SARAH EYIENE IDENYI

NEAR EAST UNIVERSITY

INSTITUTE OF GRADUATE STUDIES

DEPARTMENT OF NURSING

DETERMINING THE ATTITUDES OF IMMIGRANT AFRICAN STUDENTS TOWARDS FEMALE GENITAL MUTILATION

M.Sc. THESIS

SARAH EYIENE IDENYI

Nicosia

January, 2025

MASTER THESIS 2025

NEAR EAST UNIVERSITY
INSTITUTE OF GRADUATE STUDIES
DEPARTMENT OF NURSING

DETERMINING THE ATTITUDES OF IMMIGRANT AFRICAN STUDENTS TOWARDS FEMALE GENITAL MUTILATION

M.Sc. THESIS

SARAH EYIENE IDENYI

Supervisor
Asist. Prof. Dr. DİLAY NECİPOĞLU

Nicosia
January, 2025

Approval

We certify that we have read the thesis submitted by Sarah Eyiene Idenyi titled "**Determining the Attitudes of Immigrant African Students Towards Female Genital Mutilation**" and that in our combined opinion it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Nursing Sciences.

Examining Committee	Name-Surname	Signature
Head of the Committee:	Prof Dr Hatice BEBİŞ Doğu Akdeniz Üniversitesi	
Committee Member*:	Doç Dr Ezgi BAĞRIAÇIK Yakın Doğu Üniversitesi	
Supervisor:	Yrd Doç Dr Dilay NECİPOĞLU Yakın Doğu Üniversitesi	

Approved by the Head of the Department

29/01/2025

Yrd Doç Dr Dilay NECİPOĞLU

Head of the Department

Approved by the Institute of Graduate Studies

...../...../ 20...

Prof Dr Kemal Hüsnü Can Başer

Head of the Institute of Graduate Studies

Declaration Of Ethical Principles

I hereby declare that all information, documents, analysis and results in this thesis have been collected and presented according to the academic rules and ethical guidelines of Institute of Graduate Studies, Near East University. I also declare that as required by these rules and conduct, I have fully cited and referenced information and data that are not original to this study.

Sarah Eyiene Idenyi
25/01/2025

Acknowledgement

With the utmost sincerity I want to extend my gratitude to my supervisor, Asist. Prof. Dr. Dilay Necipoğlu, for her everlasting support, guidance, and encouragement. My entire work on this paper is a result of your guidance and I'm indebted for the role you played in making this work get accomplished.

To my family, thank you so much for your unwavering support, love, sacrifice, and drive. Thank you for trusting me, all of you. I am positive I would not have gotten to this point without your help and prayers.

Thank you Mr. Corban for your tireless encouragement and wisdom, kindness on my path in life. I am extremely grateful for your support, and your impact has been incredible. would not succeed today.

I would like to take off my hat to the Department of Nursing, Dr. Kemal ELYELI along with all the other staff members. Looking back, I owe them so much, without their resources and guidance I wouldn't have had the chance to be curious about learning and researching.

Lastly, a big thank you to my friends and well-wishers for always being there for me. Your encouragement, laughter, and understanding have made every obstacle so much easier to run at.

Abstract

Determining The Attitudes Of Immigrant African Students Towards Female Genital Mutilation

Sarah Eyiene Idenyi

MSc, Department of Nursing

January 2025, 76 pages

Female Genital Mutilation/Cutting (FGM/C) continues as an essential public health matter that generates cultural and psychological along with physical repercussions for African communities. The purpose of this study is to determine the general attitudes of African students studying in Northern Cyprus towards FGM and to determine the relationship of the determined attitude with the descriptive characteristics. Near East University hosted 450 African nursing students as participants for a cross-sectional design. A structured questionnaire gathered responses which included data about socio-demographic elements and ratings on the FGM/C Attitudes Scale. The research team analyzed data through descriptive statistics combined with t-tests and inferential techniques which ran on SPSS version 25.0. Data analysis showed that participants from the younger group aged 23–29 made up 50.9% of the sample while females made up 68.4% of the total population. Most participants were West African (64.2%) and Christian (71.8%). FGM/C data obtained from female participants showed an 8.7% rate with "Type 4" FGM/C identified as the most common (3.8%). The same FGM/C practice had been experienced by 15.8% of participants and psychological and sexual therapy were received by 4.9% and 5.1% of those same subject. Statistical testing established a meaningful connection between FGM/C viewpoint and gender attributes and cultural descent along with religious affiliation ($p < 0.05$). The study suggested awareness about FGM/C and linked detrimental effects stands high. However, socio-demographic elements produce substantial differences in public opinion. Educational efforts coupled with supporting programs focused on FGM/C emotional realities should be launched specifically in university institutions. Future research should create intervention methods which employ cultural sensitivity to both stop the practice and eliminate its existence.

Keywords**:** Female genital mutilation, attitude, immigrant, African students

Özet

Göçmen Afrikalı Öğrencilerin Kadın Genital Sünnetine Karşı Tutumlarının Belirlenmesi

Sarah Eyiene Idenyi

Yüksek Lisans, Hemşirelik Fakültesi

Ocak 2025, 76 sayfa

Kadın Genital Kesilme/Sünneti, Afrika toplumları için kültürel ve psikolojik olduğu kadar fiziksel yankılar da yaratan önemli bir halk sağlığı sorunu olarak devam etmektedir. Bu çalışmanın amacı, Kuzey Kıbrıs'ta öğrenim gören Afrikalı öğrencilerin kadın sünnetine ilişkin genel tutumlarını belirlemek ve belirlenen tutumun tanımlayıcı özelliklerle ilişkisini saptamaktır. Çalışma tanımlayıcı- kesitsel olarak yürütüldü. Evrenini Yakın Doğu Üniversitesinde eğitim gören N=450 Afrikalı hemşirelik öğrencisi oluşturdu. Sosyo-demografik veri formu, 'Kadın Sünnetine Yönelik Tutum Ölçeği' ve kadın cinsiyet grubundaki öğrenciler için genital sünnete yönelik bilgi formu ile veriler toplandı. Etik izinler alındı. Toplanan veriler SPSS 25.0 programında analiz edildi. Katılımcıların %68.4'ünün kadın grupta olduğunu ve genel örneklemin 23-29 yaş aralığında olduğu saptandı. Katılımcıların çoğu Batı Afrikalı (%64,2) ve Hristiyandı (%71.8). Kadın katılımcılardan elde edilen FGM/C verileri %8.7'lik bir oran gösterdi ve en yaygın olanı "Tip 4" FGM/C (%3,8) olarak belirlendi. İstatistiksel testler, FGM/C bakış açısı ile cinsiyet özellikleri ve kültürel köken ile dini bağlılık arasında anlamlı bir bağlantı kurdu ($p < 0.05$). Çalışma, FGM/C ve bağlantılı zararlı etkiler hakkındaki farkındalığın yüksek olduğunu öne sürdü. Ancak sosyo-demografik unsurlar kamuoyunda önemli farklılıklara yol açar. FGM/C duygusal gerçekliklerine odaklanan destekleyici programlarla birleştirilmiş eğitim çabaları özellikle üniversite kurumlarında başlatılmalıdır. Gelecekteki araştırmalar, hem uygulamayı durdurmak hem de varlığını ortadan kaldırmak için kültürel duyarlılığı kullanan müdahale yöntemleri yaratmalıdır.

Anahtar Kelimeler: Kadın sünneti, tutum, göçmenlik, Afrikalı öğrenciler

Table of Contents

LIST OF TABLES

Page

LIST OF ABBREVIATIONS

FGM:	Female genital mutilation
FGM/C:	Female genital mutilation/cutting
UNICEF	United nations children's fund
UN	United nations
WHO	World health organization
UNFPA	United nations population funds
UK	United Kingdom
EU	European Union
PTSD	Post-traumatic stress disorder
DSM	Diagnostic and Statistical Manual of Mental Disorders
SDG	Sustainable Development Goal
YLL	Years of life lost
UTI	Urinary tract infection
CBT	Cognitive Behavioral Therapy
HIV	Human immunodeficiency virus

CHAPTER I

Introduction

Female genital mutilation/cutting (FGM/C), often known as female circumcision, is a non-medical treatment that involves additional injuries to the female genital organs as well as the removal of all or part of the external female genitalia (UNICEF, 2022). A/RES/67/146, a resolution outlawing female genital mutilation (FGM) globally, was adopted by the UN General Assembly in December 2012 (Barret et al., 2020). Its acceptance by the international community demonstrated a consensus that, in order to prevent FGM and safeguard women and girls, all nations must take "all necessary measures, including enacting and enforcing legislation to prohibit FGM" (Barret et al., 2020). FGM is universally acknowledged as a violation of human rights. As part of the UN Sustainable Development Goal 5, which aims to achieve gender equality and empower all women and girls, the resolution to stop FGM has been accepted (United Nations, 2016). 200 million women and girls worldwide are impacted by FGM, and during the next ten years, 30 to 70 million girls under the age of fifteen are expected to be at risk of the procedure (Shell-Duncan et al., 2016; UNICEF, 2016). Thirty nations in Africa, the Middle East, and Southeast Asia are home to a large concentration of the practice (UNICEF, 2016). Only three nations—Egypt, Ethiopia, and Indonesia—are home to half of all women who have experienced FGM (UNICEF, 2016).

The prevalence of FMG/C is declining, according to nationally representative data, yet this trend is not consistent across nations (Kandala et al., 2018). Four kinds of FGM/C have been identified, with the majority of cases occurring in girls between the ages of infancy and puberty (Odukogbe et al., 2017).

- The prepuce and/or the clitoral gland are removed completely or partially during a type I (clitoridectomy) procedure. Without removing the labia majora,
- Type II entails the partial or complete removal of the clitoral glans and labia minora. Infibulation.
- Type III, is characterized by the modification of the labia majora and minora to shorten the vaginal canal. The clitoral glans may also be removed.
- Any other hazardous, non-medical practice, including cauterization, pricking, and scraping, is included in Type IV (WHO, 2022).

Risks vary depending on the kind; kind III, the most severe, carries significant obstetric risks such as stillbirth, neonatal death, and newborn resuscitation, while Types I and II carry risks related to cesarean delivery and postpartum hemorrhage (Banks et al., 2006). Religious, societal, and cultural aspects contribute to the persistence of FGM/C (El-Dirani et al., 2022). Because FGM/C is associated with notions about morality, hygiene, and aesthetics, it is widely believed to improve marriage prospects. It is also thought to suppress sexual impulses and preserve virginity (WHO, 2022). Menstrual troubles, infertility, urinary issues, mental health issues, pregnancy complications, extreme pain, infection, septicemia, and even death are among the unfavorable health outcomes that have emerged from the surgery, which has no known health advantages (Lurie et al., 2020).

For women and girls, FGM/C also represents a financial burden throughout the course of their lives (Tordrup et al., 2022). Student perceptions together with their attitudes about FGM often determine how frequently this practice occurs because they will design future educational programs while training their successors.

In Nigeria, a country with high FGM practice, Ashimi et al. (2014) revealed that some northern Nigeria nursing students had difficulty recognizing and classifying FGM. Therefore, for better health outcomes, nurses' and midwives' key roles in terms of management and treatment of FGM cases could not be overemphasized. Balfour et al. (2016) posited that FGM is a subject that requires cultural expertise to facilitate communication, prevention, and care, in addition to evidence-based guidelines. Campinha-Bacote (2011) indicated that patient-centeredness and cultural competence improves quality of healthcare. Such an approach to care allows nurses to become sensitized to care of patients from diverse culture. The main goal of this investigation is to determine African students' opinions about female genital mutilation (FGM). The research investigation will focus on answering the listed questions.

Statement of the Problem

Cultural norms continue to practice female genital mutilation against women and girls despite serious medical conditions and psychosocial harm as described by the World Health Organization (2024). Oppressive customs and cultures sometimes prevent women and girls from receiving sexual and reproductive health information and education together with appropriate healthcare services which results in multiple health-related burdens including

physical, psychological, social-economic as well as biological challenges (Siristatidis et al., 2021). Many social problems linked to female genital mutilation (FGM), inheritance weddings and early marriages thrive more frequently in developing nations than in industrialized nations. Female genital mutilation stands as the leading traditional practice because it damages 200 million girls and women in 31 countries across the globe (Tordrup et al., 2022).

The practice of female genital mutilation continues to persist throughout developing regions even though experts expect its disappearance by 2030 from all age groups of women (Shabila, 2021). The practice of FGM occurs throughout 30 African nations since patrician cultural beliefs and norms prevent women from obtaining equal sexual and reproductive healthcare rights (Seidu et al., 2022). This results in three million females facing annual risk (Seidu et al., 2022). Women who undergo FGM may die from the complications which include sexual distress and septic shock as well as bleeding and extensive physical as well as psychological pain (Omigbodun et al., 2020).

FGM remains prevalent in African nations because these countries accept it culturally even when global efforts through lobbying and laws have attempted to abolish it (Dennis et al., 2021). African children who study abroad in Northern Cyprus develop opinions about this tradition because they encounter numerous cultural perspectives. The understanding of diaspora African students' attitudes remains essential because these students usually facilitate cultural interaction before making social advocacy claims. Research investigating how African students evaluate Female Genital Mutilation under different cultural requirements and academic demands remains scarce. Research has not established how cultural and population backgrounds affect African students' views regarding FGM.

Ashimi et al. (2014) indicated that nurses in tertiary health institutions in places like northern Nigeria lacked knowledge of FGM types; only 49,0% of these nurses could identify *Angurya* and *Gishiri* mutilations as types of FGM. Dike et al. (2012) posited that 51,3% of nursing and midwifery students in the Afikpo Ebonyi state of southeast Nigeria believed that FGM curtailed promiscuity. Therefore, evidence shows a lack of knowledge regarding care of women with FGM among nurses and midwives due to lack of appropriate training and guidelines regarding culturally sensitive care (Abdulcadir et al., 2014; Chidera, 2018; Zurynski et al., 2015). Lack of knowledge of FGM care among caregivers is not only present

in developing countries, but evidence shows a lack of culturally sensitive care for women with FGM in the Swiss healthcare system (Echeozo, 2023). The study holds critical significance because it investigates a distinct cross-cultural approach regarding FGM from African students studying at Northern Cyprus where diverse cultural and academic environments exist. Their perspective serves as a crucial source of data that describes how migration along with diverse normal exposure affects FGM beliefs thus supporting education program and policy design. Weaknesses in existing research are filled through this investigation while the analysis creates applicable strategies to combat FGM because it evaluates cultural customs alongside medical consequences.

Also, the care of women with FGM is a subject of controversy. Migrants from countries that practice FGM who reside in countries like Northern Cyprus lack appropriate obstetrics and gynecological care within the health system due to a lack of professional guidelines and culturally appropriate FGM information.

This study contributes to the growing academic foundation needed for responsible policy creation which seeks to stop FGM through investigations of FGM attitudes among Northern Cyprus-based African nursing students and their related demographic factors.

Purpose of the Study

The purpose of this study is to determine the general attitudes of African students studying in Northern Cyprus towards FGM and to determine the relationship of the determined attitude with the descriptive characteristics.

Research Questions/Hypotheses

To achieve the purpose of this study, the following research questions will be answered:

1. What is the Female Genital Mutilation/C(FGM) Scale total and sub-dimension scores of African students?
2. Is there a difference between the Female Genital Mutilation/C(FGM) Scale total and sub-dimension scores and socio-demographic characteristics of African students?

Significance of the Study

The research significance lies in its evaluation of how African students view female genital mutilation (FGM) because it offers new cultural and intergenerational perspectives.

Public relations approach development and instructional programs require knowledge of these mindsets to bring about effectiveness. The research serves to discover how enhanced understanding and education affects attitudes about FGM while exploring its impact on decreasing its practice frequency. The research enables activists together with educators and legislators to modify their strategies for effectively targeting younger educated African populations in their anti-FGM campaigns thus supporting international efforts towards ending FGM.

This study delivers essential knowledge regarding African student attitudes about Female Genital Mutilation (FGM) prevention since students represent a key population facing reform thus making this investigation fundamental for understanding FGM prevention strategies. The research investigates the mental perspectives of African youths with education before using their responses as an indicator to foresee cultural modifications. The research findings enable governments and activists to develop specific intervention strategies that educate FGM survivors in the next generation so they will become influential stoppers of FGM throughout Africa.

This study produces important findings about young Africans' stance regarding female genital mutilation (FGM) while servicing a key gap in research knowledge. The study provides scientific proof regarding education and awareness campaign effects on these perspectives to deliver an essential view of cultural and generational adjustments. The research findings will serve as markers to instruct future examinations regarding optimal cultural transformation techniques with their correlation to educational strategies that prevent improper conduct. The study augment scholarly exploration of FGM elimination by adding to worldwide discussions about gender equality and public health and human rights and function as a research paradigm for other settings.

Limitations

The first limitation to this study is that it was done in a single university and in one department. Also, this study is limited to the responses of the participants.

Definition of Terms

Female Genital Mutilation: refers to non-medical practices which destroy external genitalia tissue and harm genital organs by removing portions of tissue partially or totally from women's bodies.

Attitude: describes the established manner through which people think and feel about their environments.

Immigrant students: students who came from abroad to study abroad constitute immigrant students.

Descriptive Statistics: Northern Cyprus stay duration combined with educational level and cultural origins together with gender composition and religious affiliation and demographic data of age make up the descriptive characteristics.

The FGM/C Scale: represents a validated assessment tool to evaluate medical professional knowledge of Female Genital Mutilation/C.

Gishiri: Backward cutting of the vagina to widen the vaginal outlet (Ashimi, 2014).

Angurya: This is a type IV FGM which includes piercing of the clitoris and scraping of the labia and tissues surrounding the vaginal orifice (Ashimi et al., 2014).

