEMALE GENITAL MUTILATION (FGM) AMONG WOMEN HERE IN OYO STATE.

RESEARCH INSTITUTION: LEAD CITY UNIVERSITY, IBADAN.

NHREC ASSIGNED NUMBER: NHREC/OYOSERB/04/2023

DATE OF RECEIPT OF VALID APPLICATION: 03/4/2023

NOTIFICATION OF EXECUTIVE APPROVAL OF PROTOCOL

That is to notify you that the Oyo State Ministry of Health Research Ethics Committee (HREC) has considered the executive approval to your research proposal after necessary reviews and corrections under the regulations guiding experimentation on human subjects.

2. This approval is for a period of 1[illegible] one year from 10th May, 2023 to 09th April, 2024. If there is/are any variances in starting this research, please inform the Oyo State HREC so that dates of approval can be adjusted accordingly. Note that no activities related to this research may be conducted outside these dates. No changes are permitted in the research without prior approval by Oyo State HREC.

3. All forms and questionnaires used in this study must carry the HREC assigned number and the executive approval. You are also to note further that the National Code of Health Research Ethics requires you to comply with all national guidelines, rules and regulations of the codes. Please note that any adverse effect that your study is quickly reported to the HREC Oyo State Ministry of Health, Ibadan.

4. You are expected to submit a report to this committee every three (3) months from the date of this approval. The Oyo State HREC reserves the right to conduct compliance visit on your research sites without previous notification.

5. Thank you.

Director, Planning, Research & Statistics
Secretary, Oyo State Ministry of Health, Ethics Review Committee

Appendix IV: Consent Form

Questionnaire Consent Form

I understand that I have been asked by Mrs. **Olufunmilayo Doyinsola AFONJA** from Lead City University, Department of Public Health to participate in a PhD research study designed to examine the **Attitude**, **Knowledge and Practice of Female Genital Mutilation (FGM) among Mothers in Oyo State**

I have read the consent form and it was further explained to me. I have also had the opportunity to ask questions about it, and my questions have been answered to my satisfaction. I therefore consent voluntarily to participate in this study and I understand that I have the right to withdraw at any time.

I understand that the researcher, hereby named **Olufunmilayo Doyinsola AFONJA**, will maintain my **anonymity** with regard to my responses to Questionnaire items.

I hereby give my permission in the form of my signature below:

Participant Name _____

Signature or thumbprint if appropriate _____

Date _____

Witness Name _____

Signature _____

Date _____

Investigator Name _____

Signature _____

Date _____

Contact Details of Principal Investigator:
Name: Olufunmilayo Doyinsola AFONJA
Phone No: +234 8065197513
E-mail: 3phuhonez@gmail.com

