NEAR EAST UNIVERSITY

INSTITUTE OF GRADUATE STUDIES

DEPARTMENT OF NURSING

THE EFFECTS OF FEMALE GENITAL MUTILATION ON VAGINAL DELIVERIES AND MATERNAL SATISFACTION IN AWKA, ANAMBRA STATE NIGERIA

M.Sc. THESIS

Ogonna Felista MUONEKE

Nicosia

January, 2024

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Prof. Dr. Gulşen Vural

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Approval

We certify that we have read the thesis submitted by Ogonna Felista MUONEKE (20213865) titled **"The Effects of Female Genital Mutilation on Vaginal Deliveries and Maternal Satisfaction in Awka, Anambra State Nigeria"** and that in our combined opinion it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Sciences in Birth and Women's Health Nursing.

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Declaration

I hereby declare that this thesis is entirely my own work, except where otherwise acknowledged and referenced. This research represents original contributions to the field of Nursing, and all sources used in its preparation have been duly acknowledged. Also, I declare that all ethical guidelines and academic rules of the Institute of Graduate Studies of Near East University were strictly followed.

Ogonna Felista Muoneke

31/January/2024

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Abstract

THE EFFECTS OF FEMALE GENITAL MUTILATION ON VAGINAL DELIVERIES AND MATERNAL SATISFACTION IN AWKA, ANAMBRA STATE NIGERIA

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Prof. Dr. Gulşen Vural

Purpose: This study aimed at investigating the effect female genital mutilation has on vaginal deliveries and maternal satisfaction of mothers in Awka, Anambra State, Nigeria.

Materials and Methods: This study is quantitative in nature and made use of a target population of women both with FGM and without FGM who gave birth in year 2022 in one of the community hospitals (Chukwuemeka Odumegwu Ojukwu University Teaching Hospital) in Awka, Anambra State, Nigeria. The study used a sample of 138 women categorised into two equal groups of women with FGM and women without FGM, which was determined using the Cochran's (1963) formula. Data were collected using a questionnaire and scales. Data were analysed using via the aid of the SPSS version 26. For evaluation of data descriptive statistics such as frequencies and percentages, and inferential statistics such as correlation analysis, regression analysis, and chi-square tests.

Findings: Findings from the study showed that, women with FGM experienced challenges such as vaginal tears, long hospital stay, large volume of blood loss, episiotomy, high pain level. It also showed that FGM had a negative relationship with birth outcomes such as vaginal bleeding and tears ($\beta = -0.280$, $p = 0.001<0.05$). Birth outcomes of the women with FGM such as babies' APGAR scores of 8-10, episiotomy, vacuum delivery, high number of pad changes, high number of pain killers used, and 48 hours of hospital were discovered to be significant. The study also discovered that FGM had a negative and statistically significant relationship with maternal satisfaction ($\beta = -0.325$, $p=0.000<0.05$).

Conclusion: This study concluded that FGM negatively affects vaginal deliveries and maternal satisfaction of women. The findings suggest that women who have undergone FGM may encounter challenges and adverse outcomes during the childbirth process.

***Keywords**:* FGM, maternal satisfaction, vaginal deliveries

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List of Abbreviations

FGM: Female Genital Mutilation

SVD: Spontaneous Vaginal Delivery

CHAPTER I

1. Introduction

1.1 Statement of the Problem

FGM is a complex issue that has been linked to a range of social, cultural, and religious factors, including the desire to preserve virginity, promote cleanliness, and conform to social norms (Berg & Denison, 2013; WHO, 2021). FGM which is also known as female genital cutting is defined by the World Health Organization (WHO) as every procedure that captures either the partial or total removal of the external female genitalia, or other injury to the genital organs of the female individual for non-medical reasons (WHO, 2023). Mummies found in Egypt provide evidence that FGM was a common procedure thousands of years ago. FGM is widespread among animists, Catholics, Jews, Muslims, Protestants, and those without religious affiliation, with reports indicating that it can be traced to Pharaonic times. While it is not referenced in major religious books like the Quran or the Bible, some tribes believe that FGM is a religious need. As late as the 19th century, clitoridectomy was employed in the United Kingdom (UK) to treat epilepsy, sterility, and masturbation. At the beginning of the 20th century, missionaries in Kenya and medical professionals in Egypt both publicly opposed the practice (Williams-Breault, 2018).

Female genital mutilation (FGM) is a deeply rooted cultural practice in many parts of Africa, including Nigeria, where its rate is reported to have increased from 16.9% in 2013 to 19.2% in 2018 for Nigerian girls aged 0-14 and reduced from 25% in 2013 to 20% in 2018 for women aged 15-49 years (UNICEF, 2022). This practice is usually performed by traditional practitioners who utilises unsterilized instruments such as knives, scissors, and razors, without any form of anaesthesia or pain relief (WHO, 2023). As earlier mentioned, this operation is often performed by a traditional circumciser or Traditional Birth Attendant (TBA) who is uninformed about the female anatomy or how to handle any negative outcomes, with the use of a blade, under anaesthesia or in the absence of it. Girls between the ages of 0 and 14 represent the most common demographic for FGM (UNICEF, 2023). The female genital mutilation practice, however, is also performed on married and mature women (WHO, 2008). This has been linked to numerous negative health outcomes, such as infections, urinary and reproductive problems, and even death (Klein, Helzner, Shayowitz, Kohlhoff, & Smith-Norowitz, 2018; Muteshi, Miller, & Belizan, 2016; WHO, 2023).

In accordance with the WHO (1995) classification, it is divided into four categories (Type I, II, III and IV). Type I (clitoridectomy) is the partial or complete removal of the clitoris and/or prepuce; Type II (excision) is the partial or complete detachment of the clitoris and the labia minora; Type III (infibulations) is where a little opening is left to permit urination and flow of blood during menstruation and is carried out by the constriction of the vagina orifice with formation of a concealing seal by trimming and opposing the labia minora and/or the labia major. Type IV includes a variety of treatments in the genital area, with variable levels of intensity having no therapeutic purpose like; piercing, dry sex, stretching, cauterizing the clitoris, etc. (WHO, 2016). The danger of acute injury from type III of FGM/C appears to be the highest of all types, and these occurrences frequently go unreported (Williams-Breault, 2018).

Depending on local customs and conditions, the age at which female genital mutilation is practiced ranges, but is declining noticeably in several nations through awareness campaigns, education, and legal measures (Nwaokoro *et al*., 2016). These efforts have helped shift societal attitudes, challenging the perception that FGM is a necessary tradition. As a result, the age at which FGM is performed has been gradually decreasing, reflecting progress in protecting girls and women from this harmful practice. In addition to international organizations and NGOs working tirelessly to eradicate FGM, governments and community leaders have also taken active steps to address the issue. Legislation has been enacted in many countries, explicitly prohibiting FGM and imposing penalties on those who perform or facilitate it. These legal frameworks serve as powerful deterrents and encourage communities to abandon the practice altogether.

The pronatalist as described by Szalma, Haskova, Olah, and Takacs (2022), are large-family-valued societies where FGM/C is often practiced and, in these areas, motherhood is seen as the main source of stability, affection, and prestige. Different communities have put out a number of justifications for the practice's continued existence, but none of them is sufficient to justify it. It is frequently referred to as a strategy to fight against premarital sex, hence preventing female promiscuity and maintaining virginity (Njoku *et al*., 2020; Yirga *et al*., 2020). In Nigeria, there are regional variations in the frequency of FGM; the southern region of Nigeria having the heaviest incidence (Anyanwu, Torpey, Abiodun, Sanni, & Anyanwu, 2022). The south-south side of Nigeria takes the largest portion at 77%, accompanied by the south-east at 68% and then finally the south-west at 65% (Obijiofor *et al*., 2020).

Despite efforts to eradicate the practice, FGM remains widespread in many parts of Nigeria, including the Awka, Anambra State, where a prevalence rate of 13.4% of women have undergone the procedure was reported (Obijiofor *et al*., 2020).This is a cause for concern, as FGM has been linked to a range of negative health outcomes, including complications such as prolonged or obstructed labour, perineal tears and trauma, postpartum haemorrhage, and so on during childbirth (Gebremicheal *et al*., 2018; Muteshi *et al*., 2016; Njoku, Emechebe, Njoku, Efiok, & Iklaki, 2020; WHO, 2023) . Therefore, there is an urgent need to investigate the effects of FGM on maternal and neonatal health outcomes in this population. FGM has also been linked to numerous negative health outcomes, including infections, urinary and reproductive problems, and even death (WHO, 2023).

Moreover, a study carried out by Suleiman et al. (2021) in Northern Tanzania sought to examine the trends of female genital mutilation and its associated neonatal and maternal adverse outcomes. The study found out that FGM is associated with long maternal hospital stays, delivery by caesarean section, postpartum haemorrhage, and low APGAR score.

These empirical studies collectively highlight the significant consequences of FGM on vaginal deliveries. The findings consistently suggest that women who have undergone FGM are at a higher risk of experiencing complications during childbirth and report lower levels of satisfaction with their childbirth experiences. The evidence underscores the urgent need for comprehensive interventions and support services targeting women affected by FGM, with a focus on improving maternal health outcomes and enhancing the overall childbirth experience.

Given that problems can occur during labour have a substantial impact on maternal mortality rates, childbirth for infibulated women provides the greatest challenge. In order to properly deliver the baby, infibulated ladies (whose genitalia have been tightly closed) undergo a perineum incision during labour (Chibber, El-Saleh, & El Harmi, 2019); this poses a huge risk to them during childbirth. Although, FGM has been linked to numerous negative health outcomes, including complications such as prolonged or obstructed labour, perineal tears and trauma, postpartum haemorrhage during childbirth (Gebremicheal *et al*., 2018; Muteshi *et al*., 2016; Njoku, Emechebe, Njoku, Efiok, & Iklaki, 2020; WHO, 2023), and many studies have examined the effects of FGM on other aspects such as obstetric and neonatal outcomes of FGM survivors, maternal and perinatal outcomes, higher rates of infection, amongst others (Akpak & Yilmaz, 2020; Sylla, Moreau, & Andro, 2020; Iavazzo, Sardi, & Gkegkes, 2013).

According to the study of Akpak and Yilmaz (2022), women who had experienced FGM were more associated with emergency caesarean sections, experienced prolonged delivery, and had higher episiotomy and periclitoral injuries. Also, the study of Gebremicheal *et al.* (2018) showed that the existence of FGM had a significant association with perineal tear [RR = 2.52 (95% CI 1.26–5.02)], postpartum blood loss [RR = 3.14 (95% CI 1.27–7.78)], outlet obstruction [RR = 1.83 (95% CI 1.19–2.79)] and emergency caesarean section [RR = 1.52 (95% CI 1.04–2.22)].

Despite these results revealed by previous studies, there is a lack of research on the specific effects of FGM on vaginal deliveries among women in Awka, Anambra State, Nigeria where it is reported that an FGM prevalence rate of 13.4% exists according to Obijiofor *et al.* (2020). Also, previous studies seemed to have neglected to examine the effect of FGM on maternal satisfaction of women who have experienced FGM. Hence, there is a need to empirically investigate how FGM affects vaginal deliveries and maternal satisfaction of women in Awka, Anambra State, Nigeria. It is therefore against this backdrop that this study aims to examine the effects of FGM on vaginal deliveries and maternal satisfaction in Awka, Anambra State, Nigeria.

Mother and child well-being, in particular, place a high value on postpartum maternal satisfaction. First off, it is essential for supporting moms' emotional and mental well. According to research, satisfied moms had reduced rates of postpartum anxiety and sadness, which benefits their general psychological health (Demis, Nigatu, Assefa, & Gedefaw, 2020). Positive mother-infant bonding is very directly related to postpartum maternal satisfaction. Satisfied women are more likely to exhibit loving behaviours, form strong bonds with their kids, and give their children the best care. The baby's emotional and social development is facilitated by this, which promotes a positive and loving bond between mother and child (Haines, Rubertsson, Pallant, & Hildingsson, 2012). Regarding the effects of FGM on maternal satisfaction, Johansen *et al.* (2013) revealed that women who had experienced FGM were seen to have lower satisfaction levels in their childbirth experience when compared to women who had not experienced FGM. Increased odds of negative experiences of childbirth such as fear, feelings of pain, and loss of control during delivery and labour were associated with FGM as revealed by the study. Also, a research carried out by Behrendt and Moritz (2005) showed that FGM negatively impacts mother-infant bonding. As reported by them, women who had undergone FGM had difficulties in breastfeeding and

developing a close emotional connection with their newborns. They concluded that the trauma and pain associated with FGM has the possibility of interfering with the mother's ability to bond with the infant.

It is pertinent to reiterate that the practice of FGM violates both the fundamental human rights of women and girls and is a significant type of violence against women. In spite of having detrimental effects on women's life and reproductive function, this ancient tradition has endured throughout successive stages of human civilization (Njoku *et al*., 2020).

1.2 Purpose of the Study

The aim of study is to determine the effect of FGM on vaginal delivery and maternal satisfaction**.**

1.3 Research Questions

The research questions for this study include the following:

(i) What are the challenges/difficulties faced by the women during vaginal delivery as a result of genital mutilation?

(ii) Is there a relationship between female genital mutilation and outcomes of birth?

(iii) What are outcomes of birth in the women with FGM, and without FGM?

(iv) What is maternal satisfaction level of the women with FGM and, without FGM?

(v) Is there any effect of FGM on maternal satisfaction?

It is pertinent to state that the independent variable of this study is FGM while the dependent variables are vaginal delivery and maternal satisfaction.