CHAPTER II

Literature Review

Theoretical Framework

Female Genital Mutilation (FGM)

According to the World Health Organization (WHO), female genital mutilation (FGM) is defined as "procedures that aim at the partial or total removal of the external female genitalia or other injury to the female genital organs for non-medical reasons" (WHO 2023). FGM is a hazardous ancient custom that is practiced in many countries in Africa, Asia, and the Middle East, and it affects people of all religions and ethnicities (UNICEF, 2016). FGM has affected at least 200 million women and girls globally, and it is now recognized as an infringement on women and children rights that has no known health benefits and can cause serious harm to their physical and mental health. Female genital mutilation and cutting (FGM/C) is widely recognized as a health and human rights concern. Furthermore, the practice is common in at least 30 countries worldwide, including Europe, Australia, and North America. The actual number of girls and women who have experienced FGM is undetermined, however current global estimates indicate that more than two hundred million women and girls are currently subjected to medically unnecessary genital cutting (WHO, 2023; Earp and Johnsdotter, 2021; UNICEF, 2022). Over half of them live in only three countries: Indonesia, Egypt, and Ethiopia, where forty millions of these girls are under the age of 15 (UNICEF, 2020; Land of Women Switzerland, 2020). While the prevalence of FGM has generally decreased over the past three decades, not all countries have completely abolished the practice, and the rate of decline has not been uniform (United Nations Children's Fund (UNICEF) 2016). In some regions, FGM is nearly universal, with 99 percent of women being cut in Somalia, 98 percent in Guinea, 96 percent in Djibouti, 91 percent in Eritrea, and 90 percent in Sudan, Egypt, and Sierra Leone. The adverse health effects of male circumcision, which has been shown to limit HIV transmission, as well as the transmission of other sexually transmitted diseases, have been shown to limit HIV transmission, which is not a major health issue. These include bleeding and infections, which can be lethal in severe situations, as well as long-term birth and obstetric issues (Corno et al., 2021). By 2030, 68 million girls are predicted to be at danger of FGM except measures to eradicate it are stepped up (UNFPA

2020). According to UNFPA, the COVID-19 pandemic may also result in an extra two million cases of FGM that could have been avoided, bringing the total number of cases to 10 million by 2030. Although FGM is more common in Africa, it is recognized globally (92 countries have reported cases, UNICEF 2016), making it an undeniably global problem.

The projections for FGM in the UK were that roughly 60, 000 teenage girls aged 0–14 were potentially at risk of having FGM carried out and 103, 000 women aged 15–49 and 24, 000 women aged 50 and beyond were affected by what has been dubbed the "hidden crime" (HM Government 2016). The NHS Digital Report (2020) recorded 52,050 attendances between 1 April 2015 and 31 March 2020, and 24,420 individual women and girls discovered via the FGM Enhanced Dataset as having experienced or been victims of FGM. Since 2012, FGM has been thoroughly detached from the UK. Over a two-year period, a surveillance report found a small percentage of children with FGM. Similar to other data sources in this epidemiological surveillance investigation, we found a small percentage of children in the UK who had undergone female genital mutilation. Prior to coming to the UK, the great majority of people who are now practicing FGM were involved in the practice. Although these findings appear to support the notion that there is very little FGM occurring in the UK, they do not rule out the potential that some FGM may still occur (Hodes et al. 2021).

The issue of female genital mutilation transcends cultural, religious, and financial boundaries. Even if the pace of FGM prevalence drop has garnered international attention, the number of girls and women at risk of and suffering FGM continues to rise since the rate of FGM prevalence decline is much slower than the rate of population growth (Adelekan et al., 2022). The World Health Organization (WHO) divides FGM/C into four categories based on the extent of tissue removal or alteration. It is mostly divided into four categories: Type I: In Type I, the clitoris and/or prepuce are removed, either completely or partially (clitoridectomy); in Type II, the clitoris and labia minora are removed, either completely or partially, with or without the labia majora being removed (excision of the clitoris and labia majora); and in Type III, the vaginal orifice is narrowed by cutting and apposition of the labia minora and/or majora, with or without the clitoris. As a result, the resulting recognition of some discrepancies allowed for the creation of sub-divisions to achieve a more thorough and accurate classification (WHO, 2020). Despite becoming more prevalent in the industrialized

world, type IV FGM/C is usually not categorized as such and is not seen as a cut when talking about genital piercings. The European Union (EU) and the United Nations (UN) have joined forces to launch the global "Spotlight Initiative." Additionally, they established a shared objective in 2018 to eradicate FGM/C by 2030 (Spotlight Initiative 2018). According to published global statistics, between 10% and 15% of circumcised women have had infibulation (type 3), with the remaining women undergoing type 1, 2, or 4 FGC (Johnson-Agbakwu et al., 2023).

Historical Background of FGM Practices

FGM was practiced by the ancient Egyptian, Phoenicians and Hittites, according to historical precedents and social studies. In the 1940s and 1950s, FGM was commonly utilized to cure female deviances such as masturbation, lesbianism, and hysteria (Llamas, 2017). The higher prevalence of FGM in regions like as Northern Ghana has been ascribed to the region's cultural and ethnic fusion with Burkina Faso, Togo, and Mali, where the practice is more prevalent. Girls are reported to be pressured by customs and social conventions to get circumcised; women who choose not to get circumcised frequently face mockery from their peers and competitors (UNICEF, 2022). The practice is linked to Islam in some groups and to traditional religion in others (Directorate of National Statistics, 2020; Von der Osten-Sacken & Uwer, 2007). Some cultures provide guidance to circumcised girls in order to get them ready for marriage and fulfilling lives. They receive instruction on how to maintain themselves in society as well as take care of their families and homes (Sakeah et al., 2019). Before young females take on a more significant position in the community as wives and mothers, it is thought that they can be schooled in societal principles and values. However, because the belief is that the clitoris renders a woman masculine, uncircumcised women run the possibility of being treated like males; their funeral and burial ceremonies may be conducted as though they are men (Sakeah et al., 2019). It is also thought that the clitoris makes women aggressive and promotes promiscuity (Akweongo et al., 2001). This is crucial in a society that views extramarital and premarital sex as immoral (Anarfi, n.d.).

Although infibulation has extremely old origins, little is known about its precise origin or the reasons behind its adoption and continued use. According to Mehari (2018), infibulation seems to have been used as a method of controlling female libido in the past. According to a

Greek papyrus from the second century BC that is now housed in the British Museum in London, a certain Haramais of Sarapeum (Alexandria, Egypt) "gave money to the mother of a girl for dowry and the usual ceremony of circumcision" (Kenyon, 1893). This is the first documented instance of female infibulation. After visiting Egypt in 25 BC, the Greek historian and geographer Strabo disclosed on the practice of excision on Egyptian girls, stating that the Koloboi group (whose name means mutilated) on the Red Sea's west coast "mutilated the sexual glands and excised their women in the Jewish manner" (Widstrand, 1964, Knight, 2001). Philo of Alexandria, a Jewish philosopher who lived in Alexandria from 20 BC to 50 AD, also mentioned FGC at this time, stating that "the Egyptians, by the custom of their country, circumcise the marriageable youth and maid in the fourteenth (year) of their age, when the male begins to get seed, and the female to have a menstrual flow" (Knight, 2001). The Greek physician Galen (129–200 AD) is credited with another reference: "Egyptians consider it suitable to cut out the clitoris when it protrude out to a great extent in their young women." The fact that infibulation is referred to as "a Pharaonic circumcision" in some nations (such as Somalia and Sudan) further supports the idea that it originated in Egypt. Based on the testimonies of visitors to the Red Sea, Venetian historian Pietro Bembo gives the first comprehensive account of infibulation in the 16th century. Because "an indubitable virginity at the marriage is held in such a high esteem," he argues, "the private parts of the girls are sewn together shortly following their birth" (Bembo, 2007). Ethnographic research records instances of infibulation among the nomadic populations in the adjoining regions of the Red Sea coast around the start of the 20th century.

Lastly, there is a complicated relationship between FGC and religion. There is disagreement over whether Islamic law mandates female circumcision or infibulation. In the pre-Islamic era (before to 600 AD), female circumcision was referenced in a few Hadiths (Austen, 1979). For instance, it has been stated that "the Fitra are known for five practices: circumcision, pubic hair shaving, short moustaches, nail clipping, and depilating armpit hair." Since this hadith makes no mention of a specific gender, it could be construed as applicable to both sexes. 810–870 (Bukhari, nd.). These days, we undoubtedly witness circumcision and infibulation among women from various religious communities.

Historical source research points to a connection between infibulation and slavery. Infibulation was believed to guarantee purity and loyalty to the owner and avoid unwanted pregnancies, which is why early travelers described infibulation as having a higher price on the market for female slaves (Browne, 1799; Larrey, 1803; Burckhardt, 1819; Cailliaud, 1826; Russenegger, 1843). "A group from Mogadishu (Somalia) has a tradition of sewing up their women, particularly their slaves being young to make them incapable of conceiving, thus rendering these slaves of greater worth in the market both for their chastity, and for the increased trust which their owner put in them," according to Portuguese missionary Joao Dos Santos in 1609 (Dos Santos, 1999). "Infibulated girls ('virgins') earned a greater price on the Egyptian slave market than non-infibulated ones," according to Swiss traveler and explorer Johann Ludwig Burckhardt (1819).

The practice began to expand among non-slave cultures and take on lesser degrees than infibulation when it was established through the slave trade and came to be linked to being pure and virginal. Mackie (1996) states that "an act associated with disgraceful female slavery came to stand for honor" and that "the geographic distribution of FGC indicates that it began on the western coast of the Red Sea, where infibulation was particularly severe, diminished to clitoridectomy in westward and southward radiation." Additionally, Abdalla (1982) contends that in this setting, virginity turned into a "trademark."

FGM as a Social Norm

In a given context, a practice is deemed a social norm if it satisfies the following criteria: there is a rule of behavior surrounding the practice; people are cognizant of the rule and think it applies to them; and people comply with the rule in order to avert social penalties and to adhere to social conventions within their common ethnic, religious, or social group (O'Neill & Pallitto, 2021). According to Edberg and Krieger (2020), social norms are culturally established within a specific cultural context and are essential to comprehending how communities uphold and propagate dominant social practices. According to O'Neill and Pallitto (2021), social norm nonconformity is frequently sanctioned to varying degrees, with repercussions ranging from social exclusion, stigma, and humiliation to individual emotions of guilt.

According to research, most mothers plan for their daughters to participate in FGM because they believe it is a necessary part of raising a girl and getting her ready for adulthood. Making ensuring their girls have a decent life is something that many parents view as their duty (Sakeah et al., 2019). Hela Bakri, a 31-year-old Sudanese lady, endured female genital mutilation during her early years. She "let her" be cut when she had a daughter later in life out of concern for her social rejection. Even though Hela did not agree with the practice, she believed that the societal norms for non-cut people took precedence over her own beliefs and that the social repercussions had a greater influence. One woman described how mothers (mainly) and fathers were regarded differently in her community depending on if they had had their daughters subjected to the practice during a focus group discussion with 17 women aged 50 to 70 who had participated in FGM in Ghana's Pusiga District. In the event that a girl was not cut and married, her husband would not consider her parents to be family and would avoid interacting with them. This was not the case if the girl who married a man was actually cut. One woman said, "That is why mothers are keen on circumcising their girls" (Sakeah et al. 2019:7), illustrating the social pressure parents may face to have their daughters cut and the consequences of not doing so. In the same study, 15 women aged 15 to 24 who had experienced FGM participated in a focus group discussion. One of the women described how peers in her community would effectively pressure girls to comply with FGM.

Typically, this manifested in name-calling, isolation, mockery, and insults. The issue, she explained, is that some girls who are not circumcised as adults would be made fun of by their peers, which will lead them to get circumcised without even telling their parents (Sakeah et al. 2019). Another participant in the same focus group described how one of her brother's daughters felt pressured by her classmates to follow the practice to the point where she chose to do so and passed away just three days later (ibid, 14). Interviews with 14 Somalian women regarding their experiences with FGM revealed similar tales. Since so many people among them had been cut, most of them said they had yearned to be cut as well. One woman described how she had been shunned by her friends and had been unable to undergo FGM due to health issues. Another woman remembered how those who hadn't been cut were subjected to severe bullying. In order to avoid being shunned, she had so lied about her own genital status before to undergoing the procedure (Jacobson et al. 2018). Positive penalties not only manifest in the opposite of negative ones, such as social isolation, ostracism, inability to

marry, and the like, but they also honor women who have undergone female genital mutilation.

In the instance of FGM, people seem to be obliged to respond with social sanctions including social exclusion, ostracism, inability to marry, and similar actions if someone in their immediate vicinity does not follow the established social norm. Even while they may not personally support those behaviors, those who exclude, harass, or make fun of non-cut people may do so because they feel it is required of them. In summary, FGM edges more toward being a social norm than a descriptive norm, as evidenced by the existence of social punishments as predominantly presented by the previously performed interviews.

Health Implications of FGM

Acute pain, bleeding, fever, wound healing issues, gangrene, swelling of the vaginal tissue, shock, infections (tetanus, HIV, hepatitis B and C), septicemia, ulcers and death are among the numerous health hazards and complications linked to FGM (Wood et al., 2021; Saraloo et al., 2019). Chronic pelvic and vaginal infections, scarring, cystitis, dyspareunia, keloid, urethritis, and painful urination), menstrual disorders, infertility, delivery, and pregnancy challenges are among the long-term consequences. Prior studies have demonstrated a connection between FGM/C and a variety of outcomes, such as affective disorders, sexual dysfunction, somatization, anxiety disorders and post-traumatic stress disorder (PTSD) (Tammary & Manasi, 2023; Alidost et al., 2023; Abdollahzadeh et al., 2023). Given that FGM/C is most frequently performed on girls before the age of 14, when they are particularly vulnerable physically and psychologically, this is particularly worrisome (Im et al., 2020).

According to Tammary and Manasi (2023), women and girls who have had FGM/C frequently suffer from significant physical and psychological repercussions that impair their wellness, including their ability to have intercourse. Women and girls have been linked to major sexual, psychological, social, and physiological consequences as a result of FGM (O'Neill & Pallitto, 2021). Some of these detrimental impacts on sexual, mental, and physical health are short-term, while others last a lifetime. More research is needed to document the effects of sexual and gender-based violence in the form of domestic violence, forceful FGM/C

practices, family violence, abuse, and assault of young girls in places where FGM/C is prevalent (Sano et al., 2021). The gendered power dynamics in households where women have little socioeconomic agency, no decision-making power as parents, and no independent access or resources to seek health care further compromise long-term outcomes.

Obstetric and Gynaecological Complications

Women with FGM/C may feel negatively about the cutting experience, and this only gets worse during obstetric and gynecological evaluations and childbirth when its negative physical and psychological effects become apparent and cause the women a great deal of unease (Tammary & Manasi, 2023). Such a classification indicates that there have been attempts to categorize the mental health burden related to women's experiences with FGM/C. A increased risk of psychiatric and psychosomatic disorders is linked to the other documented mental effects of FGM/C, which include feelings of inadequacy, fear, chronic irritation and nightmares, and the suppression of emotions and feelings (Lever et al., 2019). According to some studies, the process involves significant physical and emotional suffering in addition to reconstructive procedures. Even after the reconstitute surgical procedure, the psychological problems linked to FGM/C and the trauma that follows imply reduced self-esteem, self-efficacy, and anxiety regarding one's gender and sexual identity (O'Neill et al., 2022). Nonetheless, some research shows that clitoral reconstruction following FGM with sensitive labial flaps significantly improves clitoral sensation, genital appearance, sexual function, and self-esteem (Wilson & Zaki, 2022).

Psychological and Mental Health Effects

Over the past ten years, a number of studies have acknowledged the link between FGM and mental health issues, primarily mentioning anxiety, depression, and post-traumatic stress disorder (PTSD) (Smith & Stein 2017). Additionally, it has consistently been advised that those impacted by FGM should have their mental health concerns addressed, evaluated, and managed (WHO 2018). Severe forms of FGM, immediate post-FGM complications, chronic health issues and/or FGM-related infertility, non-consensual circumcision in adolescence or adulthood, and FGM as a form of penalty are all factors believed to affect the degree of distress (Mulongo et al. 2014). Young women in the UK who are getting counseling for

female genital mutilation have expressed sentiments of incompleteness, remorse, resentment, and parental betrayal (Mulongo et al. 2014). The literature (Bendiksen et al. 2021; Abdalla & Galea 2019) reveals a significant possibility of women and girls who have had FGM done, being at a higher chance of psychiatric illness. While there are only a very small number of empirical research studies on the psychological implications of FGM, what is obvious is that the emotional health of women who have suffered, or who are at risk of FGM, will be damaged (Abdalla & Galea 2019; Reman et al., 2023). Women who have experienced female genital mutilation are susceptible to prevalent mental health issues like affective disorder, anxiety, and somatization, which can have an impact on the health and social care providers who work with them. In addition, it would appear that women exposed to FGM are more likely to report symptoms commensurate with post-traumatic stress (PTS), and in particular recurrent flashbacks, the latter being more common among women exposed to more severe forms of FGM (Tammary & Manasi, 2023).

In order to diagnose and categorize mental disorders using clear and concise criteria that will enable an objective evaluation of symptom presentations in a range of clinical settings—inpatient, outpatient, partial hospital, consultation-liaison, clinical, private practice, and primary care—psychiatrists, other medical professionals, such as psychologists, counselors, nurses, occupational and rehabilitation therapists, social workers, forensic and legal specialists, and researchers—will find this manual to be a useful resource. The diagnostic categorization, diagnostic criterion sets, and descriptive text are the three main parts of the DSM.

The DSM-5 recognizes the following disorders as female sexual dysfunctions: female sexual interest or arousal disorder (mainly characterized by absent or reduced interest in sexual activity, sexual or erotic thoughts or fantasies, and sexual excitement or pleasure during sexual activity or to any internal or external sexual or erotic cues); female orgasmic disorder (characterized by a marked delay in, infrequency, or absence of orgasm and/or reduced intensity of orgasmic sensations); and genito-pelvic pain or penetration disorder (mainly difficulties in vaginal penetration or vulvovaginal or pelvic pain during intercourse) (Paslakis et al., 2020).

FGM/C meets criterion A of the Diagnostic and Statistical Manual of Mental Disorders (*DSM-5*) for post-traumatic stress disorder (PTSD; confrontation with actual or threat of death, severe injury or sexual violence) (American Psychiatric Association, 2013). Accordingly, affected women may develop mental disorders, such as affective disorders, anxiety disorders, somatization disorder and PTSD (Abdalla et al., 2019).

With the development of *DSM-5*, the primacy focus on fear and anxiety associated with PTSD has been broadened, taking into consideration further negative emotions and cognitive processing (e.g., anger, guilt and shame) (American Psychiatric Association, 2013).

Legal and Policy Frameworks Addressing FGM

The abandonment of FGM can be justified by a legislative system that expressly forbids it. A government makes it very evident that FGM will no longer be accepted when it makes it a crime. Legislation can discourage individuals who fear prosecution and encourage those who want to stop FGM in areas where it is already socially contentious. A national law is a significant first step in the fight against FGM, but it needs to be put into practice and upheld (UNFPA, 2018).