Lead City University Ibadan DO NOT COPY

Appendix V: Pictures of Researcher and Research Assistants in the Field



Research assistant distributing instruments to mothers in Oyo West LGA



Mothers with research instruments in Kajola LGA



Research assistant distributing instruments to mothers in Kajola LGA



A research assistant interviewing a mother in Ibadan North LGA



A research assistant interviewing a mother in Ibadan North LGA



The Research Team before one of the Health Education Sessions in Kajola LGA



The Research Team after one of the Health Education Sessions in Kajola LGA



Bio-data

A. Personal data

1. Full Name: Olufunmilayo Doyinsola AFONJA

Home Address: 38, Shoun Ajagungbade Street, New Bodija, Ibadan

E-mail Address: 3pubonez@gmail.com

Phone number: +234 (0) 8065197513

2. Date and Place of Birth: 28th October, 1965

3. Nationality: Nigerian

4. Name and Address of Next of Kin: AFONJA, Oyindamola Mofeyintoluwa
38, Shoun Ajagungbade Street, New Bodija, Ibadan

B. Educational Background

	Institutions Attended	Qualification Obtained	Date
1.	Lead City University, Oyo State	(PhD in Public Health in view)	2020-date
2.	Lead City University, Oyo State	(B.Sc Health Education)	2016-2018
3.	University of Ibadan, Nigeria	M.Ed in Community Development	2011-2014
4.	Imo State University, Owerri	B.Sc Nursing Administration	2000-2003
5.	University College Hospital, Ibadan	Diploma in Education (PHCT)	2003-2004
6.	School of Hygiene, Eleyele, Ibadan	Higher Diploma in Comm. Health	1995-1996
7.	School of Midwifery, UCH, Ibadan	Diploma in Midwifery	1992-1993
8.	School of Nursing, UCH, Ibadan	Diploma in Nursing	1985-1988
9.	Abadina College University of Ibadan	SSCE	1979-1984

C. Working Experience with Dates

	Work Place	Date
1.	Community Health Officers' Training Programme, UCH, Ibadan	2004-date

Lead City University Ibadan DO NOT COPY

2. School of Health Information Management, UCH Ibadan (Guest lecturer) 2004-2006
3. Public Health Nursing Practice, UCH Ibadan 1997-2004
4. Clinical Practice, Mission Medical Centre, Ibadan 1988-1992
5. Clinical Practice Third Eye Clinic, Ibadan 1994-1995
6. University College Hospital, Ibadan 1997

D. Awards and Fellowships (If any):

i. Best Graduating Student in Teaching Practice by Primary Health Care Tutor's Course at the University College Hospital, Ibadan
2004
ii. Award of Excellence by University College Hospital, Ibadan
2007

E. Membership of Academic Professional Bodies:

i. National Association of Community Health Practitioners of Nigeria (NACHPN)
ii. Primary Health Care Tutors' Association of Nigeria (PHCTAN)
iii. Teachers' Registration Council of Nigeria (TRCN)

F. Thesis/Dissertation:

i. Attitude, Knowledge and FGM practice among Mothers in Oyo State
ii. Obstructive Sleep Apnea and Factor for Sleep Interruption among Commercial Drivers in Lagelu Local Government, Ibadan, Oyo State (Dissertation submitted for the award of B.Sc degree)
iii. Knowledge, Attitude and Practice of Self-Medication among Undergraduates of University of Ibadan (Dissertation submitted for the award of M.Ed degree)
iv. Factors influencing Utilization of Emergency Contraceptive Pills among Married Women in Ibadan North Local Government, Oyo State (Dissertation submitted for the award of B.Sc degree)

G. Papers Presented

i. Understanding the implications of Menopause on sexual intercourse in a marriage, April, 2015
ii. Benefits of Genotype Screening before Marriage, September, 2019
iii. Roles of Community Health Officers in Mitigating Gender Based Violence, March 2021

Lead City University, Ibadan DO NOT COPY

H. Other Research Conducted (unpublished)

i. The Role of Knowledge on Attitude of Mothers' Towards Exclusive Breastfeeding in Oyo South Local Government Area of Oyo State
ii. Factors Influencing Underutilization of Primary Healthcare Services in Ibadan South East Local Government Area of Oyo State
iii. Determinants of Adolescent Sexual Health Behaviour in Lagelu Local Government Area of Oyo State
iv. Awareness and Knowledge of Adolescents Towards the Utilization of Youth Friendly Services in Ona-Ara Local Government Area of Oyo State
v. Factors Contributing to Ineffective Community Mobilization for Prompt Health Care Seeking Behaviour in Oje Owode, Oyo State
vi. Ergonomic Interventions as Determinants for Safe Work Environment in Iseyin, Oyo State

I. Publications:

- Ward Development Committees as 4th Level Governance of Primary Health Care in Nigeria: The Rivers State Model September, 2024

- Evaluating the Impact of Electronic Medical Records (EMRs) on the Quality of Health care Services at the Federal Medical Centre, Abeokuta. September, 2024