1.4 Significance of the Study

FGM is a harmful cultural practice that has been associated with numerous negative health outcomes, including complications such as prolonged or obstructed labour, perineal tears and trauma, postpartum haemorrhage during childbirth. The significance of this study lies in its potential to contribute to the body of knowledge on the effects of FGM on maternal and neonatal health outcomes, particularly during vaginal deliveries, in Awka, Anambra State, Nigeria. Specifically, the study aims to provide a better understanding of the prevalence of FGM in the study population and its effects on maternal and neonatal health outcomes during vaginal deliveries. The findings of this study may help to inform public health policies aimed at eradicating the practice of FGM in Nigeria and other countries where the practice is prevalent.

The study may also have important clinical implications for health care providers and especially nurses working in the areas where FGM is prevalent. The results of this study may help to raise awareness among health care providers about the potential complications associated with FGM during vaginal deliveries, and may prompt them to adopt more effective approaches to managing labour and delivery in women who have undergone FGM. Additionally, the study may help to identify specific risk factors associated with FGM during vaginal deliveries, which may be used to develop more targeted interventions to reduce the incidence of complications and improve maternal and neonatal health outcomes.

The adoption of a descriptive and correlational research design in this study's context is justified as it allows for a systematic and objective investigation of the research questions. It enables researchers to gather empirical evidence and generate valuable insights into the effects of FGM, contributing to the existing body of knowledge on this topic. The findings can inform policy-making, interventions, and healthcare practices aimed at improving maternal health outcomes and promoting the well-being of women affected by FGM in Awka, Anambra State, Nigeria.

1.5 Limitations

This study is limited to the mothers who gave birth in Chukwuemeka Odumegwu Ojukwu University Teaching Hospital, Awka, Anambra State, Nigeria. Also, the reliance on self-reported data through questionnaires introduces a potential for response bias, as participants may underreport or overreport certain experiences due to social desirability or recall bias. Additionally, the study's dependence on questionnaires may limit the depth of understanding, as nuanced aspects of the participants' experiences may not be fully captured. Furthermore, the use of questionnaires may overlook cultural nuances and variations in interpreting and responding to survey questions, potentially impacting the accuracy and generalizability of the findings.

1.6 Definition of Terms

FGM: The intentional cutting, removal, or alteration of female genitalia for non-medical reasons, often performed on young girls and women as a cultural or traditional practice (WHO, 2023).

Maternal satisfaction: The level of satisfaction or dissatisfaction that a woman experiences with her childbirth experience, including the quality of care received, the degree of pain or discomfort, and the overall experience. (Jafari, Mohebbi, & Mazloomzadeh, 2017).

Vaginal delivery: The process of giving birth through the vagina, which is the most common method of childbirth (Desai & Tsukerman, 2021).

Maternal mortality: Maternal death is the death of a woman while she is pregnant or within 42 days after the pregnancy's termination due to any factor aggravating or connected to the pregnancy or its care, but not due to an accident or event (United Nations Human Rights, 2020).

Neonatal mortality: The number of newborns who die within the first 28 days of life, per 1,000 live births, in a given population or region (Pathirana *et al*., 2016).

CHAPTER II

2. Literature Review

The literature review serves as a critical component of this study, providing a comprehensive examination of existing knowledge, research, and scholarly works relevant to the topic of "The Effects of Female Genital Mutilation on Vaginal Deliveries and Maternal Satisfaction in Awka, Anambra State, Nigeria." This section presents a synthesis and analysis of the available literature, highlighting key findings, theories, and gaps in understanding. It contains three major sub-sections – conceptual definitions, theoretical framework, and related research otherwise known as empirical review of literature.

2.1 Theoretical Framework

2.1.1 Female Genital Mutilation (FGM)

Female genital mutilation (FGM), also known as female genital cutting or female circumcision, refers to the deliberate alteration or removal of female external genitalia for non-medical reasons (WHO, 2023). It is a deeply rooted cultural practice that has been documented in various parts of the world, particularly in Africa, the Middle East, and some Asian countries (WHO, 2023). It is a harmful cultural practice that infringes on girls' and women's fundamental human rights and can also be referred to as female circumcision (Geremew et al., 2021).

FGM is often performed on young girls, typically between infancy and adolescence, and is influenced by social, cultural, and traditional beliefs (Berg & Denison, 2013). The practice involves various procedures, ranging from the partial or total removal of the clitoris to additional modifications of the genitalia, such as the narrowing of the vaginal opening (WHO, 2023). According to Sylla et al. (2020), FGM occurs mostly in about thirty (30) countries which cut across the regions of Asia, Middle East, and Africa. Estimates suggest that approximately 200 million women and girls have undergone the procedure worldwide, and it is projected that each year, about 3.6 million girls and women are at the risk of FGM (Taumberger et al., 2023). Although efforts have been made to address and eliminate the practice, challenges persist due to deeply ingrained cultural beliefs, societal norms, and lack of awareness and education (Berg & Denison, 2013).

Female genital mutilation/cutting (FGM/C) is divided into four categories by the World Health Organization (WHO). The clitoral glans is either completely or partially removed in

Type I. Labia minora are also removed in type II. In Type III, sometimes known as "infibulation," the labia minora and majora are removed, often together with the clitoral glans, to reduce the vaginal entrance. Last but not least, Type IV includes all additional non-medical practices that injure the female genitalia, including as cauterization, cauterization, pricking, incising, scraping, and piercing (WHO, 2018). Berg and Denison (2013) corroborate the foregoing by stating that FGM is classified into four types - clitoridectomy, excision, infibulations, and other. This shows that Berg and Denison (2013) provided different names for the FGM types but actually still mean the same thing.

Clitoridectomy refers to the partial or total removal of the clitoral glans, which is a sensitive and erectile part of the female external genitalia. This procedure is categorized as Type I FGM/C by the World Health Organization (WHO) (2018). Excision involves the removal of the clitoral glans and the labia minora, which are the inner folds of the vulva. This procedure is categorized as Type II FGM/C by the WHO (2018). Infibulation, also known as Type III FGM/C, is the most severe form of FGM/C. It involves the removal of the clitoral glans, labia minora, and labia majora, followed by the stitching or narrowing of the vaginal opening, leaving only a small hole for urine and menstrual flow. Infibulation results in the creation of a seal or closure of the vaginal opening, often requiring surgical intervention to allow for sexual intercourse or childbirth. The term "other" in the context of FGM/C refers to the broader category of non-medical procedures that cause harm to the female genitalia. This includes practices such as pricking, piercing, incising, scraping, or cauterization, which may fall under Type IV FGM/C as classified by the WHO (2018). This category captures various harmful procedures performed on the female genitalia for non-medical reasons, but does not fit into the specific definitions of Type I, II, or III.

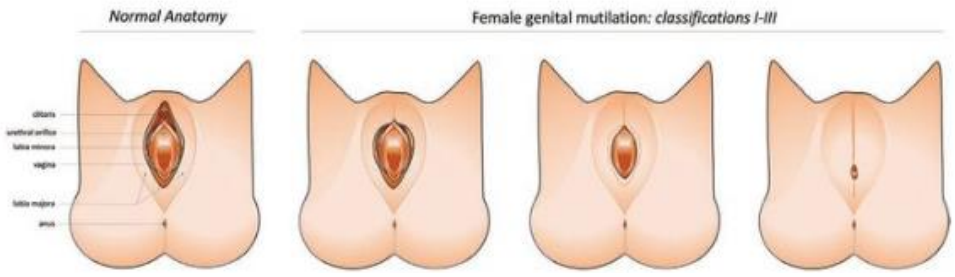

Figure 1: Types of FGM

Source: Akinbiyi et al. (2018)

As revealed by Taumberger et al. (2023), Type IV FGM or other is more prevalent in the developed world than other parts of the globe, however, it is not referred to as FGM there but is rather seen as a cosmetic procedure when it comes to genital piercings. When it comes to the health benefits of FGM, several studies have revealed that FGM provides no health benefits to women and girls, instead it poses severe risks to their health such as genitourinary (Berg et al., 2014; Birge et al., 2016; Lurie et al., 2020), sexual health (Berg et al., 2010; Perez-Lopez et al., 2020), infection (Iavazzo et al., 2013), and obstetrical complications like perineal tears, postpartum haemorrhage (Berg et al., 2014; Matanda et al., 2015).

2.1.1.1 Historical and Cultural Context of FGM in Nigeria

FGM also known as female circumcision, is deeply rooted in the historical and cultural context of Nigeria. The practice has a long-standing tradition in many Nigerian communities, where it is seen as a rite of passage and a symbol of cultural identity (Ruttert, 2021). FGM has been performed in Nigeria for generations, with evidence of its existence dating back centuries. The historical origins of FGM in Nigeria can be traced to various cultural beliefs and practices that associate the removal or alteration of female genitalia with notions of purity, chastity, and marriageability (Adelekan et al., 2022). The practice is often deeply embedded in traditional customs, religious beliefs, and social norms, making it a complex issue to address.

In Nigeria, FGM practices differ across ethnic groups and regions, reflecting the diverse cultural landscape of the country. Different ethnic groups have distinct methods, rituals, and justifications for performing FGM. For example, among the Ibibio and Efik communities in the southern region, FGM is performed as part of a cultural initiation ceremony for young girls, marking their transition to womanhood (Adelekan et al., 2022). In contrast, the Hausa and Fulani communities in northern Nigeria often practice a more severe form of FGM, known as Sunna circumcision, which involves the removal of the prepuce or the tip of the clitoris (Okeke et al., 2012). These variations in FGM practices demonstrate the intricate interplay between cultural norms, local customs, and regional influences.

Furthermore, the cultural context surrounding FGM in Nigeria perpetuates the practice through intergenerational transmission. Mothers, grandmothers, and other female relatives often play influential roles in ensuring the continuation of FGM among younger generations (Pashaei et al., 2016). The social pressure to conform to cultural expectations and maintain community acceptance further reinforces the persistence of the practice (Okeke et al., 2012).

Additionally, the belief that FGM enhances female modesty, purity, and marital prospects contributes to the cultural significance attached to the practice (Adelekan et al., 2022). These deeply ingrained cultural norms and societal expectations make it challenging to eradicate FGM in Nigeria.

The historical and cultural context of FGM in Nigeria has implications for efforts to address and eliminate the practice. While legislative measures and advocacy campaigns have been implemented to curb FGM, cultural norms and social pressures continue to influence its perpetuation. Understanding the historical roots and cultural significance of FGM in Nigeria is essential for developing effective interventions and strategies that respect local traditions while promoting the abandonment of the harmful aspects of the practice.

The negative effects culture has on women's health in numerous ways especially in Nigeria cannot be overemphasised. Amongst the numerous ways women's health is negatively impacted by culture, gender-based violence is one famous instance. When cultural norms and customs support harmful behaviours including domestic abuse, child marriage, and female genital mutilation as earlier mentioned, these behaviours put women at greater risk of suffering both physical and psychological harm, feeding the cycle of violence, and endangering their health (Ikeaba et al., 2022). Additionally, differences in women's access to reproductive healthcare may be caused by cultural attitudes and behaviours. Women's capacity to seek prompt medical attention is hampered by stigma and taboos around matters related to reproductive health.

According to the World Health Organization (2020), this may result in undesirable health consequences such as increased rates of maternal death, unsafe abortions, and reproductive tract infections. Furthermore, culture can affect women's health negatively through traditional norms that limit the autonomy of women and their decision-making power. When women are not involved in decisions about their bodies and healthcare, they may face restricted access to reproductive choices, contraception, and preventive care. This can result in adverse health consequences, including unintended pregnancies and increased risks during childbirth (Johnson-Mallard et al., 2017).

Mental health is another area affected by cultural influences. Stigma surrounding mental health, societal pressure to conform to prescribed gender roles, and experiences of discrimination can significantly impact women's mental well-being. These factors increase

the risk of depression, anxiety, and other mental disorders among women, leading to substantial burdens on their overall health (Thornicroft et al., 2016). Moreover, cultural ideals of beauty and body image can have detrimental effects on women's health. The pressure to conform to unrealistic beauty standards can contribute to body dissatisfaction, eating disorders, and unhealthy weight control practices. These factors can lead to long-term physical and psychological consequences, impacting women's well-being (Swami et al., 2010). Addressing these negative effects of culture on women's health requires a multi-faceted approach.

2.1.2 Vaginal Deliveries

The term "vaginal delivery" refers to the birth of a baby through the vagina, commonly referred to as the "birth canal," in animals or in humans (Omona, 2021). It refers to the process of giving birth through the vaginal canal, also known as the birth canal, as opposed to alternative methods such as caesarean section (C-section) or instrumental deliveries. It is the safest method of delivery for both the foetus and the mother at the time the new-born is full-term at the gestational period of 37 – 42 weeks (Desai & Tsukerman, 2023). It is the most common mode of childbirth and involves the natural expulsion of the foetus and placenta (American College of Obstetricians and Gynaecologists [ACOG], 2020).

During a vaginal delivery, the woman experiences contractions of the uterus, which gradually open the cervix, allowing the baby to descend through the birth canal. This process involves the stretching and widening of the vaginal opening to accommodate the passage of the baby's head and body (Evbuomwan & Chowdhury, 2022). Various factors, such as the position of the baby, maternal pushing efforts, and the guidance and support of healthcare providers, play a role in facilitating the progression of a successful vaginal delivery (Huang et al., 2019).