In the 1990s, FGM was categorized by the UN as a type of violence against women. The Committee on the Elimination of Discrimination Against Women's approval of General Recommendation No. 14 on female circumcision (1990) and General Recommendation No. 19 on violence against women (1992) were landmark occurrences. The Committee specifically said that violence against women is covered by international human rights legislation and the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW). Several UN agencies have reaffirmed this, as seen in the interagency statements on ending FGM from 1997 and 2008. In these declarations, United Nations agencies reaffirmed their shared commitment to eradicating FGM within a generation.

Resolution 67/146 on stepping up international efforts to eradicate female genital mutilations was adopted by the UN General Assembly in 2012. It was reiterated by resolutions 69/150 in 2014 and 71/168 in 2016 (United Nations General Assembly, 2017). The resolution, which was proposed by African states, was unanimously approved. The resolution was referred to as "historic" and "an important step towards a world free from violence against

women" by UN Secretary-General Ban Ki-moon (United Nations News Centre, 2017). The resolution demonstrates an increasing dedication to ending FGM. The resolution urged for more international efforts to eradicate the practice and underlined that FGM is a violation of human rights. According to the United Nations General Assembly (2013), this resolution called on states to "take all necessary measures, including enacting and enforcing legislation, to prohibit female genital mutilations and to protect women and girls from this form of violence, and to end impunity." A Joint General Recommendation on Harmful Practices was adopted in 2014 by the Committee on the Elimination of Discrimination Against Women and the Committee on the Rights of the Child. "States have an obligation to respect, protect, and fulfil the right of women and girls to live free from female genital mutilation," according to the report "Good practices and major challenges in preventing and eliminating FGM" published by the Office of the United Nations High Commissioner for Human Rights in March 2015 (Ibid, p. 16).

The 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) were endorsed by the worldwide community in September 2015. Target 5.3, "Eliminate all harmful practices, such as child, early, and forced marriage and female genital mutilation," of SDG 5: "Achieve gender equality and empower all women and girls," also reflects the universal agreement that all forms of FGM must be eradicated.

Burkina Faso was among the first African nations to make female genital mutilation illegal. The way the law is being applied and how the government is tackling the eradication of FGM are both exceptional and distinctive. In 2014, the Burkina law received the Silver Future Policy Award from the World Future Council (Future Policy, 2014). Furthermore, a 2016 study on the effect of the law on FGM in Burkina Faso by Ben Chrisman et al. discovered evidence of a significant decrease in the chance of girls being cut in the nation following the law's enactment. According to the researchers, the law has avoided some 240,000 female genital mutilations in the last ten years (Crisman et al., 2016). Burkina Faso is widely acknowledged as one of the few nations with consistently and successfully implemented anti-FGM regulations, and their strategy may serve as a model for other nations looking to improve the enforcement of their anti-FGM laws.

Laws can serve as platforms and channels for the safe implementation of further measures. In settings where community members are already doubting or have given up the practice and are looking for social approval, legislation may also help hasten the transition in FGM practice. However, research indicates that laws by themselves are ineffective in altering perceptions of FGM and its frequency (Dowuona-Hammond et al., 2020; Cetorelli et al., 2020). Prior studies have demonstrated that in order to demonstrate the effect on the knowledge, attitudes, and norms guiding the practice, legislation must be accompanied by political will (Nabaneh & Muula, 2019; Baillot et al., 2018), locally suitable enforcement mechanisms, an amalgamation of other interventions that are suitable to the target community, and adequate resources for implementation and sensitization (Matanda et al., 2023; Mehari et al., 2020). In a setting where it will be implemented throughout a geographic jurisdiction and provides minimal opportunity for misunderstanding, legislation can also be helpful (Baillot et al., 2018). Legislation to stop FGM, however, may take a while in most nations because laws are typically passed before they are enforced, and there are often no efficient systems in place to report, refer, and protect girls and women who are at risk of FGM (Dowuona-Hammond et al., 2020; Meroka-Mutua et al., 2020; Wouango et al., 2020). As a result, court suits are typically few or nonexistent, indicating a lack of community preparation and political will to stop the practice (Nabaneh & Muula, 2019). Notably, some communities that practice FGM refrain from doing it primarily out of concern for the legal repercussions of noncompliance (Meroka-Mutua et al., 2020).

According to Matanda et al. (2023), laws that are passed without taking into account the local context may actually work against the intended recipients and even cause harm. This is because they may cause changes to the practice rather than its abolition, such as increased medical treatment, changes in the type of cut, cutting at earlier ages, or the practice continuing in concealment (Meroka-Mutua et al., 2020; Plugge et al., 2019; Johnsdotter, 2019). Additionally, since fewer beneficiaries sought care, including reproductive health services (Karlsen et al., 2020), and possibly because reporting was compromised (Plugge et al., 2019), the enforcement of laws has alienated the intended recipients in certain instances, particularly in developed nations.

Experience and history demonstrate that laws by themselves are powerless to alter societal behavior, including the practice of female genital mutilation. FGM will persist and might even be forced underground when laws against it are implemented in areas where people are still expected to conduct the practice and fear societal repercussions if they don't. While a legislative framework plays a significant role in creating a conducive atmosphere for change, it should be used in conjunction with other tactics that promote constructive community transformation. Thus, eradicating FGM necessitates a multipronged strategy. The difficulty lies in creating, introducing, and enforcing laws in a way that promotes social change and, in the end, leads to communities' decisions to outlaw the practice (UNFPA, 2018).

Economic and Social Costs of FGM

Given that FGM is currently practiced in more than 27 countries, the state of the art estimates that its annual economic impact is 1.4 billion USD, with that amount expected to increase to 2.1 billion by 2047 (Tordrup et al., 2022). All of the annual expenses related to treating a broader variety of illnesses linked to FGM are included in the economic burden. In order to improve scale-up interventions (El-Dirani et al., 2022; Abidogun et al., 2022), further proof is required to track the decline in FGM prevalence rates and the financial strain in these countries over time. This will help identify the interventions that most effectively reduce the prevalence and identify the primary obstacles (Igras et al., 2021). A few qualitative studies, for example, show that COVID-19 impacted health interventions and resource allocation due to lockdowns (Mubaiwa et al., 2022; Esho et al., 2022). However, little is known about the economic burden of COVID-19 because the interventions were halted and the anticipated abandonment could not take place. We refer to this as the "economic burden of delay."

FGM is performed by untrained individuals using crude tools including razor blades, knives, and broken glass, without anesthetic, in unsanitary settings, and without the administration of antibiotics (United Nations Population Fund, 2015).This practice is one of the forms of abuse against women and girls that violates their human rights, and it has a detrimental effect on the physical, mental, and sexual health of many of them (Troh, 2020). FGM places a heavy burden of social impairment on the community as well as on women (Refaei et al., 2016).

Health system costs

Because of its negative repercussions, FGM is expensive for people, the healthcare system, and the government as a whole (Tordrup, 2022). According to a Nigerian study, treating FGM consequences in a pediatric clinic costs roughly $120 per girl.16 A 15-year-old girl who has FGM type 3 is thought to cost the health system $5.82 in her lifetime and lose around a quarter of a year of her life. Although not as much as type 3, type 1 and type 2 FGM also decreased survival and had financial costs for both the government and individuals (Adam et al., 2010). According to a study conducted in Somalia, 118 women stayed in hospitals for a year as a result of FGM complications, including dermoid cysts, abscesses, and vaginal stenosis; they took up hospital beds for 1967 days and significantly hampered the hospital's ability to provide medical care (Dirie & Lindmark, 1991). FGM causes one out of every three circumcised women to need a medical gynecological examination, according to a Gambia study (Kaplan et al., 2011). Women who have undergone female genital mutilation should give birth in a hospital or intensive care unit because they are more likely to experience short-term complications during childbirth (Lurie et al., 2020). According to Bishiai et al. (2010), the annual cost of obstetric complications related to FGM is $3.7 million and accounts for 0.1% to 1% of the total health expenditures on women aged 15 to 49. Given that there are currently 2.8 million 15-year-old women in the six African countries, 130000 years of life lost (YLL) are anticipated as a result of FGM-related obstetric hemorrhage, which is the equivalent of losing half a month of life expectancy.

Individual and family costs

Many kinds of infections can result from FGM. Families may face significant financial hardships as a result of treating these infections and associated sequelae, particularly in low-income nations (Osman et al., 2020). Dysmenorrhea is one of the FGM consequences that might cause impairment; a person with this condition may continue to rely on her spouse or father (González-Timoneda et al., 2021). Because of the challenges associated with FGM, she is less likely to attend work on a regular basis, even if she is educated and working. Girls' educational opportunities may be restricted and household income may decline as a result of female genital mutilation. In addition to raising the cost of medical treatment, it can decrease household savings and investment, which leads to debt accumulation and worsen household poverty (United Nations Population Fund, 2008). In addition to the expenses of performing

FGM and the recovery period, some funds are used for festivities, presenting the girl, her mother, and visitors with gifts, providing food for the villagers, and compensating the FGM practitioner with gifts (Kuring, 2014).

Related Research

FGM and reproductive health

There are acute, long-term, and occasionally fatal health repercussions associated with female genital mutilation (Refaei et al., 2016); the severity of the complications varies according to the degree of FGM, with studies reporting a number of physical complications for circumcised women. Bleeding, dystocia, prolonged labor, sepsis, urine retention, shock, urinary infection, genital swelling, bacterial vaginosis, dyspareunia, cesarean section, death, undesired labia welding, and surgical procedures to reopen the vagina are among the potential complications (Soomar & Soomar, 2022; Taraldsen, 2023). Chronic anemia from repeated vaginal opening surgeries, keloid tissue formation that can cause excruciating pain, dermoid cyst and abscess, painful menstruation from menstrual blood retention (Morrone, 2020), dysuria, urinary incontinence, weak urine stream, hematocolpos, genital ulcers, and chronic pelvic and low back pain from persistent infections, urinary and genital tract infections, abscess formation, septicemia, hepatitis C, and HIV infection (Refaei et al., 2016). Women may be at risk for HIV infection due to factors such bleeding after repair surgery, injuries during sexual activity, anal intercourse due to incapacity for vaginal intercourse (Esse et al., 2024), and exposing the birth canal with non-sterile tools. Infertility may result from ovarian and uterine infections. When the girl tries to protect herself, she may break her clavicle, femur, or humerus. Many females experience urinary issues due to pain, edema, infection, injury, urethral damage, and dysuria, while urine retention results in chronic UTIs (Taraldsen, 2023).

According to a study conducted in Sudan on 225 circumcised girls between the ages of 4 and 9, girls having a narrowed vulvar opening were more likely to have a urinary tract infection, particularly if they were younger than 7 years old. However, only 7% of the infected girls expressed experiencing urinary symptoms, and 73% of the circumcised girls reported being hospitalized for a week after undergoing circumcision (Refaei et al., 2016). In addition to urinary tract, uterine, and ovarian infections, infections like tetanus, gangrene, and sepsis

can be fatal. One of the consequences of female genital mutilation is an epidermal cyst, which can result in infection, draining surgery, and in in exceptional circumstances, cancer (Ugwu et al., 2018).

Educational Interventions and Attitude Change

There is proof that formal education can lower the number of cases of FGM (Ameyaw et al., 2020; Yount et al., 2020). By enabling women and girls to advocate for their rights and to confront current gender and social inequalities like FGM, formal education can significantly contribute to the practice's cessation by exposing girls to new information, such as the health risks/consequences and illegality of FGM (Van Bavel et al., 2017; Rawat, 2017; Esu et al., 2017). Additionally, research has connected low educational attainment to a higher propensity to condone and/or engage in FGM; data indicates that FGM was more common among females who did not pursue formal education than among those who did (Ameyaw et al., 2020). Higher education reduces the likelihood of female genital mutilation in daughters (Buttia, 2015). A particular study, however, found no connection between attitudes on FGM and academic achievement (Small et al., 2020). Less educated women and girls are less capable of contributing positively to society than more educated ones. Educated women and girls can help enhance quality of life in their families and communities overall, as well as contribute to social and economic development (UNFPA, 2015).

Some education strategies that can be employed to reduce FGM include:

Encouraging women and girls to have access to education: Education empowers women and gives them the knowledge and tools to live independently, while also educating them about human rights and FGM. As a result, it is important to encourage and enable women's access to education (for instance, by creating female-friendly spaces with enough secure restrooms and hygienic amenities).

Content of the curriculum: FGM is less of an offensive topic when it is included in both official and informal education, and girls and women may have correct information to empower them in making choices that suit them. Sessions on the subject should be conducted in an open way that permits people to share their experiences and emotions in a secure setting, in addition to imparting knowledge. Training of educators, youth workers, and moderators: In order to educate youths and help individuals who are at risk of having the process performed

or who have already had it done, educators, youth workers, and moderators should all obtain training.

Communications and mass media promotions: Through well-known communication channels like radio and television shows and posters, campaigns can increase the general knowledge of the issues and present factual information.

Information dissemination through community and religious leaders: Religious and community leaders who criticize the act are capable of educating the general public about the risks of FGM because of their prominent position in the community and their strong networks (GIZ, 2011a). Here are a few instances of educational programs that also served as awareness campaigns:

GIZ-Intergenerational Dialogue: Originally created in Guinea, this bottom-up initiative consists of the stated workshops, conferences, and consultations. An assessment carried out in 2009 demonstrates the program's effectiveness in Mali, where 74% of respondents said they had taken action to eradicate FGM in their community (GIZ, 2011c).

Forward – Africa, Europe and UK Programmes: In addition to addressing the problems of obstetric fistula, early/child marriage, and FGM, FORWARD's programs were designed to enhance the lives of women and girls. Via local, women-led organizations, it provided a comprehensive program to communities in East and West Africa that includes funding, network and association building, and capacity building (FORWARD, 2015a). For example, The Sinyati Women's Group in Kenya has been receiving funding from FORWARD since 2012. The organization has funded training programs and technical assistance for women to support their efforts to end child marriage and FGM in schools and neighborhoods (FORWARD, 2015b). In 2014, FORWARD used women's and girls' networks to contact more than 19,000 community members across five countries (FORWARD, 2015a).

Tostan - Community Empowerment Program: Under Tostan's program, a professional facilitator provides human rights-based educational sessions to a community, enabling them to effect social change (Tostan, 2016b). The program's influence is increased through organized diffusion, a technique whereby participants interact with others and disseminate information (Tostan, 2016a). This program has been used in over 7,200 communities in Djibouti, Guinea,

Guinea-Bissau, Mali, Mauritania, Senegal, Somalia, and The Gambia, and the governments of The Gambia and Senegal have designated it as their preferred approach to tackling FGM (Tostan, 2016c).

Other Intervention Methods for Addressing FGM

Rescue Centres

The purpose of rescue centers, also known as safe houses, is to safeguard and supply refuge to girls who have a high risk of female genital mutilation during the cutting period. It is noteworthy that the majority of the studies incorporated rescue centers among other interventions, and there is little information on how well these centers are evaluated as an independent intervention. In addition to offering refuge to girls fleeing FGM, rescue centers also educate girls about the health risks, illegality, and human rights violations of FGM (Nambisia, 2014). However, rescue centers face obstacles like a lack of funding and community support, which means that there is little evidence of their efficacy (Buttia, 2015). This demonstrates that, when combined with other strategies to end FGM, rescue centers can effectively offer temporary shelter to girls who are at risk of the practice. Rescue centers, however, are unable to offer sustainable remedies to put an end to the practice (Van Bavel, 2020).

Health Education

The majority of health education initiatives were community-based educational efforts aimed at raising awareness. Information about the psychological, emotional, and physical effects of FGM can be effectively conveyed through health education that employs the health risk approach (Van Raemdonck, 2019). The impacts of FGM and the necessity of taking action to end the practice can be discussed and guided by health education in communities that engage in the practice. According to a number of research, health education improved people's attitudes, knowledge, and beliefs about the practice (Abdulah et al., 2020; Mahgroub et al., 2019).

According to Waigwa et al. (2018), health education may be more successful when context is taken into account, particularly when it comes to lowering target group resistance. Furthermore, it implies that although health education might be successful in altering

knowledge, mindsets, and beliefs, another form of intervention might be required to achieve a change in behavior (Matanda et al., 2023).

Social marketing and media

Studies have demonstrated the efficacy of social marketing and media initiatives in altering societal standards and views on the cessation of female genital mutilation and, in certain situations, in decreasing the practice (Mehari et al., 2020; Evans et al., 2019; Hussein & Ghattas, 2019). Social media, theater performances, radio and television melodramas, SMS messaging, mainstream newspapers, and television reporting can all influence discussions about FGM and hasten the change in societal norms toward FGM abandonment (UNFPA, 2017). When a significant amount of information about hazards is shared, the demographic being targeted can become a repository of knowledge and change agent, which can lead to positive changes in attitudes (Matanda et al., 2023). Successful awareness-raising efforts have given girls the confidence to refuse FGM and to notify the appropriate authorities when they are in danger (Buttia, 2015). Additionally, it seems that people are much more aware of the detrimental effects of infibulations, the penalties for disobeying the law, and the illegality of FGM (Mehari et al., 2020). The procedure has been less popular and abandoned as a result of exposure and learning, which have also raised awareness and knowledge of the risks and repercussions of FGM (UNFPA-UNICEF, 2017; Abathun et al., 2018; Hussein & Ghatas, 2019). According to the UNFPA–UNICEF Joint Programme, youth can use social media to promote gender equality and FGM awareness since social media's advocacy of FGM abandonment has allowed communities to realize the potential for swift, broad change (UNFPA-UNICEF, 2018).

Public declarations/statements

It is crucial for community, religious, and political leaders, as well as other prominent individuals, to publicly declare their intention to stop FGM since this can show that they are prepared to do so (UNFPA-UNICEF, 2017; UNFPA-UNICEF, 2018; Ruiz et al., 2017). Communication channels such as social media and the mass media have been crucial in spreading these public statements and motivating other communities to stop FGM. Public declarations were also found to be very successful in minimizing more FGM cases when accompanied by post-declaration follow-up and support. It can be possible to change attitudes and behaviors among community members in FGM-prevalent environments by implementing

frequent and reiterated awareness-raising interventions that target all facets of society, emphasize the negative impacts of FGM, and encourage communities to declare their abandonment (Matanda et al., 2023).