J. Books/Monographs: Nil

K. Scholarly Articles: Nil

L. Notable scholarly or Professional Accomplishments: Nil

M. Major Conferences/Workshops Attended:

i. National Scientific Training for Primary Health Care Tutors (2022): Application of Digital Technology for Effective Teaching and Learning
ii. National Scientific Conference for Community Health Practitioners (2022): Use of Standing orders, a Tool for Effective Clinical Management
iii. Continuing Professional Development Programme (2017): The role of Community Health Practitioners towards Effective Control and Management of HIV/AIDS in Nigeria
iv. Workshop/Refresher Course for Primary Health Care Tutors and Primary Health Care Practitioners (2012): Current Concepts in its Management of Primary Health.
v. National Association of Community Health Practitioners of Nigeria (2012): Combating and Containing the Spread of Ebola and other Communicable Diseases in Nigeria
vi. Primary Health Care Tutors' Alumni Association (2012): Primary Health Care Workers – The Mirror of Grassroot Health care Implication on Community Health Education

Lead City University Ibadan DO NOT COPY

vii. Occupational Health Training (1995, 1997): Occupational Health Course
viii. Family Planning Training Programme (1992): Family Planning Provider

N. **Date and Signature: 20/09/2023**/AFONJA O.D.

Lead City University Ibadan DO NOT COPY

The University Compliance Certification

This is to certify that the thesis by **Olufunmilayo Doyinsola AFONJA** in the Department of Public Health, Lead City University, Ibadan, Oyo State, Nigeria is in full compliance with the approved University Format and Style.

Signature	Date

Lead City University Ibadan DO NOT COPY

Afonja_Olufunmilayo_Doyinsola LCU Library

ORIGINALITY REPORT

20%	21%	9%	8%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	www.researchgate.net Internet Source	5%
2	ijarbs.com Internet Source	1%
3	www.sfjesgs.com Internet Source	1%
4	www.ppacjournals.org Internet Source	1%
5	Submitted to Kwame Nkrumah University of Science and Technology Student Paper	1%
6	en.wikipedia.org Internet Source	1%
7	www.diva-portal.org Internet Source	1%
8	www.science.gov Internet Source	1%
9	Tobias K. Axelsson, Sofia Strid. "Minority migrant men's attitudes toward female	1%

genital mutilation: Developing strategies to engage men", Health Care for Women International, 2019
Publication

10	hdl.handle.net Internet Source	1 %
11	globalhistorydialogues.org Internet Source	1 %
12	Chibuzor Christopher Nnanatu, Glory Atilola, Paul Komba, Lubanzadio Mavatikua et al. "Evaluating changes in the prevalence of female genital mutilation/cutting among 0-14 years old girls in Nigeria using data from multiple surveys: A novel Bayesian hierarchical spatio-temporal model", PLOS ONE, 2021 Publication	1 %
13	Rhoda Robinson, Oluwasijibomi Paul Ojajuni, Isaiah Oluwatobi Owolabi, Oluwatomi Olunuga, Emmanuel Iyiola Oni. "Assessing the Knowledge and Intention towards the Continuation of FGM Practice among Young Girls in South West Nigeria", Open Journal of Social Sciences, 2022 Publication	1 %
14	www.annalsofhealthresearch.com Internet Source	1 %

279

15	Isi Omorodion Francisca. "Knowledge and perceptions of female genital mutilation among African immigrant women in Windsor, Canada", International Journal of Sociology and Anthropology, 2020 Publication	1 %

14	www.annalsofhealthresearch.com Internet Source	1 %
15	Isi Omorodion Francisca. "Knowledge and perceptions of female genital mutilation among African immigrant women in Windsor, Canada", International Journal of Sociology and Anthropology, 2020 Publication	1 %
16	knowledgecommons.popcouncil.org Internet Source	1 %
17	Submitted to University of Southampton Student Paper	1 %
18	juniperpublishers.com Internet Source	1 %

Exclude quotes	Off	Exclude matches	< 1%
Exclude bibliography	On		

Lead City