Vaginal deliveries are generally associated with several potential advantages. They are typically associated with shorter hospital stays, faster recovery times, and fewer postoperative complications compared to C-sections (Melo et al., 2015). Additionally, vaginal deliveries allow for beneficial physiological processes, such as the exposure of the new-born to the mother's bacteria during passage through the birth canal, which may contribute to the establishment of a healthy microbiome (Dunn et al., 2017). However, it is important to note that, vaginal deliveries also carry certain risks and considerations. These include the possibility of perineal tears or episiotomies (surgical incisions to enlarge the vaginal opening) that may require repair, as well as the potential for complications such as shoulder dystocia

(when the baby's shoulders become stuck during delivery) or instrumental deliveries involving the use of forceps or vacuum extraction (ACOG, 2020). The decision regarding the mode of delivery should be based on various factors, including the individual woman's health, the baby's well-being, and any specific circumstances or complications present in the pregnancy or labour (ACOG, 2020).

2.1.3 Maternal Satisfaction

Maternal satisfaction refers to the subjective evaluation and perception of women regarding their childbirth experience and the care they receive during pregnancy, labour, and the postpartum period (Sawyer et al., 2013). It encompasses various aspects of care, including the quality of communication and information provided by healthcare providers, the level of support and involvement in decision-making, the management of pain and discomfort, and the overall emotional and physical well-being of the mother (Okonofua et al., 2017; Rowe et al., 2012).

Maternal satisfaction is a multidimensional construct influenced by numerous factors. Effective communication and interpersonal skills of healthcare providers play a vital role in shaping women's satisfaction with their childbirth experience (Shamoradifar, 2022). Empathy, respect, and sensitivity to women's needs and preferences contribute to a positive childbirth experience and higher levels of satisfaction (Sawyer et al., 2013). Additionally, the environment in which care is provided, such as the physical facilities and availability of supportive services, can impact maternal satisfaction (Mocumbi et al., 2019). Furthermore, women's expectations and previous experiences with childbirth and healthcare influence their perceptions of satisfaction (Saywer et al., 2013). Positive experiences, feeling listened to, and having a sense of control during childbirth contribute to higher levels of satisfaction (Rowe et al., 2012). On the other hand, experiences of pain, medical interventions, and perceived lack of support may negatively impact maternal satisfaction (Thomson et al., 2019).

Maternal satisfaction is an important outcome in assessing the quality of maternity care and is linked to maternal well-being, postpartum adjustment, and future healthcare-seeking behaviours (Silesh & Lemma, 2021; Srivastava et al., 2015). It reflects the extent to which healthcare systems meet the needs and expectations of women during the vulnerable and transformative period of childbirth.

Furthermore, the theoretical framework for this study draws on the concepts of gender and women's body control, specifically focusing on the connection between the women's body and the control exerted by others. This framework acknowledges the social construction of gender and how it influences power dynamics and societal norms regarding women's bodies. In many cultures, women's bodies have been subject to control and regulation by external forces, including family, community, and societal structures. This control often manifests through practices such as Female Genital Mutilation (FGM), where the female body is altered or modified based on cultural beliefs, often associated with notions of honour and purity.

The concept of honour perception plays a significant role in understanding the motivations and effects of FGM. Honour perception refers to the societal expectations and norms surrounding women's behaviour, sexuality, and body integrity, which are closely tied to the preservation of family or community honour. FGM is often rooted in the belief that it will preserve a woman's chastity, protect her modesty, and safeguard family honour. Thus, the control exerted over women's bodies through FGM can be seen as a manifestation of honour-based cultural practices. The effects of honour perception and FGM on women are multi-faceted. On an individual level, FGM can result in physical and psychological consequences, including pain, infection, complications during childbirth, and long-term psychological trauma. Furthermore, it reinforces gender inequalities, restricts women's autonomy, and perpetuates harmful gender norms that subordinate women.

By employing the gender and women's body control framework, this study aims to explore the intricate dynamics of power, culture, and honour perception that contribute to the practice of FGM. It seeks to examine how women's bodies are subjected to external control and the implications this has on their physical and mental well-being, reproductive health, and overall empowerment. By understanding these connections, the study aims to contribute to the discourse on the eradication of harmful practices like FGM.

2.2 Related Research

Several empirical studies have examined the effects of FGM on vaginal deliveries and maternal satisfaction, providing valuable insights into the impact of this practice on childbirth experiences. A study by Yosef et al. (2023) carried out in Southern Ethiopia examined the various complications associated with FGM among postnatal women. Adopting an institutional-based quantitative cross-sectional study design and using logistic regression

analysis, the study discovered that birth asphyxia and prolonged labour were the birth complications associated with FGM.

Similarly, Akpak and Yilmaz (2022) explored the effects of FGM on obstetric and neonatal outcomes in pregnant women in a high standard hospital in Sudan. The study shows the women who had undergone FGM had more emergency caesarean sections, experienced prolonged delivery, had higher episiotomy and periclitoral injuries, had longer postpartum blood loss and hospitalisation. Additionally, a study conducted by Kulaksiz et al. (2022) examined the relationship between FGM and birth outcomes in Somalia. The study which was discovered that in patients with FGM, outlet obstruction increased 2.33 times, the need for caesarean section increased 2.11 times, perineal tears increased 2.48 times compared to the control group. It concluded by asserting that, prolongation in the second stage of labour, increased risk of perineal tear, and increased need for emergency caesarean section are highly associated with FGM.

Moreover, a study carried out by Suleiman et al. (2021) in Northern Tanzania sought to examine the trends of female genital mutilation and its associated neonatal and maternal adverse outcomes. The study found out that FGM is associated with long maternal hospital stays, delivery by caesarean section, postpartum haemorrhage, and low APGAR score.

These empirical studies collectively highlight the significant consequences of FGM on vaginal deliveries. The findings consistently suggest that women who have undergone FGM are at a higher risk of experiencing complications during childbirth and report lower levels of satisfaction with their childbirth experiences. The evidence underscores the urgent need for comprehensive interventions and support services targeting women affected by FGM, with a focus on improving maternal health outcomes and enhancing the overall childbirth experience.

Although the above studies made successful efforts in identifying the effects of FGM on vaginal deliveries, they failed to examine the effect of FGM on maternal satisfaction. What could be the effect FGM has on maternal satisfaction? This is a research question previous studies have been unable to answer. In addition, these studies did not examine the effects of FGM on vaginal deliveries and maternal satisfaction in the geographical context of Awka, Anambra State, Nigeria where it is reported that an FGM prevalence rate of 13.4% exists

according to Obijiofor *et al*. (2020). These identified loopholes or lacunae are what this current study aims to fill.

Chapter III

3. Methodology

3.1 Research Design

This research adopted a descriptive and correlational research design. It comprised two groups of respondents – those with FGM and those without FGM. The rationale for adopting a descriptive and correlational research design in the context of this study is to comprehensively explore and understand the relationship between Female Genital Mutilation (FGM) and its effects on vaginal deliveries and maternal satisfaction. Descriptive research aims to provide an accurate depiction of the characteristics, behaviours, or phenomena being studied. In this study, a descriptive design allows for the collection of detailed information about the prevalence of FGM, the incidence of complications during vaginal deliveries, and levels of maternal satisfaction among women who have undergone FGM. By describing these variables, researchers can gain a comprehensive understanding of the current state of FGM and its impact on childbirth experiences in the specific context of Awka, Anambra State, Nigeria. Recall, the independent variable for this study is FGM while the dependent variables are vaginal deliveries and maternal satisfaction are dependent variables.

Additionally, a correlational research design is suitable as it seeks to identify and examine relationships or associations between variables. By correlating FGM status with vaginal deliveries and maternal satisfaction, researchers can determine whether there is a statistically significant relationship between FGM and these outcomes. This design helps to establish the magnitude and direction of the associations, providing insights into the potential influence of FGM on vaginal deliveries and maternal satisfaction.

3.2 Participants/Population & the Sample / Study Group

The population of study is all the women (both those with and without FGM) who gave birth in 2022 year in one of the community hospitals (Chukwuemeka Odumegwu Ojukwu University Teaching Hospital) in Awka, Anambra State, Nigeria.

This study was conducted on the women giving birth in a community hospital (Chukwuemeka Odumegwu Ojukwu University Teaching Hospital) in Awka, Anambra state, Nigeria. A community hospital was more preferable because it gives a clear understanding of the cultural under tones, also make the results more generalizable and has more vaginal birth

rates. The selected hospital is central and easily accessed by pregnant women and members of the community and researcher, thus it was the hospital of preference.

In generating the sample for this study, Cochran's (1963) formula was used. This is because the researcher is ignorant of the total population of the study. Hence, Cochran's (1963) formula is suitable for generating the sample from an unknown population size.

Hence:

$$n = \frac{Z^2 pq}{e^2}$$

Where:

e = the desired level of precision (i.e. the margin of error) = 0.05

p = the (estimated) proportion of an attribute present in the population = 0.9

q = 1 – p

= 1 – 0.9 = 0.1

Z = 1.96

$$n = \frac{(1.96)^2 \times 0.9 \times 0.1}{(0.05)^2}$$

$$n = \frac{3.8416 \times 0.9 \times 0.1}{0.0025}$$

$$n = \frac{0.345744}{0.0025}$$

n = 138.30

n = 138

Based on the fact that the study focuses on two groups of respondents, the sample size was equally split into two. The sample size for those with FGM was therefore 69 while the sample size for those without FGM was also 69.

3.2.1 Inclusion Criteria

The criteria these nursing mothers met before being selected or recruited into the study include the following:

(i) gave birth to a healthy baby

(ii) have singleton pregnancy

(iii) minimum primary school graduated

(iv) genitally mutilated

(v) give birth in the selected community hospital

(vi) have no communication problem in English.

On the other hand, the inclusion criteria the babies met to be selected as participants of the study include:

(i) the babies must have a birth weight 2500 gram and over.

(ii) have no health problem and;

(iii) cephalic presentation.

3.3 Data Collection Tools

The data collection tool, otherwise known as research instrument used for this study is a questionnaire. A questionnaire developed by the researcher, maternal satisfaction in normal and caesarean birth scale developed by Anikwe *et al.* (2022) and, Visual Analog Scale was used for this study. The questionnaire sought socio-demographic characteristics of respondents, the effects of female genital mutilation on vaginal deliveries and maternal satisfaction. The questionnaire comprises four sections – Section A which deals with the demographic data, Section B deals with the Obstetric history and Type of FGM done according WHO classification, Section C concerns the Birth outcomes checklist, while section D encompasses information related to maternal satisfaction. The Maternal Satisfaction in Normal and Cesarean Birth Scale is a measurement tool developed by Anikwe et al. (2022) to assess maternal satisfaction with the childbirth experience across different modes of delivery. This scale comprises a series of items designed to evaluate various aspects of maternal satisfaction, including the quality of care received, communication with healthcare providers, pain management, emotional support, and overall childbirth experience. This scale serves as a valuable tool for healthcare providers and researchers to evaluate and improve the quality of maternal care and childbirth experiences. On the other hand, the Visual Analog Scale is a widely used psychometric tool for measuring subjective experiences such as pain intensity, mood, or other sensations. This scale provides a simple, quick, and flexible method for capturing subjective experiences and is frequently used in clinical research, patient-reported outcomes, and pain assessment in healthcare settings.

3.4 Data Collection Procedures

In collecting data from the study's participants, several key steps were observed. Firstly, ethical approval was obtained from the relevant ethical review board to ensure the study's adherence to ethical guidelines and protection of participants' rights. To recruit participants, potential participants who met the inclusion criteria as stated above were identified. Collaboration with local healthcare facilities facilitated the identification of potential participants.

Before inclusion in the study, informed consent was obtained from the participants. The purpose, procedures, potential risks, and benefits of the study were explained to them, and they were provided with written information. Participants were assured of the voluntary nature of their participation, confidentiality, and their right to withdraw from the study at any time. Structured questionnaires were developed to capture socio-demographic characteristics of the mothers, relevant information on FGM status, vaginal deliveries, maternal satisfaction, and other variables of interest. Data collection tools were administered to the mother's face-to-face by the researcher before discharge from the hospital. Before application of the research tools, mother's informed consents of the mothers were taken by the researcher.

Data validation and quality control measures were implemented to ensure the accuracy and reliability of the collected data. This included conducting a pilot test of the questionnaire on about 15 participants to assess its clarity and appropriateness. Confidentiality and anonymity were maintained throughout the data collection process. Participants were assured that their responses would be kept anonymous, and their personal information would be protected. Unique identifiers or codes were assigned to each participant to maintain confidentiality during data analysis and reporting. The collected data were entered into a secure electronic database or software for storage and analysis. Data management practices, such as regular backups and restricted access to the data, were implemented to ensure data security.

Subsequent to the foregoing, the study then analysed the data and reported its findings in relation to what previous studies have found out.

3.5 Data Analysis Procedures

The quantitative data collected was analysed using appropriate statistical techniques. Statistical tests such as frequencies, percentages, chi-squares tests, regression analysis, and

correlation analysis were used to summarize the characteristics of the study population and variables of interest. Statistical significance was set at $p < 0.05$.

3.6 Reliability and Validity of Research Instrument

The research instrument was subjected to both face validity and content validity tests where the student's supervisor opinion was sought. Subsequent to the approval granted by the student's supervisor, the questionnaire was deemed valid and administered to the study's participants. For reliability on the other hand, the research instrument was deemed reliable since it met the threshold of having a Cronbach alpha greater than 0.7 ($\alpha > 0.7$).

3.7 Ethical Considerations

This study adhered to ethical guidelines, ensuring the protection of participants' rights and confidentiality. Ethics committee approval was taken from the Near East University NEU/2022/108-1662) (Appendix C). Informed consent was obtained from all participants before their inclusion in the study. Participants were informed about the purpose, procedures, potential risks, and benefits of the study before the study. Confidentiality and anonymity were maintained throughout the data collection and analysis processes. Finally, Hospital institutional authorization (Appendix D) was obtained before the administration of the questionnaires.