Perceptions of FGM

According to an African study by Ayenew et al. (2023), daughters who believed their mothers were still engaging in female genital mutilation were more likely than their peers to get circumcised. The results are consistent with the UNICEF report (2013) and a study on daughter circumcision (Pashaei et al., 2016). This link may be explained by the fact that mothers' perceptions are a major factor in deciding whether or not they want to permit their daughters to get circumcised. According to Pashaei et al. (2016), mothers who support the continuation of FGM are more likely to allow their daughters to get circumcised.

Furthermore, daughters who had mothers who felt that female genital mutilation was a religious need were more likely to be circumcised. Studies carried out in Sub-Saharan Africa (Ahinkorah et al., 2020) and Africa (Fagbamigbe et al., 2021) supported the findings. The conduct may be impacted by individual comprehensions of faith-related teaching, and the link could be regarded as a culturally particular perception of religious identity (Mackie, 1996). According to Ayenew et al. (2023), daughters who lived in more literate communities were less likely to commit genital mutilation than daughters who lived in less literate communities. Research from Africa (Ahinkorah, 2021) and the World Health Organization report (Australian Institute of Health and Welfare, 2019) both support this. People are better able to comprehend health information, including the effects of FGM, in communities with higher literacy levels (Ayenew et al., 2023). Despite social pressure to maintain the practice, this improved understanding enables women and parents to confront detrimental sociocultural norms and practices, such as exposing daughters to female genital mutilation (Oyefara, 2014).

Furthermore, according to respondents in a Nigerian study conducted among university students by Raheem et al. (2023), cultural beliefs and faith were the two main reasons why FGM was practiced. It appears that Southern Nigerians primarily rely on these traditions to sustain this practice. Many survey participants (44.1%) thought that non-circumcision was linked to adult sexual insatiability and promiscuity. This is one of the main false beliefs that encourage FGM in Africa. Since there is no scientific proof that uncircumcised girls are

sexually voracious and likely to engage in promiscuity as adults, this concept is an old African tradition myth (Oyefara, 2014).

Impact of Exposure to Educational Environments on FGM Prevalence

According to a study by Pastor-Bravo et al. (2021), the practice is perpetuated by arguments in favor of FGM/C, ignorance, and family pressure. In contrast, the majority of interviewees oppose FGM/C due to a variety of factors, including rising awareness of their rights, breaking the taboo surrounding the practice to question justifications for FGM/C, sharing personal experiences, and the consequences on their health. According to Waigwa et al. (2018), one of the primary drivers of the shift in attitudes regarding FGM/C has been the dissemination of information and awareness. Regarding this, campaigns to promote awareness should concentrate on educating people about the health concerns associated with FGM/C while also putting into perspective the information through the use of instruments like the human rights-based approach and depending on national laws as a deterrent. Women who live in countries where FGM/C is not practiced understand that FGM/C is not really relevant to maintaining cultural and individual identity, even though people travel with their beliefs and there may be a transfer of social or behavioral norms in the diaspora (Diabate & Mesplé-Somps, 2019).

According to a 2021 UNICEF study, health education and community discussions with parents and religious leaders can alter views regarding FGM at the local level. This is a crucial stage in the process of changing attitudes toward the practice's cessation (Dennis et al., 2021). Social marketing and media campaigns are successful in altering attitudes and social norms surrounding abandonment and, in certain situations, lowering FGM. Formal education (teaching mothers) can decrease the number of girls who undergo female genital mutilation on an individual basis, while educating girls improves their understanding of the negative effects of FGM and alters their perspectives on its necessity (Dennis et al., 2021). The minimal evidence that is currently available at the service level indicates that training for healthcare providers can enhance their ability to prevent and treat FGM. Interestingly, the majority of the research focused on intermediate behavioral change outcomes like knowledge and attitude change (Dennis et al., 2021).

Information about the psychological, emotional, and physical effects of FGM can be effectively conveyed through health education that employs the health risk method (Galukande et al., 2015). According to a study conducted in Iraq, Mullahs and Mokhtars' support for the cessation of FGM rose by 35% and 41%, respectively, after a brief health education program was used to alter the attitudes of parents and religious leaders toward the practice (Abdulah et al., 2020). A health education program that was implemented over an 18-month period in the United Republic of Tanzania shown a moderate level of success in altering attitudes against FGM and raising awareness of the health hazards (Galukande et al., 2019). In a similar vein, a school-based health education program aimed at girls in the Sudan had a positive effect on female students' attitudes and understanding regarding FGM (Mahgoub et al., 2019).

Reducing the frequency of FGM may need formal education. It has been proposed that raising women's educational attainment is necessary to decrease FGM (Ameyaw et al., 2020). According to research, formal education might significantly contribute to the cessation of FGM by empowering women and girls to refuse the procedure by exposing them to fresh information about its illegality, health hazards, and consequences (Buttia, 2015; Van Bavel et al., 2017). Low educational attainment has been associated in studies with a higher propensity to condone and/or engage in FGM. Research indicates that compared to females who attended school, FGM is far more common among those who did not (Ameyaw et al., 2020). A mother's daughter is less likely to be subjected to FGM if she has more schooling. Secondary education is linked to a fourfold rise in opposition to FGM, according to research conducted in Kenya (Buttia, 2015). Additionally, a study of college students in Northern and Southern Sierra Leone revealed that neither their hegemonic views nor their attitudes regarding FGM were significantly impacted by their level of education (Small et al., 2019). However, opinions regarding FGM among male and female students were linked to parental educational status (Small et al., 2019).

Attitudes towards FGM

According to a systematic review and meta-analysis of attitudes toward female genital mutilation/circumcision conducted by Jahangiry et al. in 2021, positive attitudes toward FGM/C are still far from being eradicated and have barely changed in recent years, despite

efforts to outlaw the practice and increased awareness of it in many nations worldwide. Health care professionals' deep-seated cultural and social concerns about the practice's continuation are reflected in this topic. According to the authors, circumcised women can be instrumental in promoting the cessation of FGM/C by means of cultural and educational initiatives. Cultural outsiders and/or opponents of the practice generally view FGM/C as a detrimental traditional custom that infringes women and girls' rights to health and wellbeing, notwithstanding sociocultural differences in the practice among nations (Earp & Johnsdotter, 2021). FGM/C has its roots in social norms and cultural beliefs that have been passed down through the generations. These norms and beliefs connect to values of modesty and femininity, such as the thought that FGM/C will increase girls' marriageability by reducing promiscuity and preserving virginity (WHO, 2020). As a result, the decision to perform FGM/C is influenced by social norms and community beliefs. It typically takes place within the boundaries of households and involves multiple family members, each of whom has varying degrees of decision-making authority (Alradie-Mohamed et al., 2020; Cappa et al., 2020). Fathers and other men have a limited involvement in decision-making in the majority of countries, with mothers, grandmothers, and other women (such as aunts) holding a central position (Alradie-Mohamed et al., 2020).

Compared to low-empowered, low-educated women, women with greater social status—as indicated by their literacy and educational attainment as well as their ownership of household assets—were more likely to oppose the practice of female genital mutilation and mutilation (FGM/C) for their daughters (Van Rossem et al., 2015). Similarly, a study conducted in the Iraqi Kurdistan region revealed a negative correlation between daughters' work position and educational attainment and the prevalence of FGM/C (Shabila, 2017). Furthermore, a qualitative study conducted in Ghana found that one of the main reasons FGM/C persists in the nation is the lack of autonomy among young women, which is interpreted as the necessity to comply with social pressure and traditional norms (Sakeah et al., 2019).

According to the results of a Dutch study by Kawous et al. (2022), migration has caused many participants' attitudes toward the abandonment of FGM/C to shift, irrespective of their gender or country of origin. None of the participants had any intention of performing

FGM/C on their daughters. In general, compared to the place of origin, the Netherlands appears to have less social pressure to perform FGM/C. The majority of participants had faith in their capacity to withstand societal pressure. Some participants, however, were afraid that they may give in to peer pressure or that their daughters might be subjected to FGM/C without their knowledge or agreement.

Furthermore, a study conducted in Ethiopia by Alemu et al. in 2021 found that the prevalence of circumcision was significant (70.6%), especially among married or cohabitating women, those from rural areas, and those with low socioeconomic status. But not all women opposed the practice in the same way. Socially and economically empowered women provided the majority of the support for ending the practice, as was predicted at the outset of the study. In particular, compared to their counterparts, women who were Christian, not impoverished, uncircumcised, and had at least a primary education were more likely to be in favor of ending the practice.

Role of Nurses in treating or eradicating FGM

Building healthcare workers' capacities in communities affected by female genital mutilation/cutting (FGM/C) requires improved and creative training options on obstetric and psychological care for FGM/C survivors (Kimani et al., 2018). There is proof that FGM/C causes obstetric difficulties such perineal tears and protracted labor, and it can make it more difficult for medical professionals to diagnose and treat patients by preventing them from getting an intrapartum vaginal examination or catheterization (Al Awar et al., 2020; Lurie et al., 2020). Furthermore, women who have FGM/C may experience trauma and long-term psychological harm (Ahmed et al., 2017; Buggio et al., 2018; Odukogbe et al., 2017).

It is not easy to increase the healthcare workforce's ability to lessen the effects of FGM/C. Some healthcare practitioners might refuse training from stakeholders calling for the elimination of FGM/C in nations like Egypt, Kenya, or Nigeria, where a growing trend towards medicalizing the practice has been condemned (Leye et al., 2019). FGM/C is a process that no one dares to expose because it is a requirement for females to join a secret club in Guinea, Liberia, or Sierra Leone. Education about the health effects of FGM/C and advocacy efforts are hampered by its secrecy (Tarr-Attia et al., 2019). In addition, there is

insufficient institutional, social, and legal support to address training needs and guarantee that information is translated into clinical practice (Kimani & Shell-Duncan, 2018).

In order to ensure the successful execution of FGM/C training provision in a country such as Liberia, for example, a study of acronym PerTradFGMo was conducted in 2017 to assess healthcare workers' experiences with obstetric care provision to FGM/C survivors in Liberia (Tarr-Attia et al., 2019). The results of PerTradFGMo informed the design of a training program titled "Integrated FGM/C Antenatal and Psychosocial Care Workshop" that was accomplished in 2019. According to Nordmann et al. (2022/0), a temporary official review was carried out in conjunction with the workshops to gauge trainees' attitudes toward their role as healthcare providers in FGM/C care, their acceptability of applying evidence-based recommendations to meet the obstetric and psychosocial needs of FGM/C survivors, and their acquisition of knowledge.

Cognitive Behavioral Therapy (CBT) is another evidence-based treatment that nurses and other health care providers can use to treat or lessen the impact of FGM on its victims. It has been shown to be effective in reducing or resolving symptoms of depression and anxiety disorders associated with other conditions, such as sexual violence victims, survivors of torture and war, and psychological treatment of Post Traumatic Stress Disorder (Bass et al., 2013; Patel et al., 2014). Given the proof that CBT is beneficial for treating these conditions in other groups, it would be plausible to presume that this intervention might be helpful for girls and women living with FGM.

CHAPTER III

Methodology

Research Design

This study is a quantitative and cross-sectional survey in its methodological research design.

Study Population and Sample

Study place is Near East University of Nursing Department. The population of the research consists of N=467 students in nursing department in Near East University. In this study, an attempt was made to reach the entire universe. The sample consisted of n=450 nursing students.

Study Place

The study was conducted at the Faculty of Nursing of the Near East University in Northern Cyprus. This faculty of nursing is the only faculty of nursing in the TRNC. It provides education to Turkish and international students.

Data Collection

The data collection used a structured questionnaire to collect quantitative data from the sample of students. The method of collecting data was via self-delivery and face to face delivery of questionnaires to the study participants

Socio-Demographic Section

The researcher prepared the "socio-demographic section" consisting of age, gender, marital status, educational background, cultural background, religious beliefs and four other questions showing the socio-demographic traits of the target population. This form was planned to be applied to the entire population (Appendix A).

FGM/C Attitude Scale

The scale was developed by Marea in 2021. The knowledge and awareness section assesses respondents' understanding of FGM/C and its health consequences using a four-point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree). The

FGM/C Attitudes Scale is designed to measure personal beliefs and feelings about the practice and is divided into two sub-dimensions: negative attitudes and empathetic and this scale consists of 10 items (5 items per sub-dimension) and the total score was calculated by summing responses across all items on the FGM/C Attitude scale. The '*Negative Attitude'* subscale comprises five items, yielding scores ranging from a minimum of 5 to a maximum of 20. The '*Empathetic Attitude'* subscale, also made up of five items, has a score range from 5 to 20. When combined, the total score on the scale ranges from 10 to 40 (Appendix B). Cronbach's alpha values for the Empathetic Attitude subscale were found to be 0.628 and for the Negative Attitude subscale, it was found to be 0.814.

Female Specific Data Forms

Additionally, the female-specific data form, comprising 10 questions, targets female respondents only (n=306) to explore personal experiences with FGM/C, including occurrence, timing, the performer, awareness of different types, and emotional responses during sexual intercourse. Data were collected through both self-administered and face-to-face delivery of questionnaires in classroom settings, with an average completion time of 30 minutes (Appendix C).

Inclusion Criteria

The criterion for inclusion of subjects in the study was the condition of being an African student living in Northern Cyprus in Near East University. The study was carried out at Near East University, Nursing Faculty involving English speaking nursing students.

Exclusion Criteria

Persons under the age of 18 were included in the study, students from other continents different from Africa were also excluded.

Research Variables

Independent variable of the study were the age, gender, educational background, cultural background, and religious beliefs. The dependent variable was *the* 'Attitude towards FGM'.

Data Analysis

Statistical Package for Social Science (SPSS) 25.0 package program was used in statistical analysis. Descriptive statistics were used to determine percentages, frequencies and averages in the evaluation of data. Kolmogrov-Smirnov test was applied to evaluate compliance with normal distribution. Independent t test and One-way Anova test was used to compare dependent and independent variables. Data were evaluated with 95% confidence interval and p=0.05 margin of error.

Ethics

This study was actualized when the Near East University of TRNC research Ethics Committee approved it. To get accessibility to the questionnaire, the study subjects had to give their consent by signing the consent form agreeing to participate in the study and their data were protected by maintaining confidentiality. Written approval was obtained from the author for the use of the scale. The ethics number approved for this study was NEU/2024/127-1892 (Appendix D).

CHAPTER IV

Findings and Discussion

Table 1

Socio-demographic Results (n=450)

Demographic Variable		n	%
Age	18-22	182	40.4
	23 -29	229	50.9
	30 -42	39	8.6
Gender	Male	139	32.0
	Female	306	68.0
Year of University	1st	37	8.2
	2nd	118	26.2
	3rd	136	30.2
	4th	159	35.3
Marital Status	Married	26	5.8
	Single	424	94.2
Cultural Background	West African	289	64.2
	East African	82	18.2
	North African	32	7.1
	Central African	25	5.6
	Southern African	22	4.9
Religious Belief	Christianity	323	71.8
	Islam	108	24.0
	Traditional African religions	14	3.1
	Other	5	1.1

Table 1 (Continued)

Variables		n	%
FGM/C perform on anybody of relatives	Yes	71	15.8
	No	379	84.2
Feeling uncomfortable talking/thinking about FGM	Yes	31	6.9
	No	419	93.1
Sexual therapy support for FGM/C	Yes	22	4.9
	No	428	95.1
Psychological therapy support for FGM/C	Yes	23	5.1
	No	427	94.9

In the current study, most of the respondents are aged between 23–29 years, accounting for 50.9% of the entire sample. The second biggest group is composed of those individuals 18–22 years old, 40.4%, there is indication of students within their fresh academic year involvement. With regard to the age distribution, 30–39 constitute 8.6% category.

The sample is slightly skewed in the female direction; while the female respondents constitute 68.0% of the sample, males are at 32.0%.

The respondents were properly distributed over the years of university study: the highest percentage of the respondents is in the fourth year (35,3%) and the third years (30.2%). 26.2% of students were second-year students, first-year students were the smallest contingent, and they are 8.2%. The respondents' marital status indicates that all the respondents are single but 5.8% of them are married.

The sample was a collection of an ensemble of students originating from several African countries, and hence is a reflection of the cultural diversity of the region as 64.2% of respondents originate from West African countries. East Africans top the list at 18.2%, North Africans 7.1%, Central Africans 5.6 %, Southern Africans 4.9%. This distribution may be bias the overall finding on attitude towards FGM/C, due to the over representation of West African cultures in the study.

By religious affiliations, the largest percentages of the respondents were Christians at 71.8% while only 24% were Muslim. 3.1% people were followers of traditional African religions and 1.1% people follow other religious beliefs.

84.2% of the respondents said that FGM has not been carried out on their relatives while only 71 responses representing 15.8% asserted that FGM has indeed been carried out on their relatives.

Respondents reported varying levels of discomfort or ease at the thought of thinking or talking about FGM/C with 93.1% of respondents reporting that they are comfortable discussing, thinking or hearing about FGM with only 6.9% of respondents expressing discomfort with the topic.

As for sexual therapy support of FGM/C, as many as 95.1% of the respondents declared that they have never received it, and only 4.9% said that they have. Concerning psychological therapy support, 5.1% stated that they have been supported while 94.9% stated they have not been supported.

Descriptive Analysis Specifically for Females

Table 2

Descriptive Analysis Specifically for Females (n=306)

Variables		n	%
FGM/C undergo	Yes	39	12.7
	No	267	87.3
Sexual	Yes	147	48.0
intercourse	No	159	52.0
Orgasm during	Yes	134	43.8
sexual intercourse	No	172	56.2
Bleeding occur	Yes	24	7.8
during and/or after	No	282	92.2
Pain during sexual	Yes	29	9.5
intercourse	No	277	90.5

Table 2 presents the descriptive examination of Northern Cyprus-based African female students (n=306) demonstrates their FGM/C experiences and sexual health outcomes in addition to their FGM/C attitudes. Among the female students only 12.7% underwent FGM/C because 87.3% did not experience this practice. Data indicators from the analysis reveal that students mainly originate from areas in which FGM/C exists either infrequently or where people actively oppose the procedure.

The result also showed that sexual intercourse participation amounted to 48% of all participants but 52% remained abstinent. Out of the participants who had sexual intercourse

43.8% experienced orgasm but 56.2% failed to reach orgasm. This result might show that FGM/C affects sexual satisfaction because the practice leads to sexual dysfunctions originating from wounds to genital tissue and nervous structures. The gathered statistics point to minimal reports regarding health problems encountered by participants who had sexual intercourse. Bleeding was reported by 7.8% of the respondents and pain during intercourse affected 9.5% of the participants.