CHAPTER IV

4. Findings and Discussion

4.1 Socio-demographic Characteristics of Respondents

Table 4.1

Socio-demographic Characteristics of the Women n=138

Variables	Frequency	Percent (%)
	Age	
18-22	57	41.2
23-27	21	15.3
28-32	33	23.8
33-37	20	14.3
38-42	7	5.4
	Residence*	
Amansea	4	2.9
Awka	115	83.3
Neni	4	2.9
Nibo	5	3.6
Aguleri, Ukpo, Umuawulu	6	4.3
Umuneri	4	2.9
	Area of Origin	
South-South	18	13.0
South-east	79	57.2
South-west	8	5.8
North	33	23.9
	Educational Level	
Primary	14	10.1
Secondary	34	24.6
Tertiary	61	44.2
Vocational	29	21.1
	Employment Status	
Unemployed	30	21.7
Student	36	26.1
Civil Servant	43	31.2
Self-employed	29	21.0
	Marital Status	
Single	29	21.0
Married	109	79.0
	Religious Affiliation	
Christian	109	79.0
Muslim	29	21.0
Total	**138**	**100.0**

***Aguleri, Ukpo, Umuawulu areas were combined due to the limited answers were given by the women.**

The above table presents the socio-demographic chrematistics of the respondents. Regarding the age of the respondents, 5.8% (71 respondents) are between the ages of 18-25 years, 10.1% (36 respondents) are between the ages of 26 -30 years, and 4.3% (31 respondents) are between the ages of 31 and 34 years (Table 4.1).

Regarding the residence of the respondents, 2.2% (2 respondents) are in Aguleri, 2.9% (4 respondents) are in Amansea, 83.3% (115 respondents) are in Awka, 2.9% (2 respondents) are in Neni, 3.6% (5) are in Nibo, 1.4% (2) are in Ukpo, 0.7% (1 person) in Umuawulu and 2.9% (4) are in Umuneri (Table 4.1).

Information relating to the area of origin of the respondents, 13% (18 respondents) are in South-South origin, 57.2% (79 respondents) are South-east origin, 5.8% (8 respondents) are in South-west origin and 23.9% (33) selected others. The information relating to the educational level of the respondents shows that 10.1% (14 respondents) have completed primary education, 24.6% (34 respondents) have completed secondary education, 44.2% (61 respondents) have completed tertiary education and 21% (29) have completed vocational education (Table 4.1).

The information regarding the employment status of the respondents, 21.7% (30 respondents) are unemployed, 26.1% (36 respondents) are students, 31.2% (43 respondents) are civil servants and 21% (29 respondents) are self-employed (Table 4.1).

Concerning the marital status of the respondents, 15.9% (22 respondents) are single, 79% (109 respondents) are married, and 5.1% (7 respondents) have divorced. Regarding the respondents' religious affiliation, 79% (109 respondents) are Christian, and 21% (29 respondents) are Muslim (Table 4.1).

4.2 Findings According to First Research Question: What are the Challenges/Difficulties Faced by the Women During and After Vaginal Delivery as a Result of Genital Mutilation?

Table 4.2.1

The Types of FGM according to Mode of Delivery (n =69)

Types of FGM	Spontaneous vaginal delivery (SVD)		Vacuum delivery		Forceps delivery		Total		Statistical test (Chi-square test)
Type I	1	1.4%	1	1.4%	0	0.0%	2	2.8%	.000
Type II	1	1.4%	23	33.3%	1	1.4%	25	36.3%	.001
Type III	6	8.7%	23	33.3%	9	13.0%	38	55.1%	.023
Type IV	4	5.8%	0	0.0%	0	0.0%	4	5.8%	.007

The provided table illustrates the relationship between different types of FGM and the modes of delivery, specifically SVD, Vacuum Delivery, and Forceps Delivery. Each row corresponds to a distinct type of FGM, and the columns depict the number and percentage of deliveries for each mode, along with the results of a Chi-square test assessing the statistical significance of the association (Table 4.2.1).

For Type I FGM, one case (1.4%) in 2 involved SVD, one case (1.4%) involved Vacuum Delivery, and no cases were associated with Forceps Delivery. The Chi-square test yielded a highly significant p-value of .000, indicating a non-random distribution of delivery modes for Type I FGM (Table 4.2.1).

For Type II FGM, one case (1.4%) in 25 had SVD, 23 cases (33.3%) involved Vacuum Delivery, and one case (1.4%) in 25 involved Forceps Delivery. The Chi-square test resulted in a significant p-value of .001, suggesting a non-random distribution of delivery modes for Type II FGM (Table 4.2.1).

Moreover, regarding Type III FGM, six cases (8.7%) in 38 were associated with SVD, 23 cases (33.3%) with Vacuum Delivery, and nine cases (13.0%) in 38 with Forceps Delivery. The Chi-square test produced a significant p-value of .023, indicating a non-random distribution of delivery modes for Type III FGM (Table 4.2.1).

For Type IV FGM, four cases (5.8%) involved SVD, with no cases of Vacuum or Forceps Delivery. The Chi-square test yielded a significant p-value of .007, suggesting a non-random distribution of delivery modes for Type IV FGM (Table 4.2.1).

In summary, the data reveals statistically significant associations between the type of FGM and the mode of delivery for all FGM types. This implies that the likelihood of a specific delivery mode varies significantly across different types of FGM (Table 4.2.1).

Table 4.2.2

The Challenge of Having Episiotomy n=69

Types of FGM	Having Episiotomy				Total		Statistical test (Chi-square test)
	Yes		No				
	F	%	F	%			
Type I	2	2.9%	0	0.0%	2	2.9%	.020
Type II	21	30.4%	4	5.8%	25	36.2%	.011
Type III	32	46.4%	6	8.7%	38	55.1%	.043
Type IV	0	0.0%	4	5.8%	4	5.8%	.031

The table provides insights into the association between different types of FGM and the occurrence of episiotomy during childbirth. The data is presented in terms of the number and percentage of cases where episiotomy was performed ("Yes") or not performed ("No"). Additionally, the table includes the results of Chi-square tests, examining the statistical significance of the relationship between FGM types and episiotomy (Table 4.2.2).

For Type I FGM, two cases (2.9%) involved episiotomy, while no cases (0.0%) did not. So, the total number of cases for Type I FGM was 2 (2.9%). The Chi-square test yielded a p-value of .020, indicating a statistically significant association between Type I FGM and the occurrence of episiotomy (Table 4.2.2).

Regarding the Type II FGM, twenty-one cases (30.4%) involved episiotomy, while four cases (5.8%) did not. The total number of cases for Type II FGM was 25 (36.2%). The Chi-square test resulted in a $p<.011$, suggesting a statistically significant association between Type II FGM and the occurrence of episiotomy (Table 4.2.2).

With respect to the Type III FGM, thirty-two cases (46.4%) involved episiotomy, while six cases (8.7%) did not. The total number of cases for Type III FGM was 38 (55.1%). The Chi-square test produced a p-value of .043, indicating a statistically significant association between Type III FGM and the occurrence of episiotomy (Table 4.2.2).

For Type IV FGM, four cases (5.8%) of Type IV FGM involved episiotomy, while no cases (0.0%) did not. The total number of cases for Type IV FGM was 4 (5.8%). The Chi-square

test yielded a p-value of .031, suggesting a statistically significant association between Type IV FGM and the occurrence of episiotomy (Table 4.2.2).

In summary, the data indicates statistically significant associations between the types of FGM and the occurrence of episiotomy for Types I, II, III, and IV. These findings suggest that the likelihood of undergoing episiotomy during childbirth varies across different types of FGM (Table 4.2.2).

Table 4.2.3

The Challenge of State of Perineum n=69

Types of FGM	Intact		Bruises		1st Degree Tear		2nd Degree Tear		3rd Degree Tear		Statistical test (Chi-square test)
Type I	0	0.0%	0	0.0%	0	0.0%	2	2.9%	0	0.0%	.020
Type II	0	0.0%	5	7.2%	15	21.7%	4	5.8%	25	36.2%	.012
Type III	3	4.3%	14	20.3%	13	18.8%	8	11.6%	0	0.0%	.035
Type IV	0	0.0%	4	5.8%	0	0.0%	0	0.0%	0	0.0%	.047

The table provides information on the association between different types of FGM and specific outcomes during childbirth, namely intact perineum, bruises, 1st-degree tear, 2nd-degree tear, and 3rd-degree tear. The data is presented in terms of the number and percentage of cases for each outcome, and the table also includes the results of Chi-square tests, assessing the statistical significance of the relationship between FGM types and childbirth outcomes (Table 4.2.3).

Regarding the Type I FGM, no cases (0.0%) with intact perineum, bruises, 1st-degree tear, or 3rd-degree tear. Two cases (2.9%) with a 2nd-degree tear. The Chi-square test yielded a p-value of .020, indicating a statistically significant association between Type I FGM and 2nd-degree tear during childbirth (Table 4.2.3).

With reference to Type II FGM, no cases (0.0%) with intact perineum. Five cases (7.2%) with bruises. Fifteen cases (21.7%) with 1st-degree tear. Four cases (5.8%) with 2nd-degree tear. Twenty-five cases (36.2%) with 3rd-degree tear. The Chi-square test resulted in a p-value of .012, suggesting a statistically significant association between Type II FGM and the occurrence of bruises, 1st-degree tear, and 3rd-degree tear during childbirth (Table 4.2.3).

For Type III FGM, three cases (4.3%) with intact perineum. Fourteen cases (20.3%) with bruises. Thirteen cases (18.8%) with 1st-degree tear. Eight cases (11.6%) with 2nd-degree

tear. No cases (0.0%) with 3rd-degree tear. The Chi-square test produced a p-value of .035, indicating a statistically significant association between Type III FGM and the occurrence of bruises, 1st-degree tear, and 2nd-degree tear during childbirth (Table 4.2.3).

Regarding the Type IV FGM, no cases (0.0%) with intact perineum or 3rd-degree tear. Four cases (5.8%) with bruises. The Chi-square test yielded a p-value of .047, indicating a statistically significant association between Type IV FGM and the occurrence of bruises during childbirth (Table 4.2.3).

In summary, the data suggests statistically significant associations between certain types of FGM and specific childbirth outcomes. Type I FGM is associated with a 2nd-degree tear, Type II FGM is associated with bruises, 1st-degree tear, and 3rd-degree tear, Type III FGM is associated with bruises, 1st-degree tear, and 2nd-degree tear, and Type IV FGM is associated with bruises during childbirth. These findings highlight the potential impact of different types of FGM on the outcomes of childbirth (Table 4.2.3).

Table 4.2.4

The Challenge of Blood Loss During Birth and Labour n=69

		Blood Loss					
		≤ 500 mls		≥ 500 mls		Total	
Type of FGM (Only for women who have FGM)		F	%	F	%	F	**%**
	Type I	2	8.3%	0	0.0%	2	2.9%
	Type II	9	37.5%	16	35.6%	25	36.2%
	Type III	13	54.2%	25	55.6%	38	55.1%
	Type IV	0	0.0%	4	8.9%	4	5.8%
Total		24	100.0%	45	100.0%	69	100.0%

Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5.905[a]	3	.016
Likelihood Ratio	7.666	3	.053
Linear-by-Linear Association	2.881	1	.090

This table provides information on the amount of blood loss during childbirth in relation to different types of FGM among women who have undergone FGM (Table 4.2.4).

Concerning the Type I FGM, 2 in 4 of the women with Type I FGM experienced blood loss of 500 milliliters or less (≤ 500 mls), while none of them had blood loss of 500 milliliters or

more (≥ 500 mls). The total count of women with Type I FGM is 2 with a percentage of 2.9% (Table 4.2.4).

Moreover, among women with Type II FGM, 9 in 25 had a blood loss of ≤ 500 mls, and 35.6% experienced blood loss of ≥ 500 mls. The total count for Type II FGM is 25 with a percentage value of 36.2% (Table 4.2.4).

Regarding Type III FGM, the majority of women with Type III FGM, 54.2% had blood loss of ≤ 500 mls while 55.6% had blood loss of ≥500 mls, while. The total count for Type III FGM is 38 with a percentage value of 55.1% (Table 4.2.4).

Finally, among the women with Type IV FGM, and none had blood loss of ≤500 mls, 4 in 4 had blood loss of ≥500 mls. The total count for Type IV FGM is with a percentage value of Type IV FGM were 4 with a percentage value of 5.8% (Table 4.2.4).

Also, with regards to the Chi-square test, the Pearson Chi-Square test is used to assess the association between two categorical variables. Therefore, the association is considered significant at the conventional significance level of 0.05 (Table 4.2.4).

In summary, the table illustrates the distribution of blood loss during childbirth among women with different types of FGM. It shows that the prevalence of blood loss, especially blood loss of ≥ 500 mls, varies among the types of FGM, with Type II and Type III FGM being the most common types among the sample, and that a significant association existed between FGM types and blood loss (Table 4.2.4).

Table 4.2.5

The Challenge of Pain Level of Women with FGM during Birth and Labour n=69

	Pain Level during Birth and Labour							
Types of FGM	0-3 (Mild Pain)		4-6 (Moderate Pain)		7-10 (Severe Pain)		Total	
	F	%	F	%	F	%	F	%
Type I	0	0.0%	0	0.0%	2	2.9%	2	2.9%
Type II	5	7.2%	10	14.5%	10	14.5%	25	36.2%
Type III	10	14.5%	14	20.3%	14	20.3%	38	55.1%
Type IV	4	5.8%	0	0.0%	0	0.0%	4	5.8%
Total	19	27.5%	24	34.8%	26	37.7%	69	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	58.340[a]	24	.000
Likelihood Ratio	51.068	24	.001
Linear-by-Linear Association	6.602	1	.010

*Only for women who have FGM.

This table provides information on the pain levels experienced by women during labour and childbirth in relation to different types of FGM among women who have undergone FGM. From the table, it is seen that, none of the women with Type I FGM reported experiencing mild (0-3) or moderate (4-6) pain during labour and childbirth. However, 2 in 2 of these women reported severe pain (7-10). The total count of women with Type I FGM is 2, and the table shows that all of them experienced severe pain (Table 4.2.5).

Moreover, among the women with Type II FGM, 5 in 25 experienced mild pain, 14.5% had moderate pain, and another 14.5% reported severe pain during labour. The total count for Type II FGM is 25 with a percentage value of 36.2% (Table 4.2.5).

With regards to women with Type III FGM, 14.5% reported mild pain, 20.3% experienced moderate pain, and another 20.3% had severe pain during labour and childbirth. The total count for Type III FGM is 38 with a percentage value of 55.1% (Table 4.2.5).

Furthermore, concerning women with Type IV FGM, all the women (4 in 4) reported mild pain, and none reported moderate or severe pain during birth and labour (Table 4.2.5).

In total, across all types of FGM, 27.5% of women reported experiencing mild pain during labour, 34.8% reported moderate pain, and 37.7% reported severe pain (Table 4.2.5).

With reference to the chi-square test for this table, the Pearson Chi-Square test indicates a highly significant association between the two categorical variables being analyzed. The very low p-value (0.000) suggests that the observed data is highly unlikely to have occurred by chance alone. This means that there is strong evidence to show that a significant relationship exists between type of FGM and pain level during birth and labour (Table 4.2.5).

Table 4.2.6

The Challenge of Duration of Hospital Stay and Pain Level during the Postpartum Period n=69

Variables Duration of Hospital Stay	Women with FGM		Statistical test (Chi-square test)
	F	**%**	
24 hours	15	21.7%	.014
48 hours	30	43.5%	.033
72 hours	24	34.7%	.021
Pain Level during the Postpartum Period			
0-3 (Mild Pain)	28	40.5%	0.020
4-6 (Moderate Pain)	26	37.6%	0.045
7-10 (Severe Pain)	20	29.0%	0.019
Total	69	100.0%	

The table presents data on the duration of hospital stay and pain levels during the postpartum period among a sample of 69 women with Female Genital Mutilation (FGM). The statistical analysis was conducted using the Chi-square test to assess associations between the variables (Table 4.2.6).

In terms of the duration of hospital stay, the table indicates that 21.7% of women with FGM had a hospital stay of 24 hours, 43.5% stayed for 48 hours, and 34.7% stayed for 72 hours. The statistical tests associated with these durations (.014, .033, and .021, respectively) suggest a significant association between the presence of FGM and the duration of hospital stay (Table 4.2.6).

Regarding pain levels during the postpartum period, the data categorizes pain into three levels: mild (0-3), moderate (4-6), and severe (7-10). The percentages show that 40.5% of women experienced mild pain, 37.6% experienced moderate pain, and 29.0% experienced severe pain. The associated statistical tests (.020, .045, and .019, respectively) indicate

significant associations between the presence of FGM and the reported pain levels (Table 4.2.6).

In summary, the table provides insights into the relationship between FGM, the duration of hospital stay, and pain levels during the postpartum period. The statistical tests suggest that FGM is significantly associated with both the duration of hospital stay and the reported pain levels among the study participants (Table 4.2.6).

4.3 Findings: Second Research Question: Is There a Relationship between Female Genital Mutilation and Outcomes of Birth?

Table 4.3.1

Comparisons between female genital mutilation, vaginal deliveries, birth outcome and maternal satisfaction

Variables		FGM	Vaginal deliveries	Birth outcomes (Vaginal bleeding, tears, and episiotomy)	Maternal satisfaction
Female genital mutilation	Pearson Correlation	1	-.587	-.280**	-.325*
	Sig. (2-tailed)		.011	.001	.000
	N	138	138	138	138
Vaginal deliveries	Pearson Correlation	-.587	1	.576**	-.239**
	Sig. (2-tailed)	.011		.000	.005
	N	138	138	138	138
Birth outcome (Vaginal bleeding, tears, and episiotomy)	Pearson Correlation	-.280**	.576**	1	-.066
	Sig. (2-tailed)	.001	.000		.445
	N	138	138	138	138
Maternal satisfaction	Pearson Correlation	-.325**	-.239**	-.066	1
	Sig. (2-tailed)	.000	.005	.445	
	N	138	138	138	138

* Correlation is significant at the 0.01 level (2-tailed).

** Correlation is highly significant at the 0.01 level (2-tailed)

The table displays correlation coefficients and significance levels (two-tailed) between Female Genital Mutilation (FGM), vaginal deliveries, birth outcomes (including vaginal bleeding and tears), and maternal satisfaction (Table 4.3.1).

For FGM and vaginal deliveries, there is a negative correlation of -0.587, which is statistically significant ($p = 0.011<0.05$). Vaginal deliveries, in turn, show a significant positive correlation with birth outcomes (0.576, $p = 0.000 < 0.05$) and a significant negative correlation with maternal satisfaction (-0.239, $p = 0.005 < 0.05$) (Table 4.3.1).

Regarding birth outcomes, FGM has a significant negative correlation with birth outcomes (-0.280, $p = 0.001 < 0.05$), suggesting that as the severity of FGM increases, there is a tendency for adverse birth outcomes (Table 4.3.1).

In terms of maternal satisfaction, FGM exhibits a significant negative correlation (-0.325, $p < 0.000 < 0.05$), indicating that as the severity of FGM increases, maternal satisfaction tends to decrease (Table 4.3.1).

These results suggest complex relationships between FGM, vaginal deliveries, birth outcomes, and maternal satisfaction, emphasizing the need for a nuanced understanding of how FGM impacts various aspects of childbirth and maternal experiences (Table 4.3.1).

4.4 Findings: Third Research Question: What are the Outcomes of Birth in the Women with FGM and without FGM

The outcomes of birth in the women with FGM can be shown in the table below:

Table 4.4

Outcomes of Birth in the Women with and without FGM n=138

	Women with FGM		Women without FGM	
Mode of Delivery	F	%	F	%
Spontaneous vaginal delivery (SVD)	12	17.4%	25	36.2%
Vacuum delivery	47	68.1%	31	44.9%
Forceps delivery	10	14.5%	13	18.8%
Duration of Second Stage of Labour (Minute)				
10	13	18.8%	15	21.7%
5	4	5.8%	3	4.3%
6	2	2.9%	3	4.3%
7	10	14.5%	6	8.7%
8	22	31.9%	10	14.5%
9	18	26.1%	11	15.9%
2	0	0.0%	3	4.3%
4	0	0.0%	3	4.3%
Having Episiotomy				
Yes	55	79.7%	52	75.4%
No	14	20.3%	17	24.6%
APGAR Scores of Babies				
4-7	25	36.2%	39	56.5%
8-10	44	63.8%	30	43.4%
Baby's Birth Weight				
1.0 – 2.4	0	0.0	16	23.1%
2.5 – 3.0	46	66.6%	29	41.9%
3.1 - 3.50	21	30.3%	22	31.9%
Over 3.50	2	2.9%	2	2.9%
Number of Pad				
1	1	1.4%	9	13.0%
2	44	63.8%	15	21.7%
3	6	8.7%	0	0.0%
4	18	26.1%	0	0.0%
5 and more	45	65.4%	0	0.0%
Duration of Hospital Stay				
24 hours	15	21.7%	24	34.8%
48 hours	30	43.5%	23	33.3%
72 hours	24	34.8%	22	31.9%
Pain Killer Taken Per 24 Hours				
Yes	63	91.3%	49	71.0%
No	6	8.7%	20	29.0%
Number of Pain Killer Taken*				
None	6	8.7%	17	24.6%
One	15	21.7%	0	0.0%
Two	20	29.0%	2	2.9%
Three	22	31.9%	5	7.2%

Four	17	24.6%	5	7.2%
Five	28	40.6%	1	1.4%
Total	69	100.0%	69	100.0%

Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15.115[a]	9	.038
Likelihood Ratio	9.787	9	.043
Linear-by-Linear Association	3.451	1	.021

This table presents a comprehensive comparison of various variables between women with FGM and women without FGM. Regarding mode of delivery, 17.4% of women with FGM had SVD while 36.2% of women without FGM had SVD. A higher percentage of women with FGM (68.1%) had vacuum deliveries compared to women without FGM (44.9%). For forceps deliveries, 14.5% of women with FGM and 18.8% of women without FGM had this type of delivery (Table 4.4).

Regarding the duration of second stage of labour (minutes), there is variation in the duration of the second stage of labor among women with and without FGM. For women with FGM, the majority of them (31.9%) had a second stage of labor lasting 8 minutes. 26.1% had a second stage lasting 9 minutes, and 18.8% had it lasting 10 minutes (Table 4.4).

For women without FGM, the majority (21.7%) had a second stage of labor lasting 10 minutes. 15.9% had a second stage lasting 9 minutes, and 14.5% had it lasting 8 minutes (Table 4.4).

Concerning episiotomy, 79.7% of the women with FGM had episiotomies, while 75.4% of women without FGM also had episiotomies. (Table 4.4).

With regards to the APGAR scores, a lower percentage (36.2%) of babies born to women with FGM had APGAR scores of 4-7 when compared to babies born to women without FGM (56.5%). Conversely, a higher percentage of babies born to women with FGM had APGAR scores of 8-10 (63.8%) compared to babies born to women without FGM (43.4%) (Table 4.4).

Concerning baby's birth weight, a majority of babies born to women with FGM had birth weights in the range of 2.5-3.0 (66.6%), while a higher percentage of babies born to women

without FGM had birth weights in the range of 2.5-3.0 (41.9%). For baby's weight of 1.0-2.4, most of the babies born to women without FGM had such birth weight (23.1%) while none of the babies born to women with FGM had such birth weight range. Regarding the birth weight range of 3.1-3.50, 30.3% of babies born to women with FGM had such birth weight range while 31.9% of babies born to women without FGM had such weight range (Table 4.4).

Moreover, with respect to the number of pads changed during hospital stay, the table showed that the number of pads changed varied for women with and without FGM during their hospital stay. Among the women with FGM, 63.8% had their pads changed 2 times during their hospital stay. 26.1% had their pads changed 4 times, 8.7% had them changed 3 times. On the other hand, among women without FGM, 21.7% had their pads changed 2 times or more during their hospital stay. 13.0% had their pads changed once (Table 4.4).

Furthermore, concerning the duration of hospital stay, among women with FGM, 21.7% of them had a hospital stay of 24 hours, 43.5% stayed for 48 hours, and another 34.8% stayed for 72 hours. On the other hand, among women without FGM, 34.8% had a hospital stay of 24 hours, 33.3% stayed for 48 hours, and 31.9% stayed for 72 hours (Table 4.4).

With reference to pain killer taken per 24 hours, a higher percentage of women with FGM (91.3%) took painkillers per 24 hours compared to women without FGM (71.0%) (Table 4.4)

Concerning the number of pain killers taken, about 8.7% of women with FGM reported not taking any painkillers. 21.7% of women with FGM reported taking one painkiller, and 29.0% reported taking two. 31.9% took three painkillers, and 24.6% took four, and 40.6% took five painkillers. Among women without FGM, 24.6% reported not taking any painkillers. No women without FGM reported taking one painkiller. 2.9% took two painkillers, 7.2% took three and four each, while just 1.4% reported taking five painkillers (Table 4.4).

Chi-square tests indicate statistically significant differences between women with and without FGM across these variables, highlighting the impact of FGM on various aspects of childbirth (Table 4.4).

4.5 Findings: Fourth Research Question: What is maternal satisfaction level of the women with FGM and, without FGM?

Table 4.5

Maternal Satisfaction of Women with and without Women with FGM n=138

	Maternal Satisfaction of Women with FGM				Maternal Satisfaction of Women without FGM			
	Agree		Disagree		Agree		Disagree	
	F	%	F	%	F	%	F	%
I came through childbirth virtually unscathed	51	73.9	18	26.1	48	69.6	21	30.4
I thought my labour was excessively long	43	62.3	26	37.7	35	50.7	34	49.3
The delivery room staff encouraged me to make decisions about how I wanted my birth to progress	41	59.4	28	40.6	26	37.7	43	62.3
I felt very anxious during my labour and birth	46	66.6	23	33.4	44	63.8	25	36.2
I felt well supported by staff during my labour and birth	36	52.1	33	47.9	26	37.6	43	62.4
The staff communicated well with me during labour	31	44.9	38	55.1	26	37.7	43	62.3
I found giving birth a distressing experience	41	59.4	28	40.6	42	60.9	27	39.1
I felt out of control during my birth experience	46	66.6	23	33.4	42	60.8	27	39.2
I was not distressed at all during labour.	13	18.8	56	81.2	23	33.3	46	66.7
The delivery room was clean and hygienic.	26	37.6	43	62.4	32	46.3	37	53.7

The above table gives a presentation of the maternal satisfaction of women with FGM and women without FGM. As seen in the table above, regarding the statement, ‘I came through childbirth virtually unscathed’, 73.9% of women with FGM agreed while 26.1% disagreed. On the other hand, 69.6% of women without FGM agreed while 30.4% disagreed (Table 4.5).