Table 3

Descriptive Analysis Specifically for FGM/C Appied Females (n=39)

Variables		FGM/C Appied n	%
FGM/C practiced time	After birth	10	25.6
	As a child	24	61.5
	Adolescent	2	5.1
	After age 19	3	7.7
Person who perform FGM/C	Mothers	11	28.2
	Traditional rulers	3	7.7
	Others	25	64.1
Type of FGM/C (by the WHO)	Type1	7	17.9
	Type2	6	15.4
	Type3	2	5.1
	Type4	17	43.6
	I don't know	7	18.0
Complications after FGM/C	Yes	19	47.8
	No	20	51.3
Sexual intercourse	Yes	32	82.1
	No	7	17.9
Orgasm during sexual intercourse	Yes	28	71.8
	No	11	28.2
Bleeding occur during and/or after sexual intercourse	Yes	12	30.8
	No	27	69.2
Pain during sexual intercourse	Yes	21	53.8
	No	18	46.2

n: Number, SD: Standard Deviation

According to Table 3 most participants (61.5%) received FGM/C treatment as children (61.5%) while the remaining section of respondents (25.6%) sought FGM/C intervention after birth as reflected by the data (7.7%). Most cases (64.1%) of FGM/C were conducted by unlicensed practitioners and traditional birth attendants together with mothers who acted as the administrators of care (28.2%) and traditional rulers (7.7%).

More than four in ten women (43.6%) reported undergoing Type 4 FGM according to WHO classifications. This group included any harmful procedures beyond Type 3 FGM involving pricking, scraping or cauterization. Research data exhibited that 17.9% of participants had Type 1 (clitoridectomy) and 15.4% had Type 2 (excision) and 5.1% underwent Type 3 (infibulation). The data showed that 18.0% of respondents did not know what type of female genital mutilation was performed likely because they lacked understanding or proper consent.

A total of 47.8% of responders experienced complications after FGM/C what demonstrates the severe medical dangers linked to this practice. A total of 51.3% of respondents did not report complications from FGM/C although silent physical problems should be considered. Undergoing FGM/C leads patients to participate in sexual intercourse according to the survey findings (82.1 percent). 71.8% of participants who took part in senior-level research reported experiencing orgasm but 28.2% of them did not achieve an orgasm. The physical consequences of FGM/C showed bleeding after intercourse occurred in 30.8% of cases while 53.8% of patients experienced pain during sexual intercourse. The reported data shows that FGM/C leads to multiple sexual health complications which cause physical distress among affected women.

Descriptive Statistics of Female Genital Mutilation (FGM) Scale total and subdimension scores of African students

Table 4

Descriptive Statistics of Female Genital Mutilation (FGM) Scale Total and Subdimension Scores of African Students

	Attitude Scale	n	Min	Max	Mean	SD
All group	Total Score FGMA	450	11.0	49.00	26.52	4.03
	Negative Attitude	450	6.0	20.00	16.71	3.13
	Empathetic Attitude	450	5.0	29.00	9.81	3.22
Female group	Total Score FGMA	306	14.0	40.0	26.59	4.19
	Negative Attitude	306	6.0	20.0	16.77	3.16
	Empathetic Attitude	306	5.0	20.0	9.82	3.26
FGM/C group	Total Score FGMA	39	22.0	40.0	28.89	4.62
	Negative Attitude	39	6.0	20.0	17.56	3.27
	Empathetic Attitude	39	5.0	20.0	11.33	3.92

Table 4 presents descriptive statistics from the Female Genital Mutilation Attitude (FGMA) Scale that show total score and subdimension ratings across three groups totaled 450 African students and 306 females and 39 females who participated in FGM/C. Two analytical components within this study evaluated negative attitude as FGM/C opposition and empathetic attitude that demonstrates recognition of FGM/C. Result about FGM/C understanding appears through mean scores together with their calculated standard deviations for those three tested groups.

In the 450-student total group the FGMA total scores spanned from 11.0 through 49.0 with an average at 26.52 and standard deviation at 4.03. Students manifest a mixed viewpoint about FGM/C according to the average yet somewhat diverse score. Results indicate students possess a strong negativity toward FGM/C because their mean score on the negative attitude subdimension is 16.71 out of 20 (SD = 3.13). The score for empathetic attitude stands at 9.81 points (SD = 3.22) while presenting a lower figure than other ratings suggesting only a small number of participants will accept cultural reasoning for FGM/C although they understand its logic.

The mean total FGMA scores of 306 female participants reaching 26.59 (SD = 4.19) consist of values within 14.0 to 40.0. The resistance level against FGM/C shown by female students matches that of the total group because they experience the direct effects of this practice personally. Female respondents demonstrated similar negative FGM/C attitudes to the

overall research group as revealed through their average score of 16.77 (SD = 3.16). Females score 9.82 on empathetic attitude measurement (SD = 3.26) which matches the total group scores thus demonstrating they show some cultural empathy but keep up their critical stance towards the practice.

The females among the 39 participants who have been through FGM/C exhibited a substantially higher mean total FGMA score that reaches 28.89 while their standard deviation stands at 4.62 and their total score ranges from 22.0 to 40.0. The individuals who experienced FGM/C appeared to develop stronger attitudes regarding the topic based on their personal exposure to this practice. The personal involvement results in either negative stance toward or positive endorsement of the practice. Women who have undergone FGM/C exhibited a stronger opposition to this practice according to their score of 17.56 (SD = 3.27), which suggests their personal experiences with physical and psychological consequences from the practice. The empathetic attitude score in this group reached 11.33 (SD = 3.92). These women showed awareness of cultural and familial and social forces which support FGM even though they hold negative views about the practice.

Table 5

Descriptive Analysis of Difference Between the Female Genital Mutilation (FGM) Scale Total Scores and Diagnostic Characteristics of African Students (n=450)

Descriptive Variables		n	%	FGMA Total Score Mean ± SD	Test value	*p*
Age	18-22	182	40.4	26.69 ± 3.56	F = 1.211	0.305
	23-29	228	50.9	26.25 ± 4.30		
	30-42	39	8.6	27.42 ± 4.38		
Gender	Male	139	32.0	26.20 ± 3.22	t = 5.137	0.249
	Female	306	68.0	26.67 ± 4.35		
Years of Universty	1	37	8.2	28.24 ± 3.10	F = 3.675	0.012*
	2	118	26.2	26.28± 3.53		
	3	135	30.2	25.93 ± 3.79		
	4	159	35.3	26.,81 ± 4.61		
Marital Status	Married	26	5.8	25.03 ± 4.56	t = 0.254	0.051
	Single	423	94.2	26.61 ± 3.98		
Cultural Background	West African	289	64.2	26.35 ± 3.93	F = 1.300	0.269
	East African	82	18.2	27.42 ± 4.82		
	North African	31	7.1	26.32 ± 2.98		
	Central African	25	5.6	26.36 ± 3.87		
	Southern African	22	4.9	25.95 ± 3.25		
Religious Affiliation	Christianity	323	71.8	26.48 ± 4.15	F = 0.835	0.475
	Islam	108	24.0	26.86 ± 3.89		
	Traditional African religions	13	3.1	25.23 ± 2.24		
	Other	5	1.1	25.40 ± 0.54		

n: Frequency, %: Percentage, SD: Standard Deviation, p: Significance Level, *: $p < 0.05$, t: Independent t test, F: One-way Analysis of Variance (ANOVA)

Table 5 presents descriptive data about Female Genital Mutilation Attitude (FGMA) Scale total score differences according to different diagnostic characteristics which affect African students (n=450). The analysis evaluated diagnostic characteristics between African

students by studying gender, age, university education period, marital status, cultural background, and religious beliefs. The collected data through test values and p-values and standard deviations and mean FGMA total scores demonstrated which variables affect FGM attitudes.

Students within the age range of 18-22 (n=182) scored their mean FGMA at 26.69 ± 3.56 while students from 23-29 years old (n=228) scored their mean FGMA at 26.25 ± 4.30. Students between 30 and 42 years old (8.6% of the total, n=39) have the highest mean score at 27.42 ± 4.38 on FGMA. The one-way ANOVA test with F = 1.211 proved there is no statistical relationship between FGM attitudes and age division (p = 0.305) showing age does not affect how participants feel about FGM.

The research demonstrates that among students, male students (n=142, 31.6%) scored 26.20 ± 3.22 while female students (n=306, 68.0%) obtained 26.67 ± 4.35 on average. Data from the independent t-test analysis revealed that male and female students demonstrate similar outlooks toward FGM without statistical difference (p = 0.249) based on the test results (t = 5.137). Findings from this study demonstrate that participants of both sexes share identical perspectives about FGM among the research participants.

The opinions of undergraduate students displayed greater changes than those of university students at various academic levels. First-year students demonstrate the most support for FGM by scoring 28.24 ± 3.10 points on the FGMA among their total 37 participants (8.2%). The second-year students (n=118) registered a mean FGMA score of 26.28 ± 3.53 (26.2% participation) matched by third-year students (n=135) who scored 25.93 ± 3.79 (30.2% participation). Fourth-year students (n=159) (35.3% participation) achieved a mean score of 26.81 ± 4.61. These result indicate that university education duration impacts FGM attitudes through ANOVA results (F = 3.675 and p = 0.012) because new students demonstrate elevated opposition to FGM which might level off with advancing academic levels.

University students who have different marital status demonstrated distinctive views about the subject. Among survey participants, married students (5.8%) scored 25.03 ± 4.56 on the FGMA while single students (94.2%) obtained a higher mean of 26.61 ± 3.98. The

statistical analysis using the t-test revealed an insignificant difference ($t = 0.254$, $p = 0.051$) demonstrating that marital status does not affect FGM attitude strength in the surveyed students.

The mean FGMA score reported by West African students (n=289, 64.2%) amounts to 26.35 ± 3.93 and East African students (n=82, 18.2%) exhibit the highest mean at 27.42 ± 4.82 and North African students (n=31, 7.1%) scored 26.32 ± 2.98. The mean FGMA scores of 26.36 ± 3.87 appear among Central African students at 5.6% while Southern African students at 4.9% register 25.95 ± 3.25. Students from different cultural backgrounds demonstrate similar attitudes toward FGM because a statistically insignificant difference has been observed among them as revealed by the ANOVA test ($F = 1.300$; $p = 0.269$).

Among 323 Christian students who make up 71.8% of the participants their FGMA average score amounts to 26.48 ± 4.15. The mean score for Muslim students at 26.86 ± 3.89 exceeds the mean score of 26.48 ± 4.15 reported by Christian students slightly. The mean FGMA score for students belonging to traditional African religions reached 25.23 ± 2.24 whereas students practicing other religions averaged 25.40 ± 0.54.

ANOVA $F = 0.835$ proves religion does not cause statistically important attitude differences related to FGM among respondents since $p = 0.475$.

Table 6

Descriptive Analysis of Difference between the Female Genital Mutilation (FGM) Attitude Scale Total Scores and Responses of Only the Female Students (n=39)

Variables		Total Score			Negative Attitude			Empathetic Attitude		
		Mean ± SD	Test value	*P*	Mean ± SD	Test value	*p*	Mean ± SD	Test value	*p*
FGM/C undergo	Yes	28.89 ±4.62	t= 4.174	0.000	17.56 ±3.27	t= 1.758	0.079	11.33 ±3.92	t= 3.443	0.001
	No	26.23 ±3.72			16.64 ±3.09			9.58 ±2.93		

t = Independet t Test

Female students (n=39) participated in the Female Genital Mutilation (FGM) Attitude Scale measurement according to Table 6 where descriptive statistics compare their total score results. This analysis examined the link between FGM/C experience of respondents along with their total attitudes and negative and empathetic attitudes. The data shows mean results with standard deviations together with test values and p-values that demonstrate statistical significance between various attitude categories.

A total FGM Attitude Scale survey from female students who have undergone FGM/C resulted in a score mean of 28.89 ± 4.62. The average score of 28.89 ± 4.62 surpasses the 26.23 ± 3.72 mean score recorded from female students who have not had FGM/C. The results from the independent t-test (t = 4.174) demonstrate a statistically significant difference between the groups (p = 0.000) describing that experiencing FGM/C produces substantial modifications in total practice opinions. Individuals who experienced FGM/C appear to demonstrate more intense views about this matter.

Female students who have undergone the procedure demonstrate an average level of negative attitude toward FGM at 17.56 ± 3.27. The mean score for individuals who have not had FGM/C amounts to 16.64 ± 3.09. The value of t-test for this group assessment stands at 1.758 while its p-value reached 0.079. Based on the mean scores female participants who underwent FGM/C have stronger negative attitudes compared to uninformed subjects yet this distinction falls short of achieving statistical significance at $p<0.05$. Personal experience with FGM/C affects negative perceptions but the impact does not reach statistical significance when studying this research population.

The scores regarding empathetic attitudes produced contrasting results. Female students who have experienced FGM/C showed 11.33 ± 3.92 mean empathetic attitude scores which exceed the scores of 9.58 ± 2.93 shown by students who have not undergone the procedure. Statistics revealed that female students who underwent FGM/C demonstrate significantly elevated empathy levels toward FGM/C through the t-test ($p = 0.001$ with $t = 3.443$). When measured against non-FCMG participants those who have gone through FGM/C demonstrated more complex knowledge about the cultural setting surrounding the procedure leading to an empathetic standpoint emerging from their personal background.

CHAPTER V

Discussion

Major findings from this study revealed that there FGM/C exists at a minimal rate in the population. Results showed that majority of students belong to locations where FGM/C practice is not common or have a strong active community that opposes this cultural practice. This research confirms how FGM/C might affect sexual satisfaction because the practice often results in sexual dysfunction by damaging genital tissue and nerve endings. The evaluated group showed a limited number of cases with health-related problems following sexual encounters. The number of study participants who reported bleeding stood at 7.8% and those experiencing pain reached 9.5%.

The research confirms that most FGM/C procedures take place when the victim is still very young. The surgical practice follows mainstream cultural communities because women receive FGM/C before they develop resistance to medical procedures. The research also indicates family members serve as important decision-makers regarding FGM/C but community leaders actively help this practice continue. FGM/C procedure leads to sexual functioning preservation for some women but the rate of orgasm difficulties remains considerably high because of neural tissue destruction.

The findings presented in this study indicate that despite the overall negative perception expressed by the students about FGM there may well be qualitative changes in attitudes which could be described as empathetic, at least to some extent, as shaped by cultural or contextual factors. Participants displayed negative attitudes toward FGM/C in assessments yet their responses indicated cultural context affected their willingness to empathize with this practice. This is in line with the study of Raheem et al. (2023) and Ahinkorah et al. (2020) since cultural values coupled with religious beliefs strongly shape FGM practices in various African communities. Cultural connections could be the root reason behind differing student opinions regarding FGM while the communities fight against this practice grows across Africa. Also, students' educational backgrounds shape their point of view because first-year university students exhibited different perspectives than later-year students according to statistical analysis. The study confirms research findings from Ameyaw et al. (2020) and Van Bavel et al. (2017) that demonstrate education transforms FGM rates by educating people

about health dangers and legal consequences. Research by Small et al. (2020) revealed contradictory results which stress the value of developing cultural specific interventions instead of depending solely on education.

A study has revealed an underdeveloped system of psychological support for FGM survivors because just 5,1% of participants stated they had access to therapy. According to Tammarya and Manasi (2023) mental and sexual health interventions require combined integration for FGM survivors based on their narrative synthesis. People experiencing difficulties with sexual achievements reported below average satisfaction despite minimal reported complications or pain levels in intercourse according to the data which demonstrated 38,4% of participants were unable to reach orgasm. The majority of persons undergoing FGM experienced their initial procedure at a very young age while undergoing less invasive procedures that led to subsequent sexual health complications including bleeding and pain during intercourse and setbacks in sexual enjoyment. The physical consequences of FGM/C showed bleeding after intercourse occurred in 30.8% of cases while 53.8% of patients experienced pain during sexual intercourse. The reported data shows that FGM/C leads to multiple sexual health complications which cause physical distress among affected women.

Similar to Yassin et al. (2018) research FGM survivors demonstrated essential sexual complications including dyspareunia and reduced sexual satisfaction. In addition, Subject-specific FGM/C test results compared to sexual health metrics showed no meaningful discrepancies suggesting FGM-related psychological distress derives primarily from the culture and procedure nature than physical consequences. The findings of Elise and Johansen (2017) support these observations because they showed FGM serves vital cultural purposes for virility and sexual pleasure thus challenging any potential changes toward elimination.

Students in different years at the university appeared to hold different stances toward FGM/C. Simultaneously marital status demonstrated a nearly significant trend where unmarried students scored slightly higher on the FGM/C scale than married students. Statistical analysis indicates the academic year of study influences attitudes regarding FGM/C more strongly than other demographic properties since the education level and knowledge exposure about the practice may differ among students throughout their academic journey. Society along with cultural environment continue to serve as primary drivers of people's

perspectives about FGM/C. Analysis of FGM types and frequency revealed that 60,2% of participants had not experienced FGM/C yet 3,8% had undergone Type 4 (inconstant procedures on genital organ) possibly due to increased education and awareness efforts. The reduction of FGM occurs because education enhances social empowerment according to research from Ayenew et al. (2023) and Van Rossem et al. (2015). Results showed marital status and academic year influence attitudes between cultural and personal influences. University students who have different marital status demonstrated distinctive views about the subject. Among survey participants, married students (5.8%) scored 25.03 ± 4.56 on the FGMA while single students (94.2%) obtained a higher mean of 26.61 ± 3.98. The statistical analysis using the t-test revealed an insignificant difference ($t = 0.254$, $p = 0.051$) demonstrating that marital status does not affect FGM attitude strength in the surveyed students. Shabila's (2017) research mirrored these results which demonstrated that social position relates to FGM attitudes.

The research findings indicate the necessity of developing intensive interventions which simultaneously handle FGM's psychological and cultural dimensions. Northern Cyprus could adopt the specific successful health education programs from Tanzania studied by Galukande et al. (2019) to inform African students about FGM hazards plus its violations against human rights. University support systems would benefit FGM survivors when mental health and sexual health care services receive integration as proposed by Tammarya and Manasi (2023). Community engagement sessions together with social dialogue aimed at cultural norms would function as additional support to formal educational initiatives. According to Sakeah et al. (2019) the ongoing presence of FGM in specific regions stems from both traditional beliefs and social expectations. Interventions focusing on gender equality and cultural transformation require both male along with female student participation to alter societal perceptions.

In this study, it was observed that attitudes were stronger and more positive, especially in regions where female circumcision is common (Crichton et al., 2020). It was also emphasized that these attitudes are a determining factor in communities that tend to continue the practice of female circumcision. It is also emphasized that FGM leads to women being

seen as second-class citizens in society, and this situation can negatively affect women's struggle for equality in social life (Yılmaz & Demirtaş, 2021).

CHAPTER VI

Results and Recommendations

Conclusion

- The research measured African students in Northern Cyprus opinions about Female Genital Mutilation/Cutting (FGM/C) and linked student background characteristics to their attitudes. The survey included 450 African nursing students at Near East University who used a quantitative cross-sectional design which specifically gathered data from 306 female students about their personal experiences and attitudes.
- The research data indicates that most participants were free from FGM/C practice and its medical consequences. The majority of persons undergoing FGM experienced their initial procedure at a very young age while undergoing less invasive procedures that led to subsequent sexual health complications including bleeding and pain during intercourse and setbacks in sexual enjoyment. The continuously measured mean and standard deviation statistics demonstrated the minimal occurrence of FGM/C and its effects on these respondents.
- The findings presented in this study indicate that individuals who experienced FGM/C appeared to develop stronger attitudes regarding the topic based on their personal exposure to this practice. Women who have undergone FGM/C exhibited a stronger opposition to this practice according to their score of 17.56 (SD = 3.27), which suggests their personal experiences with physical and psychological consequences from the practice. The empathetic attitude score in this group reached 11.33 (SD = 3.92). These women showed awareness of cultural and familial and social forces which support FGM even though they hold negative views about the practice.
- University students who have different marital status demonstrated distinctive views about the subject. The statistical analysis using the t-test revealed an insignificant difference ($t = 0.254$, $p = 0.051$) demonstrating that marital status does not affect FGM attitude strength in the surveyed students.

- Although this research confirms how FGM/C might affect sexual satisfaction because the practice often results in sexual dysfunction by damaging genital tissue and nerve endings, the evaluated group showed a limited number of cases with health-related problems following sexual encounters. The number of study participants who reported bleeding stood at 7.8% and those experiencing pain reached 9.5%.

Recommendations

Based on the findings from this study, the following recommendations were made:

I. Awareness Campaigns on the critical dangers of FGM/C within educational institutions serving diverse student populations are recommended.

II. Strategies must handle cultural respect as well as religious beliefs to support direct FGM/C dialogue while combating erroneous beliefs without creating shame for affected people.

III. Educational institutions should develop sexual health and psychological support networks for FGM/C survivors which help treat their long-standing physical and mental health consequences.

IV. The protection of people from FGM/C requires local and international organizations to join forces through advocacy for protective policies applicable in diaspora communities and their home nations.

V. Future studies need to research the complex psychological traits and cultural settings surrounding FGM/C perspectives among diaspora peoples because they will help develop specific intervention programs.

REFERENCES

Abathun, A. D., Sundby, J., & Gele, A. (2018). Pupil's perspectives on female genital cutting abandonment in Harari and Somali regions of Ethiopia 11 *Medical and Health Sciences 11*17 Public Health and Health Services.

Abdalla, R.H.D. (1982). *Sisters in afflictions: Circumcision and Infibulation of women in Africa*. Zed Press.

Abdalla, S. M., & Galea, S. (2019). Is female genital mutilation/cutting associated with adverse mental health consequences? A systematic review of the evidence. *BMJ global health, 4*(4), e001553.

Abdollahzadeh, M., Nourizadeh, R., & Jahdi, N. S. (2023). Post-traumatic stress disorder among Iranian women with genital mutilation: a cross-sectional study. *Reproductive health*, *20*(1), 59.

Abdulcadir, J., Rodriguez, M. I., & Say, L. (2014). Research gaps in the care of women with female genital mutilation: An analysis. BJOG: *An International Journal of Obstetrics & Gynaecology, 122*(3), 294–303. https://doi.org/10.1111/1471- 0528.13217

Abdulah, D. M., Dawson, A., & Sedo, B. A. (2020). The impact of health education on attitudes of parents and religious leaders towards female genital mutilation. *BMJ Sexual & Reproductive Health*, *46*(1), 51-58.

Abdullah F. Z. (2021). The effect of female genital mutilation/cutting (FGM/C) on girls/women's mental health: a case-control study in Kurdistan Region of Iraq. *Archives of women's mental health*, *24*(5), 721–726. https://doi.org/10.1007/s00737-021-01125-4

Abidogun, T. M., Alyssa Ramnarine, L., Fouladi, N., Owens, J., Abusalih, H. H., Bernstein, J., & Aboul Enein, B. H. (2022). Female genital mutilation and cutting in the Arab League and diaspora: A systematic review of preventive interventions. *Tropical Medicine & International Health*, *27*(5), 468-478.

Adam, T., Bathija, H., Bishai, D., Bonnenfant, Y. T., Darwish, M., Huntington, D., & Johansen, E. (2010). Estimating the obstetric costs of female genital mutilation in six African countries. *Bulletin of the World Health Organization*, *88*(4), 281-288.

Adelekan, B., Kareem, Y. O., Abubakar, Z., Bungudu, K., Aderemi, A., Goldson, E., ... & Fatusi, A. (2022). Female genital mutilation and sexual behaviour by marital status among a nationally representative sample of Nigerian women. *Reproductive Health*, *19*(1), 91.

Ahinkorah, B. O. (2021). Factors associated with female genital mutilation among women of reproductive age and girls aged 0–14 in Chad: a mixed-effects multilevel analysis of the 2014–2015 Chad demographic and health survey data. *BMC public health*, *21*, 1-11.

Ahinkorah, B. O., Hagan, J. E., Ameyaw, E. K., Seidu, A. A., Budu, E., Sambah, F., & Schack, T. (2020). Socio-economic and demographic determinants of female genital mutilation in sub-Saharan Africa: analysis of data from demographic and health surveys. *Reproductive health*, *17*, 1-14.

Ahmed, MR, Shaaban, MM, Meky, HK, Amin Arafa, ME, Mohamed, TY, Gharib, WF, & Ahmed, AB (2017). Psychological impact of female genital mutilation among adolescent Egyptian girls: a cross-sectional study. *The European Journal of Contraception & Reproductive Health Care* , *22* (4), 280-285.

Akweongo P, Appiah-Yeboah S, Sakeah E, Phillips JF, Jackson E. It's a Woman's Thing: Gender Roles Sustaining the Practice of Female Genital Mutilation among the Kassena-Nankana of Northern Ghana. a paper presented at the Population Association of America, Washington DC; 2001

Al Awar, S., Al-Jefout, M., Osman, N., Balayah, Z., Al Kindi, N., & Ucenic, T. (2020). Prevalence, knowledge, attitude and practices of female genital mutilation and cutting (FGM/C) among United Arab Emirates population. *BMC women's health*, *20*, 1-12.

Alidost, F., Abbasi, M., Ghamsari, S. R., & Pakzad, M. (2023). Mental Health Disorders in Circumcised Reproductive-age Women, Legal Dimensions and Prevention Strategies: A Narrative Review. Distúrbios de saúde mental em mulheres circuncidadas em idade

reprodutiva, dimensões legais e estratégias de prevenção: uma revisão narrativa. *Revista brasileira de ginecologia e obstetricia : revista da Federacao Brasileira das Sociedades de Ginecologia e Obstetricia*, *45*(5), 281–288. https://doi.org/10.1055/s-0043-1770130

Alradie-Mohamed, A., Kabir, R., and Arafat, S. (2020). Decision-making Process in Female Genital Mutilation: *A Systematic Review. Int. J. Environ. Res. Public Health 17* (10), 3362. doi:10.3390/ijerph17103362

American Psychiatric Association . Diagnostic and Statistical Manual of Mental Disorders (DSM-5) 5th ed. American Psychiatric Association; Arlington, TX, USA: 2013.

Ameyaw, E. K., Tetteh, J. K., Armah-Ansah, E. K., Aduo-Adjei, K., & Sena-Iddrisu, A. (2020). Female genital mutilation/cutting in Sierra Leone: are educated women intending to circumcise their daughters?. *BMC international health and human rights*, *20*, 1-11.

Anarfi, K.J. To Change or not to Change: Obstacles and Resistance to Sexual Behavioural Change among the Youth in Ghana in the Era of AIDS. Res Rev. 19: 27–45.

Ashimi, A., Aliyu, L., Shittu, M., & Amole, T. (2014). A multicenter study on knowledge and attitude of nurses in northern Nigeria concerning female genital mutilation. European *Journal of Contraception and Reproductive Health Care, 19*(2), 134–140. https://doi.org/10.3109/13625187.2014.885940

Austen, R. A. (1979). *The Trans Saharan Slave Trade: A tentative census*. In the Uncommon Market: Essays in the economic history of the Atlantic slave trade, Henry A.Gemery and Jan S. Hogendon eds., New York Academic Press.

Australian Institute of Health and Welfare (2019). *Discussion of female genital mutilation/cutting data in Australia.* Cat. no. PHE 253. Canberra: AIHW.

Ayenew, A. A., Mol, B. W., Bradford, B., & Abeje, G. (2023). Prevalence of female genital mutilation and associated factors among daughters aged 0–14 years in sub-Saharan Africa: a multilevel analysis of recent demographic health surveys. *Frontiers in Reproductive Health*, *5*, 1105666.

Baillot, H., Murray, N., Connelly, E., & Howard, N. (2018). Addressing female genital mutilation in Europe: a scoping review of approaches to participation, prevention, protection, and provision of services. *International journal for equity in health*, *17*, 1-15.

Balfour, J., Abdulcadir, J., Say, L., & Hindin, M. J. (2016). Interventions for healthcare providers to improve treatment and prevention of female genital mutilation: A systematic review. BMC Health Services Research, 16(1), 1–6. https://doi.org/10.1186/s12913-016-1674-1

Banks, E., Meirik, O., Farley, T., Akande, O., Bathija, H., & Ali, M. (2006). Female genital mutilation and obstetric outcome: WHO collaborative prospective study in six African countries. *The Lancet, 367*(9525), 1835–1841. https://doi.org/10.1016/S0140-6736(06)68805-3

Barrett, H. R., Bedri, N., & Krishnapalan, N. (2020). The Female Genital Mutilation (FGM)–migration matrix: The case of the Arab League region. *Health Care for Women International, 41*(2), 186–212. https://doi.org/10.1080/07399332.2020.1815290

Bass, J. K., Annan, J., McIvor Murray, S., Kaysen, D., Griffiths, S., Cetinoglu, T. (2013). Controlled trial of psychotherapy for Congolese survivors of sexual violence. *New Engl J Med;368*(23):2182-91. doi:10.1056/NEJMoa1211853.

Bembo, P. (2007*). History of Venice (1551).* The I Tatti Renaissance Library, ed. R. W. Ulery, Harvard University Press.

Bendiksen, B., Heir, T., Minteh, F., Ziyada, M. M., Kuye, R. A., & Lien, I. L. (2021). The association between physical complications following female genital cutting and the mental health of 12-year-old Gambian girls: A community-based cross-sectional study. *Plos one, 16*(1), e0245723.

Browne, W.G. (1799). *Travels in Africa, Egypt and Syria from the year 1792 to 1798*. London.

Buggio, L., Facchin, F., Chiappa, L., Barbara, G., Brambilla, M., & Vercellini, P. (2019). Psychosexual consequences of female genital mutilation and the impact of reconstructive surgery: a narrative review. *Health Equity* ,

Bukhari M. (n.d). 810-870, "Sahih".

Burckhardt, J. L. (1835). Travels in Nubia, 1819. *North American Review , 40*(87), 477-510

Buttia, C. (2015). *Investigation of successful interventions in mitigation of female genital mutilation/cutting (FGM/C) among selected Kenyan communities: Maasai, Kisii and Kuria* (Doctoral dissertation, Hochschule für angewandte Wissenschaften Hamburg).

Cailliaud, F. (1826). Voyage a Meroe: au áeuve Blanc, au-dela de Fazoql dans le midi du royaume de Sennar, a Syouah et dans cinq autres oasis; fait dans les annees 1819, 1820, 1821 et 1822. *Par autorisation du roi, a líImprimerie royale , 1.*

Campinha-Bacote, J. (2011). Delivering patient centered care in the midst of a cultural conflict: The role of cultural competence. *The Online Journal of Issues in Nursing, 16*(2), Article 5. https://doi.org/10.3912/OJIN.Vol16No02Man05

Cappa, C., Thomson, C., and Murray, C. (2020). Understanding the Association between Parental Attitudes and the Practice of Female Genital Mutilation Among Daughters. *PLoS One 15* (5), e0233344–10. doi:10.1371/ journal.pone.0233344

Cetorelli, V., Wilson, B., Batyra, E., & Coast, E. (2020). Female genital mutilation/cutting in Mali and Mauritania: understanding trends and evaluating policies. *Studies in family planning*, *51*(1), 51-69.

Chidera, E. (2018). What factors influence the persistence of female genital mutilation in Nigeria ? A systematic review. *Journal of Tropical Diseases, 6(*1), Article 1000256. https://doi.org/10.4172/2473-3350.1000256

Corno, L., La Ferrara, E., & Voena, A. (2021). *Female genital cutting and the slave trade* (No. 99). Working paper.

Crisman, B., Dykstra, S., Kenny, C., & O'Donnell, M. (2016). The impact of legislation on the hazard of female genital mutilation/cutting: regression discontinuity evidence from Burkina Faso. *Center for Global Development Working Paper*, (432).

Diabate, I., & Mesplé-Somps, S. (2019). Female genital mutilation and migration in Mali: do return migrants transfer social norms?. *Journal of Population Economics*, *32*(4), 1125-1170.

Dike, E. I., Ojiyi, E. C., Chukwulebe, A. E., & Egwuatu, V. F. (2012). Female genital mutilation: Awareness and attitude of nursing and midwifery students in Afikpo, Nigeria. *Internet Journal of Gynecology & Obstetrics, 16*(3), 1–6. https://doi.org/10.5580/2c1b

Directorate of National Statistics, (2020) The Somali Health and Demographic Survey 2020. Available at https://reliefweb.int/sites/reliefweb.int/files/resources/Som%20Gvt%20UNFPA%20Press%20Release_SHDS%20Rpt%20Launch_29-04-20_Final.pdf.

Dirie, M. A., & Lindmark, G. (1991). A hospital study of the complications of female circumcision. *Tropical doctor*, *21*(4), 146-148.

Dos Santos, J.D. (1999). *1609, Ethiopia Oriental e Varia Historia de Cousas Notaveis do Oriente*. Euora: de Lira.

Dowuona-Hammond, C., Atuguba, R. A., & Tuokuu, F. X. D. (2020). Women's survival in Ghana: what has Law got to Do with it?. *Sage Open*, *10*(3), 2158244020941472.

Earp BD, Johnsdotter S. (2021). Current critiques of the WHO policy on female genital mutilation. *International journal of impotence research, 33*(2):196-209. doi.org/10.1038/s41443-020-0302-0

Echeozo, J. F. (2023). *Nigerian Nurses' Perceptions of Caring for Women with Female Genital Mutilation* (Doctoral dissertation, Walden University).

Edberg, M., & Krieger, L. (2020). Recontextualizing the social norms construct as applied to health promotion. *SSM—Population Health, 10*, Article 100560. https://doi.org/10.1016/j.ssmph.2020.100560

El-Dirani, Z., Farouki, L., Akl, C., Ali, U., Akik, C., & McCall, S. J. (2022). Factors associated with female genital mutilation: A systematic review and synthesis of national, regional

and community-based studies. *BMJ Sexual & Reproductive Health*. https://doi.org/10.1136/bmjsrh-2021-201399

El-Dirani, Z., Farouki, L., Akl, C., Ali, U., Akik, C., & McCall, S. J. (2022). Factors associated with female genital mutilation: a systematic review and synthesis of national, regional and community-based studies. *BMJ Sexual & Reproductive Health*, *48*(3), 169-178.

Esho, T., Matanda, D. J., Abuya, T., Abebe, S., Hailu, Y., Camara, K., ... & Osur, J. (2022). The perceived effects of COVID-19 pandemic on female genital mutilation/cutting and child or forced marriages in Kenya, Uganda, Ethiopia and Senegal. *BMC public health*, *22*(1), 601.

Esse, I., Kincaid, C. M., Terrell, C. A., & Mesinkovska, N. A. (2024). Female genital mutilation: Overview and dermatologic relevance. *JAAD international*, *14*, 92-98.

Esu, E., Okoye, I., Arikpo, I., Ejemot-Nwadiaro, R., & Meremikwu, M. M. (2017). Providing information to improve body image and care-seeking behavior of women and girls living with female genital mutilation: A systematic review and meta-analysis. *International Journal of Gynecology & Obstetrics*, *136*, 72-78.

Evans, W. D., Donahue, C., Snider, J., Bedri, N., Elhussein, T. A., & Elamin, S. A. (2019). The Saleema initiative in Sudan to abandon female genital mutilation: Outcomes and dose response effects. *PLoS One*, *14*(3), e0213380.

Fagbamigbe, A. F., Morhason-Bello, I. O., Kareem, Y. O., & Idemudia, E. S. (2021). 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), e0250411.

Future Policy (2014). *Winner Silver Award. Burkina Faso's law prohibiting FGM* (http://www.futurepolicy.org/wp-content/uploads/2015/06/fpa2014brochure_en_2nd_ed-1.pdf.

Galukande, M., Kamara, J., Ndabwire, V., Leistey, E., Valla, C., & Luboga, S. (2015). Eradicating female genital mutilation and cutting in Tanzania: an observational study. *BMC public health*, *15*, 1-10.

González-Timoneda, A., González-Timoneda, M., Cano Sánchez, A., & Ruiz Ros, V. (2021). Female genital mutilation consequences and healthcare received among migrant women: a phenomenological qualitative study. *International journal of environmental research and public health*, *18*(13), 7195.

Hodes, D., O'Donnell, N. A., Pall, K., Leoni, M., Lok, W., Debelle, G. & Lynn, R. M. (2021). Epidemiological surveillance study of female genital mutilation in the UK. *Archives of disease in childhood*, *106*(4), 372-376.