Concerning the next statement, ‘I thought my labour was excessively long’, 62.3% of women with FGM agreed while, 37.7% disagreed. Regarding women without FGM, 50.7% agreed while 49.3% disagreed. In the aspect of ‘The delivery room staff encouraged me to take decisions about how I wanted my birth to progress’, 59.4% of women with FGM agreed and 40.6% disagreed while for women without FGM, 37.7% agreed while 62.3% disagreed (Table 4.5).

With reference to the statement, ‘I felt very anxious during my labour and birth’, 66.6% of women with FGM agreed and 33.4% disagreed, while 63.8% of women without FGM agreed and 36.2% disagreed. Concerning the statement, ‘I felt well supported by staff during my labour and birth, 52.1% agreed and 47.9% disagreed, while for women without FGM, 37.6% agreed and 62.4% disagreed (Table 4.5).

Moreover, regarding the statement, ‘The staff communicated well with me during labour’, 44.9% of women with FGM agreed and 55.1% disagreed, while 37.7% of women without FGM agreed and 62.3% disagreed. Concerning the statement, ‘I found giving birth a distressing experience’, 59.4% of women with FGM agreed and 40.6% disagreed, while 60.9% of women without FGM agreed and 39.1% disagreed (Table 4.5)

Furthermore, with respect to the statement, ‘I felt out of control during my birth experience’, 66.6% of women with FGM agreed and 33.4% disagreed, while 60.8% of women without FGM agreed, and 39.2% disagreed. With regards to the statement, ‘I was not distressed at all during labour’, 18.8% of women with FGM agreed and 81.2% disagreed, while 33.3% of women without FGM agreed, and 66.7% disagreed (Table 4.5).

Finally, concerning the statement, ‘The delivery room was clean and hygienic’, 37.6% of women with FGM agreed and 62.4% disagreed, while for women without FGM, 46.3% agreed while 53.7% disagreed (Table 4.5).

4.6 Findings: Fifth Research Question: Is there any effect of FGM on maternal satisfaction?

Table 4.6.1

Model Summary Result of the Effects of FGM on Maternal Satisfaction

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.325[a]	.106	.099	.85577

a. Predictors: (Constant), female genital mutilation

This table presents the model summary of the effect of female genital mutilation on maternal satisfaction. The results show that female genital mutilation explains 10.6% influence on maternal satisfaction. There are other factors that also influence maternal satisfaction which was not part of this study other than the female genital mutilation (Table 4.6.1).

Table 4.6.2

ANOVA Result of the Effect of FGM on Maternal Satisfaction

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	11.794	1	11.794	16.104	.000[b]
	Residual	99.599	136	.732		
	Total	111.393	137			

a. Dependent Variable: maternal satisfaction

b. Predictors: (Constant), female genital mutilation

c. ANOVA test was applied to this table.

This table shows the ANOVA results on the effect of female genital mutilation on maternal satisfaction. The results for the ANOVA (f= 16.104; P= 0.00) show that female genital mutilation had an overall impact on maternal satisfaction. This implies that the practice of female genital mutilation (FGM) has a discernible influence on how women perceive and experience satisfaction in the context of childbirth. The word "overall" suggests that this impact is not confined to a specific aspect but encompasses a broader range of factors related to maternal satisfaction. The implications could include challenges or adverse effects stemming from FGM, such as physical discomfort, complications, or psychological distress, that collectively contribute to a diminished sense of satisfaction during the childbirth experience (Table 4.6.2).

Table 4.6.3

Regression Results of Effects of FGM on Maternal Satisfaction

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.320	.102		32.619	.000
	female genital mutilation	-.311	.078	-.325	-4.013	.000

a. Dependent Variable: marital satisfaction

b. Regression analysis test was applied.

This table presents the regression results showing the effect of female genital mutilation on maternal satisfaction. The study found that female genital mutilation ($\beta = -0.311$, $t = -4.013$, $P = 0.000$) had a negative and significant impact on maternal satisfaction. The results imply that when there is a partial or total removal of the external female genitalia, it contributes negatively to the sexual intercourse of the women. The practice of female genital mutilation has the potential to negatively impact maternal satisfaction and pose a threat to the stability of a marriage. The findings also suggest that female genital mutilation can diminish sexual well-being and elevate the likelihood of adverse outcomes. The anatomical alterations and scar tissue resulting from the practice can contribute to physical discomfort and diminished sexual function. Moreover, the heightened likelihood of adverse outcomes suggests that women who have undergone FGM may face increased risks during sexual activities, such as pain or complications. These multifaceted implications underscore the urgent need for comprehensive and sensitive healthcare approaches that address the diverse challenges posed by FGM, aiming to promote both maternal and sexual well-being in affected individuals. The findings emphasize the importance of raising awareness among healthcare professionals to ensure adequate support and care for women with a history of FGM (Table 4.6.3).

CHAPTER V

5. Discussion

Our study revealed compelling evidence of statistically significant associations between various forms of FGM and the mode of delivery. According to our findings, 1 woman in 2 with type I FGM had SVD, and another 1 woman in 2 with type I FGM had vacuum delivery. This finding aligns with a study that showed that equal proportion of women with type I FGM has SVD and vacuum delivery (Anikwe *et al*., 2019). A reason for the foregoing might be because women with type I FGM faced diverse circumstances during labour, leading to the utilization of both delivery methods in an equal proportion. Additionally, healthcare providers might have chosen the most appropriate method based on the specific conditions of each case, aiming to ensure a safe and successful delivery for both the mother and the baby (Table 4.2.1).

We also discovered that 1 woman in 25 with type II FGM had SVD, while 33.3% with type II FGM had vacuum delivery, and 1 woman in 25 with type II FGM had forceps delivery. This finding shows that most of the women with type II FGM had vacuum delivery. Difference between the groups were found statistically significant($p<0.05$). This is supported by the finding of Rabiepour and Ahmadi (2023) who also revealed that most women with type II FGM had vacuum delivery. The preference for vacuum delivery among most women with Type II Female Genital Mutilation (FGM) could be influenced by the anatomical changes associated with type II FGM.

For women with type III FGM, we discovered that 6 in 38 underwent SVD, 33.3% underwent vacuum delivery, and 9 in 38 underwent forceps delivery. Difference between the groups was found statistically insignificant($p>0.05$). A study performed by Wuest *et al*. (2009) also showed that most of the women with type III FGM underwent vacuum delivery. Finally for women with type IV FGM, all of the 4 women had an SVD. A study performed by Eshragi *et al*. (2022) revealed that 32.8% of women with type IV FGM had an SVD and difference between the groups was found statistically significant. (Table 4.2.1). This particular finding sheds light on the prevalent mode of assisted childbirth in the studied population and is supported by the study of Nolens *et al.* (2019) and Ramos *et al.* (2017) who revealed the prevalence of vacuum delivery among mothers, and stated that less pain, avoidance of surgery, shorter period of recovery, and the safety of vacuum delivery accounts for the reasons more women with Type II and Type III FGM opted for the use of vacuum delivery.

According to Goordyal et al. (2021), vacuum extraction is often employed to facilitate the birthing process when traditional methods prove challenging, aiming to ensure a safe and timely delivery for both the mother and the baby (Table 4.2.1).

Moreover, our study's findings unveiled notable and statistically significant connections between the four various types of FGM and the occurrence of episiotomy. All of the women (2 in 2) with type I FGM had episiotomy during child birth and labour. Difference between the groups was found statistically significant($p<0.05$). A study shows that 25% of women with type I FGM had episiotomy (Yosef, Borsamo, & Abeje, 2023) while another study shows that 32% of women with type I FGM had episiotomy (Kimani, Musteshi-Stratchan, & Njue, 2016). We can suggest that more studies should be carried out on this topic.

In type II FGM group, 30.4% of the women had episiotomy during child birth and labour. Difference between the groups was found statistically insignificant($p>0.05$). A study shows that 49% of women with type II FGM had episiotomy (Al-Hussaini, 2023), and another study reveals that 37% of women with type II FGM had episiotomy (Suleiman *et al*., 2021). Moreover, in our study, 46.4% of the women with the Type III FGM group had episiotomy. Difference between the groups was found statistically significant($p<0.05$). A study shows that, Women with type III FGM had an episiotomy rate 42.7% (Rodriguez *et al*., 2016) (Table 4.2.2). From the foregoing, it is implied that women who have undergone FGM are more likely to undergo episiotomy during childbirth. Previous researches support the preceding by revealing through their study that episiotomy is one of the challenges or outcomes faced by women with FGM during delivery (Ershragi, Hermansson, Berggren, & Marions, 2022; Sylla, Morreau, and Andro, 2020) (Table 4.2.2).

In addition, our study revealed statistically significant associations between particular types of FGM and state of perineum. Incidence of 2nd-degree tears during childbirth in the type I FGM was found in 2 in 2 and the difference between the groups was found statistically significant($p<0.05$). Bruises was found 5 in 49 in type II FGM, 21.7% in 1st-degree tear, 4 in 49 in 2nd-degree tear, and 36.2% in 3rd-degree tear. The difference between the groups was found statistically significant($p<0.05$). These results underscore the impact of FGM on perineal health during childbirth and highlight the importance of tailored obstetric care for women affected by FGM to mitigate associated risks, and is supported by the findings of Ershragi *et al.* (2022).

Two women in 2 in the type I FGM had second degree tears and no women were found in first, second and 3rd degree tears groups. The difference between the groups was found statistically significant ($p<0.05$). Our finding is in tandem with that Akpak and Yilmaz (2022) and it underscores a significant association between Type I Female Genital Mutilation (FGM) and second-degree tears during childbirth. The absence of women in the first, second, and third-degree tears groups among those with Type I FGM suggests a distinct pattern of perineal trauma in this cohort. The statistically significant difference between the groups further emphasizes the unique impact of Type I FGM on perineal health during childbirth, highlighting the importance of tailored obstetric care and interventions to address associated risks and complications in this population.

In type II FGM group bruises were found 7.2%, first degree tear 21.7%, 4 in 49 had second degree tears and 3rd degree tear was 36.2%. The difference between the groups was found statistically significant ($p<0.05$). These results which aligns with that of Bayoumi and Boivin (2022) emphasize the considerable impact of Type II FGM on perineal health during the birthing process. Such findings underscore the importance of tailored obstetric care and interventions to address the increased risk of perineal trauma associated with Type II FGM, aiming to improve maternal outcomes and overall childbirth experiences for affected women. All of the women in type IV FGM had no bruises, first, second, third degree tears. FGM exhibits a statistically significant association with bruises as an outcome of the birthing process ($p<0.05$) (Table 4.2.3). These findings highlight the prevalence of perineal injuries in women with FGM, and is in tandem with that of Idoko *et al*. (2022) and Anikwe *et al*. (2019) who also revealed in their studies the prevalence perineal tear amongst women with FGM with 1st-degree tear being the most prevalent. This result suggests that a significant proportion of individuals experienced some level of trauma to the perineum during childbirth, with varying degrees of severity (Table 4.2.3).

According to our study, it was discovered that a significant association exists between the various types FGM and the amount of blood loss during delivery. The result showed that 2 women in 4 with FGM Type I experienced blood loss of 500 milliliters or less ($\leq$ 500 mls); women with Type II FGM, about 35.6% experienced blood loss of $\geq$ 500 mls; a higher percentage of women with Type III FGM, about 55.6% had blood loss of $\geq$500 mls; while all 4 in 4 women with Type IV FGM had blood loss of $\geq$500 mls. This shows that women who have undergone FGM experience increased blood loss during labor and that in accordance to

the type of FGM they had. In other words, the higher the degree of FGM, the more the blood loss. FGM often involves the partial or complete removal of the clitoris and other genital tissues, which can result in scar tissue formation and a loss of vascular integrity in the affected areas. As a result, the normal anatomical structures that aid in controlling bleeding during childbirth may be compromised, making these women more susceptible to bleeding complications. Additionally, the scar tissue can obstruct the birth canal, increasing the likelihood of tears and lacerations during delivery, further contributing to blood loss. This finding is in alignment with previous studies where it was revealed that women with FGM experienced a greater deal of blood loss (Gebremichael *et al.*, 2018; Idoko *et al*., 2022; Konwea & Fabamise, 2020) (Table 4.2.4).

Also, the studies suggests that women who have undergone FGM may be more prone to increased blood loss during the delivery process. This is in consonance with the study of Idoko *et al*. (2022); Bassey, Abonor, and Ejeje (2017) who revealed FGM to be associated with haemorrhage which is blood loss during childbirth. These findings highlight the importance of vigilant monitoring and specialized care for women with a history of FGM during childbirth to mitigate the risks associated with increased blood loss and ensure optimal maternal well-being (Table 4.2.4).

Furthermore, our study showed strong evidence that a significant relationship exists between type of FGM and pain level during birth and labour. This was another challenge for women with FGM. In type I FGM 2 women in 2 had severe pain, women with Type II FGM, 5 in 25 experienced mild pain, 14.5% experienced moderate and severe pain. A study shows that about 25.6% of women with Type II FGM experienced moderate pain (Kaplan *et al*., 2011), while another study shows that 33.5% of women with Type II FGM experienced severe pain (Kerubo, 2010) (Table 4.2.5).

Also, for the women with Type III FGM, 14.5% experienced mild pain, while 20.3% each experienced moderate and severe pain. A study shows that about 35% of women with Type III FGM experienced moderate pain (Ismail *et al.*, 2017), while another study shows that 42.9% of women with Type III FGM experienced severe pain (Bazzoun, Aerts, & Abdulcadir, 2021) (Table 4.2.5).