Hussein, S. A., & Ghattass, S. (2019). *" No to circumcision": The road to effective social marketing campaigns in Egypt.*

Igras, S., Plesons, M., & Chandra-Mouli, V. (2021). Building evidence on what works (and what does not): practical guidance from the World Health Organization on post-project evaluation of adolescent sexual and reproductive health projects. *Health Policy and Planning*, *36*(5), 811-815.

Im, H., Swan, L. E., & Heaton, L. (2020). Polyvictimization and mental health consequences of female genital mutilation/circumcision (FGM/C) among Somali refugees in Kenya. *Women & Health*, *60*(6), 636-651.

Jacobson, D., Glazer, E., Mason, R., Duplessis, D., Blom, K., Du Mont, J., Jassal, N., Einstein, G. (2018) The Lived Experiences of Female Genital Cutting (FGC) in Somali-Canadian Women's Daily Lives. *PLoS ONE, 13(* 11): 31-58.

Jahangiry, L., Pashaei, T., & Ponnet, K. (2021, September). Attitudes toward female genital mutilation/circumcision: a systematic review and meta-analysis. In *Healthcare*, 9(9), p. 1184). MDPI.

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

Johnsdotter, S. (2019). Meaning well while doing harm: compulsory genital examinations in Swedish African girls. *Sexual and Reproductive Health Matters*, *27*(2), 87-99.

Johnson-Agbakwu, C. E., Chen, M., Salad, M., Chaisson, N., Connor, J. J., & Robinson, B. B. E. (2023). Female genital cutting (FGC) type: proposing a multifaceted, interactive method for FGC self-assessment. *The journal of sexual medicine*, *20*(11), 1292–1300. https://doi.org/10.1093/jsxmed/qdad101

Kandala, N. B., Ezejimofor, M. C., Uthman, O. A., & Komba, P. (2018). Secular trends in the prevalence of female genital mutilation/cutting among girls: A systematic analysis. *BMJ Global Health, 3*(5), e000549. https://doi.org/10.1136/bmjgh-2017-000549

Kaplan, A., Hechavarría, S., Martín, M., & Bonhoure, I. (2011). Health consequences of female genital mutilation/cutting in the Gambia, evidence into action. *Reproductive health*, *8*, 1-6.

Karlsen, S., Carver, N., Mogilnicka, M., & Pantazis, C. (2020). 'Putting salt on the wound': a qualitative study of the impact of FGM-safeguarding in healthcare settings on people with a British Somali heritage living in Bristol, UK. *BMJ open*, *10*(6), e035039.

Kenyon, F.G. (1893), ìGreek papyri in the British Museumî, ed. F. G. Kenyon, nr. 24. p. 32, London.

Kimani, S., & Shell-Duncan, B. (2018). Medicalized female genital mutilation/cutting: contentious practices and persistent debates. *Current sexual health reports*, *10*, 25-34.

Kimani, S., Esho, T., Kimani, V., Muniu, S., Kamau, J., Kigondu, C., ... & Guyo, J. (2018). Female Genital Mutilation/Cutting: Innovative Training Approach for Nurse-Midwives in High Prevalent Settings. *Obstetrics and Gynecology International*, *2018*(1), 5043512.

Knight, M.(2001), ìCuring Cut or Ritual Mutilation?: Some Remarks on the Practice of Female and Male Circumcision in Graeco-Roman Egypt. Isis; an international review devoted to the history of science and its cultural ináuencesî, 92, 317-38. 10.1086/385184

Kuring, D. (2014). *Diversity, culture and international law: Self-determination in the case of harmful traditional practices*. epubli.

Land of Women Switzerland. (2020). *Female genital mutilation in Switzerland: State of place of prevention, care and protection measures in relation to female genital mutilation (FGM) in Switzerland*: Summary. Bern. Available at: https://www.terredes-femmes.ch/images/docs/2014_EtatsdesLieux_MGF.pdf.

Larrey, D. J. (1803). *Relation historique et chirurgicale de líexpÈdition de líarmÈe díorient, en Egypte et en Syrie*. Demonville, Paris.

Lever, H., Ottenheimer, D., Teysir, J., Singer, E., & Atkinson, H. G. (2019). Depression, Anxiety, Post-traumatic Stress Disorder and a History of Pervasive Gender-Based Violence Among Women Asylum Seekers Who Have Undergone Female Genital Mutilation/Cutting: A Retrospective Case Review. *Journal of immigrant and minority health*, *21*(3), 483–489. https://doi.org/10.1007/s10903-018-0782-x

Leye, E., Van Eekert, N., Shamu, S., Esho, T., & Barrett, H. (2019). Debating medicalization of Female Genital Mutilation/Cutting (FGM/C): learning from (policy) experiences across countries. *Reproductive health*, *16*(1), 1-10.

Llamas, J. (2017). Female circumcision: The history, the current prevalence and the approach to a patient. *University of Virginia Medical School Working Paper*, 1-8.

Lurie, J. M., Weidman, A., Huynh, S., Delgado, D., Easthausen, I., & Kaur, G. (2020). Painful gynecologic and obstetric complications of female genital mutilation/cutting: A systematic review and meta-analysis. *PLoS medicine*, *17*(3), e1003088. https://doi.org/10.1371/journal.pmed.1003088

Mackie, G. (1996). Ending footbinding and inÖbulation: A convention account. *American sociological review*, 999-1017.

Mahgoub, E., Nimir, M., Abdalla, S., & Elhuda, D. A. (2019). Effects of school-based health education on attitudes of female students towards female genital mutilation in Sudan. *East Mediterr Health J*, *25*(6), 406-12.

Matanda, D. J., Van Eekert, N., Croce-Galis, M., Gay, J., Middelburg, M. J., & Hardee, K. (2023). What interventions are effective to prevent or respond to female genital

mutilation? A review of existing evidence from 2008–2020. *PLOS Global Public Health*, *3*(5), e0001855.

Matanda, D., Groce-Galis, M., Gay, J., & Hardee, K. (2021). Effectiveness of interventions designed to prevent or respond to female genital mutilation: A review of evidence. *UNFPA, UNICEF, WHO, and Population Council*.

Mehari, G., Molla, A., Mamo, A., & Matanda, D. (2020). Exploring changes in female genital mutilation/cutting: Shifting norms and practices among communities in Fafan and West Arsi zones, Ethiopia.

Mehari, L. E. (2018). *The Association of Female Genital Mutilation in sexual behaviors and marriageability*, Ethiopia DHS 2016.

Meroka-Mutua, A. K., Mwanga, D., & Olungah, C. O. (2020). *Assessing the role of law in reducing the practise of FGM/C in Kenya.*

Morrone, A. (2020). Female genital mutilation. *Skin Disorders in Migrants*, 191-207.

Mubaiwa, O., Bradley, T., & Meme, J. (2022). The gendered impact of COVID-19 on FGM. *Development in Practice*, *32*(6), 840-850.

Mulongo, P., McAndrew, S., Hollins-Martin, C. (2014) Crossing borders: discussing the evidence relating to the mental health needs of women exposed to female genital mutilation. *Int J Ment Health Nurs 23(*4):296–305

Nabaneh, S., & Muula, A. S. (2019). Female genital mutilation/cutting in Africa: A complex legal and ethical landscape. *International Journal of Gynecology & Obstetrics*, *145*(2), 253-257.

Nambisia, E. M. (2014). *Measures influencing eradication of female genital mutilation practices among the Maasai community in Maparasha constituency Kajiado county, Kenya* (Doctoral dissertation, University of Nairobi).

O'Neill, S. & Pallitto, C. (2021). The Consequences of Female Genital Mutilation on Psycho-Social Well-Being: A Systematic Review of Qualitative Research. *Qualitative Health Research, 31*(9) 1738–1750

O'Neill, S., Richard, F., Vanderhoven, C., & Caillet, M. (2022). Pleasure, womanhood and the desire for reconstructive surgery after female genital cutting in Belgium. *Anthropology & medicine*, *29*(3), 237-254.

Odukogbe, A. A., Afolabi, B. B., Bello, O. O., & Adeyanju, A. S. (2017). Female genital mutilation/cutting in Africa. *Translational Andrology and Urology, 6*(2), 138–148. https://doi.org/10.21037/tau.2017.03.60

Omigbodun, O., Bella-Awusah, T., Groleau, D., Abdulmalik, J., & Emma-Echiegu, N. (2020). Perceptions of the psychological experiences surrounding female genital mutilation/cutting (FGM/C) among the Izzi in Southeast Nigeria. *Transcultural Psychiatry, 57*(1), 212–227. https://doi.org/10.1177/1363461519893141

Orekoya, S. (2015). *Workers Health Status and Economic Productivity*.

Ortner, S. B. (1984). Theory in anthropology since the sixties. *Comparative Studies in Society and History, 26*(1), 126–166. https://doi.org/10.1017/S0010417500010811

Osman, S. Y. E., Ounsa, M. A. A. G. E., Zain, H., Albarakati, R. G., Deyab, A. A., Abdalla, S. M., ... & Ebaid, E. M. (2020). Female Genital Mutilation (FGM): Social Factors and Urinary Tract Infection. *Journal of Research in Medical and Dental Science*, *8*(2), 11-16.

Oyefara, J. L. (2015). Female genital mutilation (FGM) and sexual functioning of married women in Oworonshoki Community, Lagos State, Nigeria. *African Population Studies*, *29*(1), 1526-1540.

Oyefara, L. J. (2014). Female genital mutilation (FGM) and theory of promiscuity: myths, realities and prospects for change in Oworonshoki Community, Lagos State, Nigeria. *Genus*, *70*(2-3), 7-33.

Pashaei, T., Ponnet, K., Moeeni, M., Khazaee-pool, M., & Majlessi, F. (2016). Daughters at risk of female genital mutilation: Examining the determinants of mothers' intentions to allow their daughters to undergo female genital mutilation. *PLoS One*, *11*(3), e0151630.

Paslakis G, Farré JM, Tolosa-Sola I, Palazón-Llecha A, Domínguez-Cagnon H, Jiménez M, Martínez Rosselló B, Barri-Soldevila P, Mestre-Bach G. (2020). Clinical Features Associated with Female Genital Mutilation/Cutting: A Pilot Longitudinal Study. *J Clin Med.* 2020 Jul 22;9(8):2340. doi: 10.3390/jcm9082340. PMID: 32707951; PMCID: PMC7463820.

Pastor-Bravo, M., Almansa-Martínez, P., & Jiménez-Ruiz, I. (2022). Factors contributing to the perpetuation and eradication of female genital mutilation/cutting in sub-Saharan women living in Spain. *Midwifery*, *105*, 103207.

Patel, N., Kellezi, B., Williams, A.C. (2014). Psychological, social and welfare interventions for psychological health and well-being of torture survivors. *Cochrane Database Syst Rev*.;(11):CD009317

Plugge, E., Adam, S., El Hindi, L., Gitau, J., Shodunke, N., & Mohamed-Ahmed, O. (2019). The prevention of female genital mutilation in England: what can be done?. *Journal of Public Health*, *41*(3), e261-e266.

Raheem, K. A., Udenze, C., & Odetokun, I. A. (2023). University female students' perception and prospective practice of female genital mutilation in Umudike, Southeast Nigeria. *African Journal of Reproductive Health*, *27*(1), 54-62.

Rawat, R. (2017). The association between economic development, education and FGM in six selected African countries. *African Journal of Midwifery and Women's Health*, *11*(3), 137-146.

Refaei, M., Aghababaei, S., Pourreza, A., & Masoumi, S. Z. (2016). Socioeconomic and Reproductive Health Outcomes of Female Genital Mutilation. *Archives of Iranian medicine*, *19*(11), 805–811.

Reman, T., Balligand, V., Schoefs, B., Feipel, V., & Bertuit, J. (2023). Psychological consequences of female genital mutilation: A mixed-method systematic review. *South African journal of physiotherapy*, *79*(1), 1877.

Ruiz, I. J., Martínez, P. A., & Giménez, L. G. (2017). Eradicating Female Genital Mutilation; a viable reality. Raising awareness in the men involved. *Procedia-Social and Behavioral Sciences*, *237*, 784-791.

Russegger, J. (1843). Reisen in Europa, Asien und Afrika: mit besonderer Rucksicht auf die naturwissenschaftlichen Verhaltnisse der betreffenden Lander ; unternommen in den Jahren 1835 bis 1841. *Schweizerbartische Verlagshandlung, 2.*

Sakeah, E., Debpuur, C., Aborigo, R. A., Oburo, A. R., Sakeah, J. K., Moyer, C. A., (2019). Persistent Female Genital Mutilation Despite its Illegality: Narratives from Women and Men in Northern Ghana. Yeetau Akpe Kweso Enuameh, Kwame Nkrumah University of Science and Technology. *PLoS ONE, 14*(14): 54-71.

Sano, Y., Konkor, I., Antabe, R., & Ragetlie, R. (2021). Physical intimate partner violence justification and female genital mutilation in Kenya: evidence from the demographic and health survey. *Journal of Aggression, Maltreatment & Trauma*, *30*(6), 781-791.

Sarayloo, K., Latifnejad Roudsari, R., Elhadi, A. (2019) Health consequences of the female genital mutilation: a systematic review. *Galen Med J 8*:e1336

Seidu, A. A., Aboagye, R. G., Sakyi, B., Adu, C., & Ameyaw, E. K. (2022). Female genital mutilation and skilled birth attendance among women in sub-Saharan Africa. *BMC Women's Health, 22*(26), 1–11. https://doi.org/10.1186/s12905-021-01578-w

Shabila, N. P. (2017). Mothers' Factors Associated with Female Genital Mtilation in Dughters in the Iraqi Kurdistan Region. *Women Health 57* (3), 283–294. doi:10.1080/03630242.2016.1164274

Shabila, N. P. (2021). Changes in the prevalence and trends of female genital mutilation in Iraqi Kurdistan Region between 2011 and 2018. *BMC Women's Health, 21*(137), 1–7. https://doi.org/10.1186/s12905-021-01282-9

Shell-Duncan, B., Naik, R., & Feldman-Jacobs, C. (2016). A state-of-the-art synthesis of female genital mutilation/cutting: What do we know now? *Evidence to End FGM/C: Research to Help Women Thrive*. Population Council. https://www.popcouncil.org/research/evidence-to-end-fgmc

Siristatidis, C., Karageorgiou, V., & Vogiatzi, P. (2021). Current issues on research conducted to improve women's health. *MDPI Healthcare, 9*(92), 1–11. https://doi.org/10.3390/healthcare9010092

Small, E., Sharma, B. B., Nikolova, S. P., & Tonui, B. C. (2020). Hegemonic masculinity attitudes toward female genital mutilation/cutting among a sample of college students in northern and southern Sierra Leone. *Journal of Transcultural Nursing*, *31*(5), 468-478.

Smith, H., Stein, K. (2017) Psychological and counselling interventions for female genital mutilation. *Int J Gynecol Obstet 136*:60–64

Soomar, S. M., & Soomar, S. M. (2022). A review of sexual and reproductive health outcomes of female genital mutilation and with the context of COVID-19 pandemic. *Journal on Nursing*, *12*(1).

Spotlight Initiative (2018*). How Spotlight Initiative is working to end female genital mutilation by 2030.* Available from: https://www.spotlightinitia tive.org/news/how-spotlight-initiative-working-end-female-genital-mutilation-2030

Tammary, E., & Manasi, K. (2023). Mental and sexual health outcomes associated with FGM/C in Africa: a systematic narrative synthesis. *EClinicalMedicine*, *56*.

Taraldsen, S. (2023). *Managing health consequences of female genital mutilation/cutting (FGM/C).*

Tarr-Attia, C.K., Boiwu, G.H., & Martínez-Pérez, G. (2019). 'Birds of the same feathers fly together': midwives' experiences with pregnant women and FGM/C complications-a grounded theory study in Liberia. *Reproductive Health* , *16* , 1-12.

Tordrup, D., Bishop, C., Green, N., Petzold, M., Vallejo, F. R., & Vogel, J. P., et al. (2022). Economic burden of female genital mutilation in 27 high-prevalence countries. *BMJ Global Health, 7*(2), e004512. https://doi.org/10.1136/bmjgh-2020-004512

Tordrup, D., Bishop, C., Green, N., Petzold, M., Vallejo, F. R., Vogel, J. P., & Pallitto, C. (2022). Economic burden of female genital mutilation in 27 high-prevalence countries. *BMJ global health*, *7*(2), e004512.

Troh, C. (2020). *Violation of women's rights: Female Genital Mutilation FGM*.

Ugwu, A. O., Owie, E., Olamijulo, J. A., Okorafor, U. C., Odo, C. C., & Okoro, A. C. (2022). Epidermal Inclusion Cysts of the Clitoris Following Female Genital Mutilation: Case Series and Review of Literature. *Nigerian Journal of Experimental and Clinical Biosciences*, *10*(4), 131-133.

UNFPA (2018). *Analysis of Legal Frameworks on Female Genital Mutilation in selected countries in West Africa*. https://wcaro.unfpa.org/sites/default/files/pub-pdf/EN-UNFPA-ANALYSIS-ON-FGM-WEB.pdf

UNFPA–UNICEF (2018). *Performance Analysis for Phase II. UNFPA–UNICEF Joint Programme on Female Genital Mutilation: Accelerating Change*. UNFPA–UNICEF.

UNFPA-UNICEF. (2017). *17 ways to end FGM/C*. Available from: https://www.unfpa.org/publications/seventeen-ways-end-fgmc

UNICEF (2016). *Female genital mutilation/cutting: a global concern*. Online: Accessed; [Available from: https://www.unicef.org/media/files/FGMC_2016_brochure_final_UNICEF_SPREAD.pdf accessed December 2024.

UNICEF (2020). *Female Genital Mutilation/ Cutting: A global concern*. Available at: https://www.unicef. org/media/files/FGMC_2016_brochure_final_UN UNICEF_ SPREAD.pdf.

UNICEF (2022). Dynamic of Social Norms: Female Genital Mutilation https://www.unicef.org/media/124446/file/FGM-Dynamics-Social-Norm-2022.pdf

UNICEF. (2016). Female genital mutilation/cutting: A global concern. *UNICEF*.

UNICEF. (2022). *Female Genital Mutilation*: https://data.unicef.org/topic/childprotection/female-genital-mutilation/

United Nations Children's Fund (UNICEF) (2008). *Changing a Harmful Social Convention: Female Genital Mutilation/Cutting.*

United Nations Children's Fund, & Gupta, G. R. (2013). Female genital mutilation/cutting: a statistical overview and exploration of the dynamics of change. *Reproductive Health Matters*, 184-190.

United Nations General Assembly (2013). Resolution 67/146 on Intensifying Global Efforts for the Elimination of Female Genital Mutilations, A/RES/67/146, 5 March 2013, para. 4

United Nations General Assembly (2017). Resolution 71/168 on Intensifying Global Efforts for the Elimination of Female Genital Mutilation, A/RES/71/168.

United Nations News Centre (2017). Ban welcomes UN General Assembly resolutions eliminating female genital mutilation, 21 December 2012 (http://www.un.org/apps/news/story. asp?NewsID=43839#.VfKMu2TtlHw

United Nations Population Fund, UNICEF (2015). *Global strategy to stop health–care providers from performing female genital mutilation*: World Health Organization. Available from: URL: http: //www.who.int/ reproductivehealth/publications/fgm/

United Nations. (2016). Sustainable Development Goal 5: Achieve gender equality and empower all women and girls. *Sustainable Development Knowledge Platform*. https://sustainabledevelopment.un.org/sdg5

Van Bavel H. (2022). Education, Class, and Female Genital Cutting among the Samburu of Northern Kenya: Challenging the Reproduction of the "Ignorant Pastoralist" Narrative in Anticutting Campaigns. *Violence against women*, *28*(15-16), 3742–3761. https://doi.org/10.1177/10778012221079376

Van Bavel, H., Coene, G., & Leye, E. (2017). Changing practices and shifting meanings of female genital cutting among the Maasai of Arusha and Manyara regions of Tanzania. *Culture, Health & Sexuality*, *19*(12), 1344-1359.

Van Raemdonck, A. (2019). Paradoxes of awareness raising in development: gender and sexual morality in anti-FGC campaigning in Egypt. *Culture, Health & Sexuality*, *21*(10), 1177-1191.

Van Rossem, R., Meekers, D., and Gage, A. J. (2015). Women's Position and Attitudes towards Female Genital Mutilation in Egypt: A Secondary Analysis of the Egypt Demographic and Health Surveys, 1995-2014. *BMC Public Health 15* (1), 874–913. doi:10.1186/s12889-015-2203-6

Von der Osten-Sacken T, Uwer T. Is Female Genital Mutilation an Islamic problem? Middle East Q. 2007; 14: 29–36.

Waigwa, S., Doos, L., Bradbury-Jones, C., & Taylor, J. (2018). Effectiveness of health education as an intervention designed to prevent female genital mutilation/cutting (FGM/C): a systematic review. *Reproductive health*, *15*, 1-14.

WHO (2020). *Female Genital Mutilation* [Internet]. Geneva: World Health Organization. Available at: https://www.who.int/news-room/fact-sheets/ detail/female-genital-mutilation.

Widstrand, C. (1964). Female Infibulation. *Studia Ethnographica Upsaliensia, 20*, 95-122.

Wilson, A. M., & Zaki, A. A. (2022). Novel clitoral reconstruction and coverage with sensate labial flaps: potential remedy for female genital mutilation. *Aesthetic Surgery Journal*, *42*(2), 183-192.

Wood, R., Richens, Y., Lavender, T. (2021) The experiences and psychological outcomes for pregnant women who have had FGM: a systematic review. *Sex Reprod Healthc Of J Swed Assoc Midwives 29*:100639

World Health Organization (2018). Care of girls and women living with female genital mutilation: a clinical handbook. WHO, Geneva.

World Health Organization (WHO), (2012). *Female Genital Mutilation. Understanding and addressing violence against Women,* World Health Organization, Geneva, Switzerland.

World Health Organization. (2016). *WHO guidelines on the management of health complications from female genital mutilation*: Web Annex: GRADE tables. https://apps.who.int/iris/bitstream/ handle/10665/206443/WHO_RHR_16.05_eng.pdf

World Health Organization. (2020*). Classification of female genital mutilation*. WHO. Available at: https://www.who.int/ reproductivehealth/topics/fgm/overview/en/.; Accessed December 18, 2024.

World Health Organization. (2022). Female genital mutilation. *WHO*. https://www.who.int/news-room/fact-sheets/detail/female-genital-mutilation

World Health Organization. (2023). *Female Genital Mutilation fact sheet*. https://www.who.int/newsroom/fact-sheets/detail/female-genital-mutilation

World Health Organization. (2024). Female genital mutilation. *WHO*. https://www.who.int/news-room/fact-sheets/detail/female-genital-mutilation

Wouango, J., Ostermann, S. L., & Mwanga, D. (2020). *When and how does law effectively reduce the practice of female genital mutilation/cutting?*

Yassin, K., Idris, H.A. & Ali, A.A. (2018). Characteristics of female sexual dysfunctions and obstetric complications related to female genital mutilation in Omdurman maternity hospital, Sudan. *Reprod Health* **15**, 7. https://doi.org/10.1186/s12978-017-0442-y

Yount, K. M., Cheong, Y. F., Grose, R. G., & Hayford, S. R. (2020). Community gender systems and a daughter's risk of female genital mutilation/cutting: Multilevel findings from Egypt. *PloS one*, *15*(3), e0229917.

Zurynski, Y., Sureshkumar, P., Phu, A., & Elliott, E. (2015). Female genital mutilation and cutting: A systemic literature review of health professionals' knowledge, attitudes, and clinical practice. *BMC International Health and Human Rights, 15*(1), 1–18. https://doi.org/10.1186/s12914-015-0070-y

APPENDICES

Appendix A: Section 1 Socio-demographic information form

Dear Participant,
Thank you for participating in this study. Your responses will provide valuable insights into the attitudes of African students towards Female Genital Mutilation (FGM/C). All information collected will be kept confidential and used solely for academic purposes. Your participation is voluntary, and you can withdraw at any time.
Sarah Eyiene Idenyi
1. Age:…….

2. Gender:
[ ]1.Male
[ ] 2.Female
[ ] 3. Other……..

3. Year of university:
[ ] 1. 1st year
[ ] 2. 2nd year
[ ] 3. 3rd year
[ ] 4. 4th year

4. Marital status: [ ] 1.Married [ ] 2.Single

5.Has FGM been performed on any of your relatives? [ ] 1.Yes [ ] 2.No

6. Do you feel uncomfortable talking or thinking about the subject of FGM? [ ]1.Yes [ ] 2.No

7.Have you received any sexual therapy support for FGM? [ ] 1.Yes [ ] 2.No

8.Have you received any psychological therapy support for FGM? [ ] 1.Yes [ ] 2.No

9. Cultural Background:
[ ] 1.West African
[ ] 2.East African
[ ] 3.North African
[ ] 4.Central African
[ ] 5.Southern African

10. Religious Beliefs:
[ ] 1.Christianity
[ ] 2.Islam
[ ] 3.Traditional African Religions
[ ] 4.Other (Please specify) _____

Appendix B: Section 2, Attitudes Towards the Practice of FGM'C

No.		Items	Strongly Disagree	Disagree	Agree	Strongly Agree
N A	**1**	FGM/C is a violation of human rights				
	2	Health Care Providers who perform any form of FGM/C, including symbolic nicking, should be charged with a crime				
	3	Communities that practice FGM/C are oppressive towards women				
	4	Parents who have their daughter circumcised are abusing them				
	5	Women who have undergone FGM/C are victims of an oppressive cultural practice				
E A	6	Symbolic nicking or cutting of the female genitalia is an effective way to reduce the harm of FGM/C compared to more extensive procedures				
	7	Adult women have the right to undergo FGM/C				
	8	Communities that practice FGM/C are honoring an important cultural tradition				
	9	Parents who have their daughter circumcised are protecting her future marriage prospects				
	10	Women who have undergone FGM/C are empowered agents				

N A: Negative Attitudes Toward FGM/C

E A: Empathetic Attitudes Towards FGM/C

Appendix C: Section 3 Female Specific Data Forms (Only Females to Answer)

1. Have you undergone FGM/C? (Those who answered yes will answer questions 2,3,4,5)
[ ] 1. Yes
[ ] 2. No

2. When was FGM/C practiced?
[ ] 1.Immediately after birth
[ ] 2.As a child
[ ] 3. Adolescent
[ ] 4. After age 19

3. Who performed FGM/C?.....

4. What is the type of FGM/C? (by the WHO)
[ ] 1.**Type 1:** clitoridectomy (removal of the clitoris hood with or without clitoris removal)
[ ] 2. **Type 2:** removal of the clitoris as well as partial or all of the labia minora
[ ] 3. **Type 3:** clitoris, labia minora, and labia majora are removed, and the introitus may be stitched or made smaller with a very small outlet for menstrual and urine transit (another terminology for this is infibulation)
[ ] 4. **Type 4:** the female genitalia being injured through non-medical procedures
[ ] 5. I have FGM but **I don't know** the type

5. Have you experienced any complications after FGM/C? What is it?
[ ] 1.Yes What?.....
[ ] 2. No

6. Do you have sexual intercourse? (Those who answered yes will answer questions 7,8)
[ ] 1.Yes
[ ] 2. No

7. Do you reach orgasm during sexual intercourse?
[ ] 1.Yes
[ ] 2. No

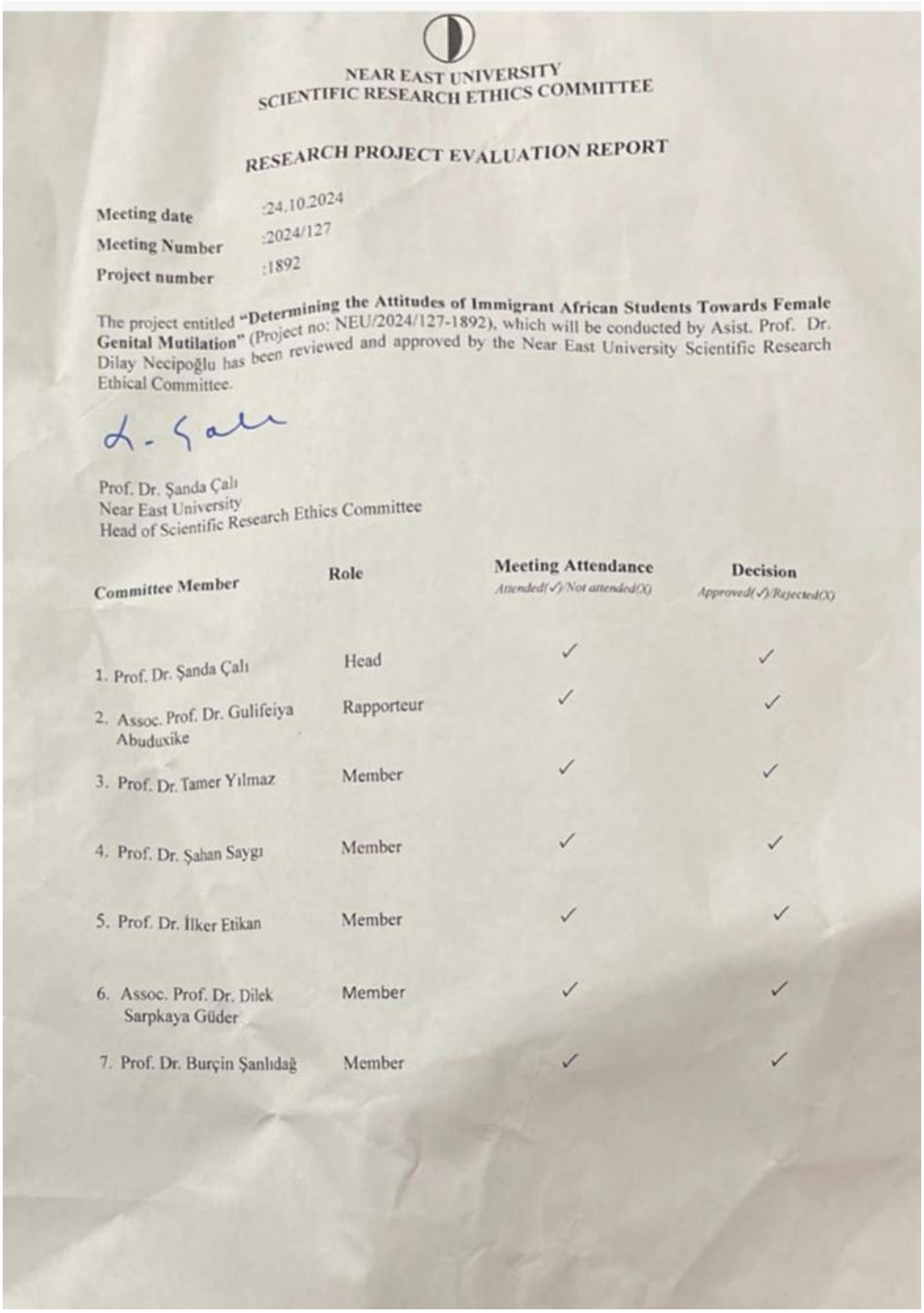
8.Does bleeding occur during and/or after sexual intercourse? [ ] 1.Yes [ ] 2. No

9. Do you experience pain during sexual intercourse? (**Those who answered yes will answer questions 10)**
[ ] 1.Yes
[ ] 2. No

10. What is the severity of the pain? (1 less; 10 more)

1 2 3 4 5 6 7 8 9 10

Appendix D: Ethics committee permission



NEAR EAST UNIVERSITY
SCIENTIFIC RESEARCH ETHICS COMMITTEE

RESEARCH PROJECT EVALUATION REPORT

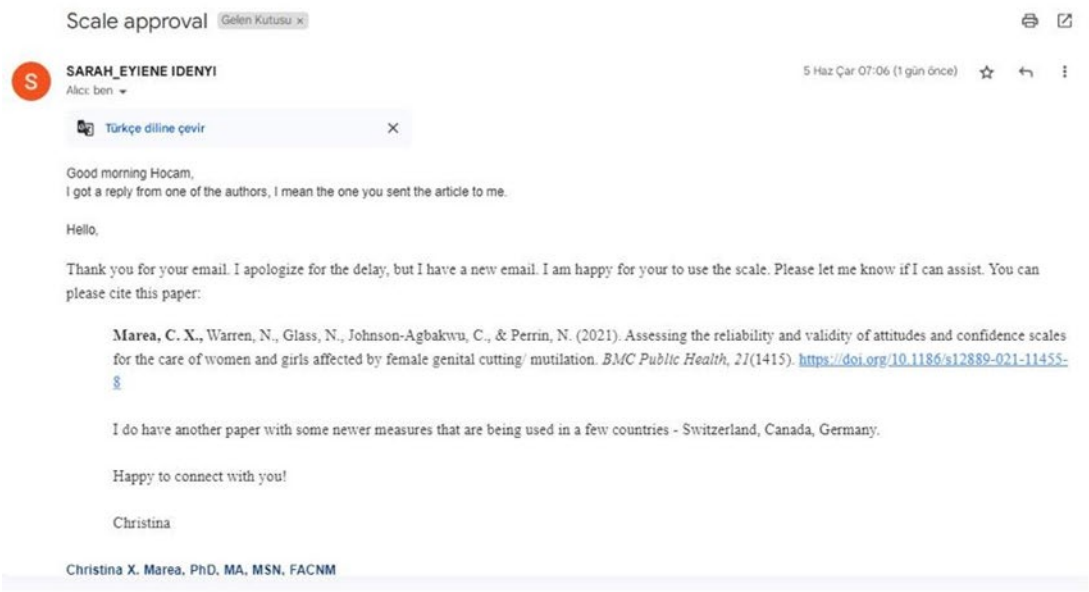
Meeting date :24.10.2024
Meeting Number :2024/127
Project number :1892

The project entitled **"Determining the Attitudes of Immigrant African Students Towards Female Genital Mutilation"** (Project no: NEU/2024/127-1892), which will be conducted by Asist. Prof. Dr. Dilay Necipoğlu has been reviewed and approved by the Near East University Scientific Research Ethical Committee.

Prof. Dr. Şanda Çalı
Near East University
Head of Scientific Research Ethics Committee

Committee Member	Role	Meeting Attendance *Attended(✓)/Not attended(X)*	Decision *Approved(✓)/Rejected(X)*
1. Prof. Dr. Şanda Çalı	Head	✓	✓
2. Assoc. Prof. Dr. Gulifeiya Abuduxike	Rapporteur	✓	✓
3. Prof. Dr. Tamer Yılmaz	Member	✓	✓
4. Prof. Dr. Şahan Saygı	Member	✓	✓
5. Prof. Dr. İlker Etikan	Member	✓	✓
6. Assoc. Prof. Dr. Dilek Sarpkaya Güder	Member	✓	✓
7. Prof. Dr. Burçin Şanlıdağ	Member	✓	✓

Appendix E: Scale permission



Scale approval Gelen Kutusu ×

SARAH_EYIENE IDENYI
Alıcı: ben

5 Haz Çar 07:06 (1 gün önce)

Türkçe diline çevir

Good morning Hocam,
I got a reply from one of the authors, I mean the one you sent the article to me.

Hello,

Thank you for your email. I apologize for the delay, but I have a new email. I am happy for your to use the scale. Please let me know if I can assist. You can please cite this paper:

> **Marea, C. X.,** Warren, N., Glass, N., Johnson-Agbakwu, C., & Perrin, N. (2021). Assessing the reliability and validity of attitudes and confidence scales for the care of women and girls affected by female genital cutting/ mutilation. *BMC Public Health, 21*(1415). https://doi.org/10.1186/s12889-021-11455-8
>
> I do have another paper with some newer measures that are being used in a few countries - Switzerland, Canada, Germany.
>
> Happy to connect with you!
>
> Christina

Christina X. Marea, PhD, MA, MSN, FACNM

Appendix F: Curriculum Vitae

1. PERSONAL INFORMATION

NAME, SURNAME: DATE of BIRTH and PLACE:	Sarah Eyiene Idenyi 10/11/94 Idah, Kogi state Nigeria
CURRENT OCCUPATION: Student ADDRESS of CORRESPONDENCE: Door 2 Alpay 22, Cavda Sk, Gonyeli Northern Cyprus TELEPHONE: +905338728170 E-MAIL: 20234362@std.neu.edu.tr	

2. EDUCATION

YEAR	GRADE	UNIVERSITY	FIELD
2023	First Class	Near East University	Nursing

3. ACADEMIC EXPERIENCE

PERIOD	TITLE	DEPARTMENT	UNIVERSITY
2016	ND	Science Laboratory Technology	Federal Polytechnic Idah
2019	HND	Biology/Microbiology	Kaduna Polytechnic
2023	BSC	Nursing	Near East University
2025	MASTER	Women Health Nursing	Near East University