Finally, all the women with Type IV FGM (4 in 4) experienced mild pain. There are different results of studies on the effects of FGM on mothers level of pain,. A study shows that no

woman with Type IV FGM experienced moderate pain (Bazzoun, Aerts, & Abdulcadir, 2021), while another study showed that 65.8% of women with Type IV FGM experienced severe pain (Mahmoud, 2016). Women with Type IV FGM may experience severe pain due to the nature of this category, which includes various non-medical procedures like piercing, scraping, or pricking the genital area. These interventions can cause extensive tissue damage, inflammation, and nerve irritation, leading to heightened sensitivity and pain during various activities, including childbirth (Table 4.2.5). More studies should be carried out on type IV FGM and level of pain.

With regards to the relationship between FGM and both birth outcomes (vaginal bleeding, tears, and episiotomy) and maternal satisfaction, our study uncovered a compelling and statistically significant negative relationship. This indicates that women who have undergone FGM are more likely to experience adverse birth outcomes such as vaginal bleeding and tears, possibly due to the physiological consequences and complications associated with the practice. Majority of the mothers stayed in the hospital 48 hours. Our finding supports that of Gebremicheal *et al.* (2018). Also, results of previous studies support our finding where they revealed that FGM is associated with poor obstetric outcomes, such as bleeding, tear, and episiotomy (Berg and Underland, 2013; Nonterah *et al*., 2020). Additionally, the negative impact extends to maternal satisfaction, suggesting that women with a history of FGM may be more dissatisfied with their childbirth experiences, likely influenced by the physical and psychological implications of the procedure. Some studies' results support our findings by stating that FGM reduces the maternal satisfaction of women (Ahanonu & Victor, 2014; Bayoumi & Boivin, 2022) (Table 4.3.1).

In addition, the result of this investigation shows that FGM had a statistically significant negative relationship with vaginal deliveries. This result demonstrates that there is a meaningful association between FGM and a reduced likelihood of women undergoing vaginal deliveries. The negative relationship suggests that as the severity or presence of FGM increases, there is a corresponding decrease in the occurrence of vaginal deliveries. This could mean that there is increased maternal fatalities when women with FGM undergo vaginal deliveries. This discovery is in consonance with previous studies that reveal that one to two infants in every 100 deliveries die as a result of FGM and that FGM contributes to increased maternal fatalities (Seidu *et al.*, 2022; WHO, 2008) (Table 4.3.1).

Moreover, the comprehensive comparison of childbirth variables between women with and without Female Genital Mutilation (FGM) highlights significant disparities in maternal and neonatal outcomes. Specifically, the higher prevalence of vacuum deliveries among women with FGM underscores the potential obstetric complications associated with this practice. This is in tandem with the finding of Chawanpaiboom *et al.* (2023) who also revealed some complications associated with FGM. Episiotomies, a common intervention during childbirth, were more frequently performed among women with FGM, indicating potential challenges in managing perineal trauma during delivery (Suleiman *et al*., 2021). Variations in the duration of the second stage of labour suggest differences in the progression of childbirth between the two groups (Akpak & Yilmaz, 2022). Babies born to women with FGM exhibited lower APGAR scores in the 4-7 range, indicating potential immediate neonatal health concerns, which may be attributed to the obstetric challenges associated with FGM (Kulaksiz *et al*., 2022). The higher percentage of babies with birth weights falling within the 2.5-3.0 kg range among women with FGM suggests potential implications for foetal growth and development. Moreover, the increased frequency of pad changes and longer hospital stays among women with FGM may reflect heightened postpartum care needs and potential complications related to FGM (Chawanpaiboom *et al.*, 2023). Additionally, the higher reported use of painkillers among women with FGM underscores the potential pain and discomfort associated with childbirth in this population. These findings collectively emphasize the multifaceted impact of FGM on maternal and neonatal health outcomes, highlighting the importance of tailored obstetric care and support for women affected by FGM (Table 4.4).

The comparison of maternal satisfaction between women with and without Female Genital Mutilation (FGM) sheds light on the nuanced experiences within childbirth settings. Regarding the statement "I came through childbirth virtually unscathed," a higher percentage of women with FGM (73.9%) agreed compared to women without FGM (69.6%), suggesting a slightly more positive perception of the physical outcome of childbirth among women with FGM. A study contradicted this finding as it revealed that women with FGM came through childbirth scathed (Awotunde et al., 2023). However, when asked if their labour was excessively long, 62.3% of women with FGM agreed, compared to 50.7% of women without FGM, indicating that women with FGM were more likely to perceive their labour as prolonged. This finding of ours was supported by a study which revealed that 73.8% of women with FGM showed that their labour was excessively long (Bayoumi & Boivin, 2022) (Table 4.5).

In terms of decision-making during childbirth, 59.4% of women with FGM felt encouraged by delivery room staff to make decisions about their birth, whereas only 37.7% of women without FGM felt similarly supported. This indicates a notable difference in perceived autonomy and support between the two groups. This finding is in alignment with that Ahanonu and Victor (2014) who also showed that a larger percentage (69.5%) of women with FGM felt encouraged by delivery room staff to make decisions about their birth. Also, anxiety during labour was reported by 66.6% of women with FGM and 63.8% of women without FGM, reflecting high levels of anxiety in both groups but slightly higher among women with FGM. The study of Chawanpaiboom *et al.* (2023) supported this our finding by stating that both women with FGM and without FGM usually demonstrate anxiety during labour. Moreover, support from staff during labour was perceived positively by 52.1% of women with FGM, compared to only 37.6% of women without FGM, suggesting better perceived support among the former group. A study by Al-Hussaini (2023) aligns with this our finding by showing that a larger percentage of women with FGM (88.1%) perceived positively support from staff during labour. However, communication from staff during labour was rated positively by only 44.9% of women with FGM and 37.7% of women without FGM, indicating that both groups had issues with staff communication, though women with FGM reported slightly better experiences. The study conducted by Seidu *et al*. (2022) supports the finding as they revealed that a higher percentage of women with FGM (69.1%) reports better and more positive communication experiences with staff during labour (Table 4.5).

When considering the distressing nature of childbirth, 59.4% of women with FGM found giving birth distressing, similar to 60.9% of women without FGM, showing that both groups had comparable levels of distress. The study of Akpak and Yilmaz (2022) contradicts this our finding by asserting that a higher percentage of women with FGM (78.5%) found giving birth a distressing experience. Also, feeling out of control during birth was more commonly reported by women with FGM (66.6%) compared to women without FGM (60.8%), indicating higher levels of perceived loss of control among women with FGM. Our finding is in alignment with the finding of Anikwe *et al*. (2019) who revealed that a larger percentage of women with FGM (82.0%) felt out of control during birth (Table 4.5).

Moreover, a significant disparity was noted in distress levels during labour, with only 18.8% of women with FGM reporting no distress compared to 33.3% of women without FGM,

suggesting higher distress among the former group. A study by O'Neil and Palitto (2021) supports our finding by revealing that a lower percentage (20.5%) of women with FGM reported having no distress during labour when compared to women without FGM. Lastly, perceptions of the cleanliness and hygiene of the delivery room were lower among women with FGM (37.6%) compared to women without FGM (46.3%), highlighting concerns about the birthing environment among women with FGM. Other studies conducted by Eshragi *et al*. (2022) and Gonzalez-Timoneda *et al.* (2021) showed that a higher percentage of women with FGM had a positive perception about the cleanliness and hygiene of the delivery room when compared to women without FGM. This accounts for the need to ensure the delivery room of women should be treated with high level of care, ensuring it is well cleaned and hygienic (Akinbiyi *et al.,* 2018) (Table 4.5).

In Table 4.6.1, we found out that female genital mutilation explains 10.6% influence on maternal satisfaction. There are other factors that also influence maternal satisfaction which was not part of this study other than the female genital mutilation. Some of these factors include: cost of care, care provider competence, a well-planned post-natal care assessment, etc. (Awotunde *et al.*, 2023). These additional factors contribute significantly to shaping women's perceptions and experiences of childbirth by influencing various aspects of their care and support throughout the pregnancy and birthing process (Demis *et al.*, 2020). For example, the cost of care can impact access to prenatal services, the quality of healthcare facilities utilized, and the availability of essential resources during childbirth, thereby shaping women's overall satisfaction with their care experience. Similarly, the competence of care providers, including their communication skills, medical expertise, and emotional support, directly affects women's confidence and trust in the care they receive, which in turn influences their satisfaction with the childbirth experience. This aligns with the statement of Jafari *et al*. (2017) who asserted that patient trust more and are confident in the care they receive if they perceive the care providers to be competent. Additionally, a well-planned post-natal care assessment ensures that women receive appropriate follow-up care and support after childbirth, addressing any lingering concerns or complications and promoting their overall well-being (Awotunde *et al*., 2023). By considering these factors, healthcare systems can better tailor their services to meet the diverse needs and preferences of women, ultimately enhancing their satisfaction and positive experiences throughout the childbirth journey.

Moreover, the outcomes derived from the analysis using ANOVA, as presented in Table 4.6.2, distinctly demonstrate the substantial influence of female genital mutilation (FGM) on maternal satisfaction. This statistical approach affirms that FGM exerts a significant and pervasive effect on women's perceptions and experiences of satisfaction throughout the childbirth process. The implications of these findings extend beyond mere statistical significance, revealing the profound and tangible impact that FGM has on shaping women's childbirth experiences. This finding is in tandem with the discovery of Ahanonu and Victor (2014); Bayoumi and Boivin (2022) who also revealed that maternal satisfaction is affected by FGM. It suggests that the presence of FGM fundamentally alters the childbirth landscape for affected women, influencing their sense of agency, autonomy, and overall satisfaction with the birthing process. This underscores the urgent need for tailored interventions and support mechanisms to address the unique challenges faced by women affected by FGM during childbirth, with a focus on enhancing their overall satisfaction and well-being.

Finally, our study revealed a significant negative impact of female genital mutilation (FGM) on maternal satisfaction. This implies that women who have undergone FGM are more likely to experience dissatisfaction with their maternal care experiences. The adverse effect on maternal satisfaction may stem from various factors, including physical discomfort, complications related to the anatomical alterations caused by FGM, and potential psychological distress associated with the practice. Adelekan *et al.* (2022) corroborates the foregoing by asserting that the anatomical alterations caused by FGM causes heightened discomfort in women who have experienced the practice, implying the decrease in the satisfaction of delivery of women with FGM. Also, this particular finding of ours is supported by that of Strand, Maxwell, and Trang (2021) who revealed that the absence of FGM results in a positive maternal satisfaction. Also, O'Neill and Pallitto (2021) corroborated our finding by asserting that FGM adversely affect the psycho-social wellbeing of mothers, and if their wellbeing is negatively affected, they would not be satisfied with the delivery process. In other words, Berg and Denison (2013) asserted that the physical trauma inflicted by FGM can lead to intense pain during labour and delivery, contributing to feelings of distress and dissatisfaction among affected women. Also, Behrendt and Moritz (2005) asserted that FGM is often associated with psychological consequences, including anxiety, fear, and a sense of powerlessness, which can further exacerbate maternal distress and diminish satisfaction with the childbirth experience. In addition, Mpinga *et al*. (2016) supported our finding by stating that the practice of FGM hinders effective communication between healthcare providers and

women during labour, leading to a lack of informed decision-making and reduced satisfaction with the quality of care received. Additionally, the stigma and discrimination faced by women affected by FGM within healthcare settings can perpetuate feelings of marginalization and dissatisfaction, further undermining their overall childbirth experiences. This statement is in alignment with the findings of Dawson *et al*. (2015). Furthermore, FGM can result in long-term complications such as pelvic pain, sexual dysfunction, and psychological trauma, which can persist beyond childbirth and continue to impact maternal satisfaction and well-being (Berg & Denison, 2013). These findings underscore the importance of addressing the unique needs and challenges faced by women with a history of FGM in maternal healthcare settings (Table 4.6.3).

CHAPTER VI

6. Conclusion and Recommendations

This chapter presents the summary and conclusion of the research study and further proffers recommendations to healthcare practitioners on the issue of FGM and vaginal delivery and maternal satisfaction. The previous chapters have explored the background, literature review, methodology, and results of the study, while in this chapter every aspect of this study would be brought to a conclusion.

6.1 Conclusion

In conclusion, this comprehensive study has provided a nuanced understanding of the intricate relationship between FGM and various maternal outcomes during childbirth. The prevalence of vacuum delivery among women with and without FGM, particularly in response to factors like prolonged labour, fetal distress, or maternal exhaustion, underscores the significance of this assisted delivery method in the studied population. Statistically significant associations between different types of FGM and childbirth modes, episiotomy occurrences, and maternal satisfaction reveal the multifaceted impact of FGM on the dynamics of childbirth experiences. The findings highlight the challenges faced by women with a history of FGM, including increased risks of perineal injuries, blood loss, and varying pain levels during childbirth. These results underscore the urgent need for tailored obstetric care, heightened awareness, and comprehensive support systems to address the unique needs and challenges faced by women affected by FGM. This study contributes valuable insights for healthcare professionals and policymakers striving to enhance maternal care outcomes and the overall well-being of women who have undergone FGM.

6.2 Recommendations

Based on the findings of the research study on "The Effects of Female Genital Mutilation on Vaginal Deliveries and Maternal Satisfaction in Awka, Anambra State, Nigeria," the following recommendations are proffered to address the challenges faced by women with FGM during childbirth and enhance their overall maternity care:

(i) Based on our study’s findings, it was discovered that women with FGM could not deliver their babies spontaneously. As a result, there is need for assisted delivery mechanisms like vacuum assisted delivery to aid in the easy delivery of newborns and reduce the pain and difficulties the mothers experience.

(ii) We also discovered FGM to be associated with perineal tears. Hence, it is recommended that healthcare practitioners implement individualized and culturally sensitive obstetric care plans that address the specific anatomical challenges associated with FGM, incorporating techniques such as controlled episiotomy and perineal support during childbirth.

(iii) In our study, it is found out that women with FGM had severe bleeding during birth. Hence, healthcare providers should be trained to address and manage bleeding complications associated with FGM, emphasizing prompt identification, proper hemostasis techniques, and access to blood transfusion services when necessary.

(iv) Also, our study revealed that FGM is negatively associated vaginal deliveries. As a result, this study recommends the need for healthcare professionals to implement targeted obstetric care strategies, including close monitoring and individualized birthing plans, for women with a history of FGM to mitigate the negative impact observed on vaginal deliveries, ensuring safer and more positive childbirth experiences.

(v) The study also discovered that women with FGM experienced poor maternal satisfaction. As a result, it is recommended that healthcare providers and policymakers should prioritize the development and implementation of specialized support programs and interventions aimed at enhancing the overall maternal satisfaction of women with a history of Female Genital Mutilation (FGM), addressing both physical and psychological aspects to ensure a more positive childbirth experience.

By implementing these recommendations, healthcare systems, policymakers, and communities can work together to improve maternity care for women with FGM, enhance their birthing experiences, and protect their reproductive health and rights. These efforts are essential in promoting safe and satisfactory childbirth experiences for all women, irrespective of their cultural backgrounds or experiences with FGM.

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Appendices

Appendix A: Research Questionnaire

Informed Consent

Dear Participant,

This study is Ogonna Felista Muoneke's master thesis. The aim of this study is to determine the Effects of Female Genital Mutilation on Vaginal Deliveries and Maternal satisfaction. I am kindly inviting you to join in the study. Your participation in this study is completely voluntary and you will not be forced or coerced to give any information you are not comfortable with. No name is required as you participate to promote confidentiality and anonymity and you are allowed to drop off at any stage if you no longer wish to continue. Thank you.

Exclusions

- Multiple gestations
- Women already booked for elective C/S
- Pregnancy complicated by medical disease or pregnancy related complications
- Non-cephalic presentation of neonate
- Women with previous C/Sections or undergoing VBAC (Vaginal birth after C/S)
- Women with identified fetal anomalies

Section A- Demographic Data

1. what is your age

2. what is your residence?

3. Area of origin

a) South-south

b) South-east

c) South-west

d) Other

4. Educational level

a) Primary

b) Secondary

c) Tertiary

d) Vocational

e) Other

5. Employment status

a) Unemployed

b) Student

c) Civil servant

d) Self-employed

e) Other

6. Marital status

a) Single

b) Married

c) Divorced

d) Widowed

7. Religious Affiliation

a) Christian

b) Muslim

c) Other

Section B- Obstetric history and Type of FGM done according WHO classification

1. what is your number of children?

a) 1

b) 2

c) 3

d) more than 3

2. Type of FGM (Only for women who have FGM)

a) Type I- Clitoridectomy

b) Type II- Excision (partial or complete removal of clitoris and labia minora)

c) Type III- Infibulations (opening left for urine and menstrual flow)

d) Type IV- Variety of other treatments (piercings and cauterizing)

3. Age at which FGM was done

a) Childhood

b) Adolescence/ Teenage years

c) Early adulthood

d) Late adulthood

Section C- Birth outcomes checklist

1. Mode of delivery

a) Spontaneous vaginal delivery (SVD)

b) Vacuum delivery

c) Forceps delivery

2. Duration of second stage of labor (4cm to delivery of baby)

……..

3. Do you have Episiotomy?

a) Yes

b) No

4. What is the State of Perinum

a) Intact

b) Bruises

c) 1st degree tear

d) 2nd degree tear

e) 3rd degree tear

5. Apgar score of Baby

a) 0

b) 1-3

c) 4-7

d) 8-10

6. Baby's birth weight ----------

7. Blood loss

a) ≤ 500mls

b) ≥ 500mls

8. Number of pad changes since delivery (within 24hrs)

……..

9. Duration of hospital stay

a) 24 hours

b) 48 hours

c) 72 hours

10) Can you mark your pain level on the diagram is given below (Please answer this question by considering the most severe pain you felt during birth and labor).

(0 mean no pain, 5 mean moderate pain and, 10 mean severe pain)

1----2----3---4----5----6----7----8----9----10

11) Can you mark your pain level on the diagram which is given below (Please answer this question by considering the most severe pain you felt during postpartum period hospital stay).

(0 mean no pain, 5 mean moderate pain and, 10 mean severe pain)

1----2----3---4----5----6----7----8----9----10

12) Did you take pain killer during hospital stay?

a) Yes

b) No (if no do not answer question number 13)

13) How many pain killers you took in a day?

a) One

b) Two

c) Three

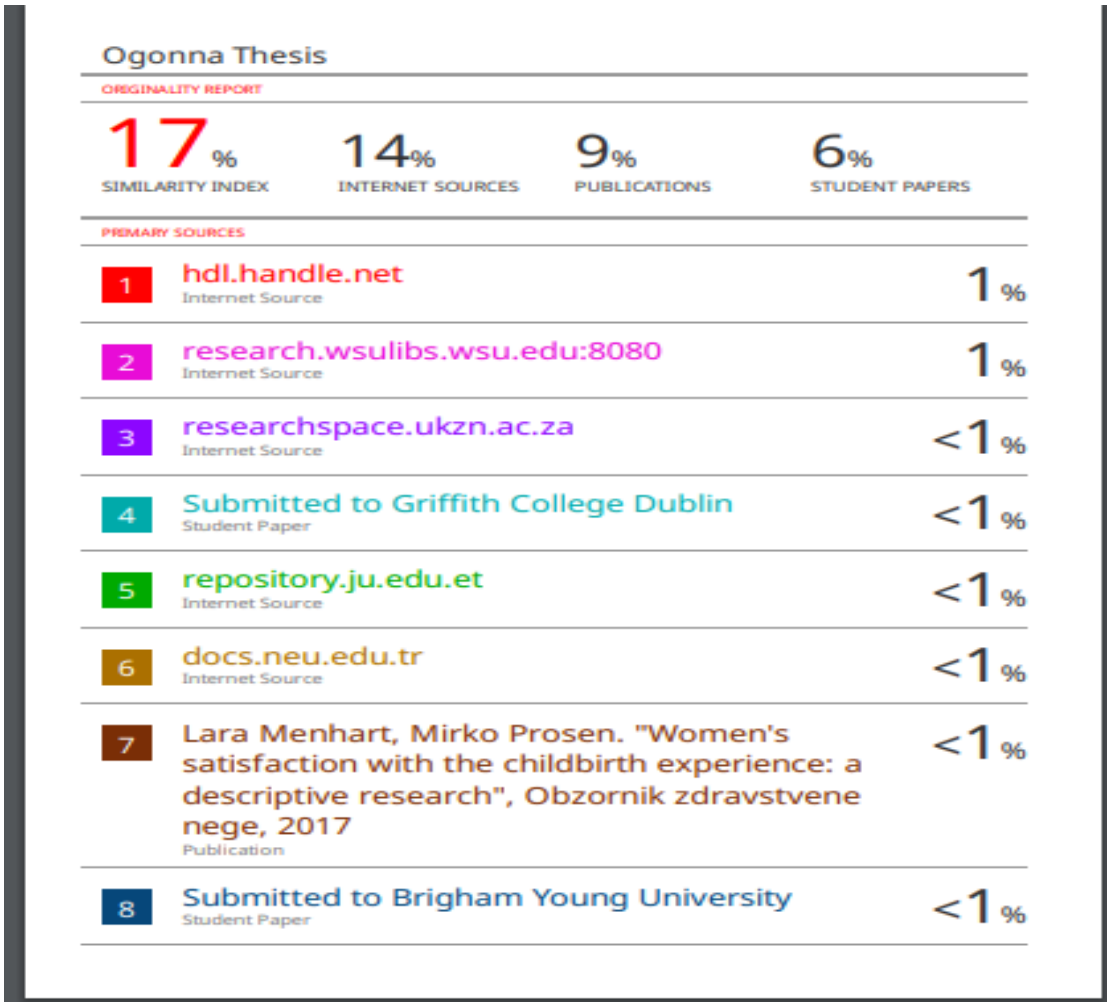
d) Four

e) Five

SECTION D – MATERNAL SATISFACTION: Please tick [√] the appropriate option that best represents your opinion on the statement using the following response scale. 1 – Agree, 2 –Disagree

S/N	Maternal Satisfaction	A	D
1	I came through childbirth virtually unscathed		
2	I thought my labour was excessively long		
3	The delivery room staff encouraged me to make decisions about how I wanted my birth to progress		
4	I felt very anxious during my labour and birth		
5	I felt well supported by staff during my labour and birth.		
6	The staff communicated well with me during labour.		
7	I found giving birth a distressing experience.		
8	I felt out of control during my birth experience		
9	I was not distressed at all during labour.		
10	The delivery room was clean and hygienic		

Appendix B: Similarity Report



Ogonna Thesis

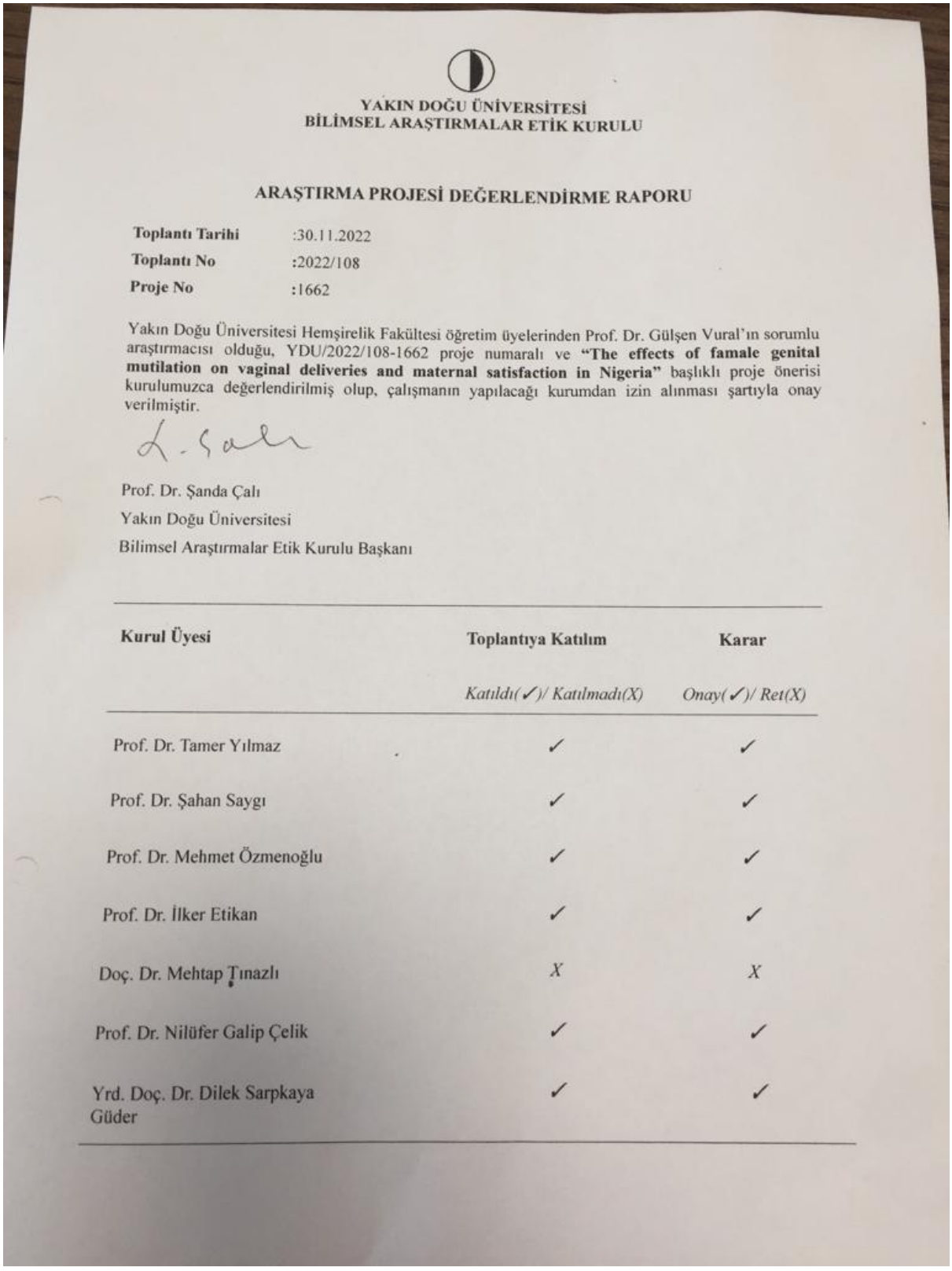
ORIGINALITY REPORT

17%	14%	9%	6%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	hdl.handle.net Internet Source	1%
2	research.wsulibs.wsu.edu:8080 Internet Source	1%
3	researchspace.ukzn.ac.za Internet Source	<1%
4	Submitted to Griffith College Dublin Student Paper	<1%
5	repository.ju.edu.et Internet Source	<1%
6	docs.neu.edu.tr Internet Source	<1%
7	Lara Menhart, Mirko Prosen. "Women's satisfaction with the childbirth experience: a descriptive research", Obzornik zdravstvene nege, 2017 Publication	<1%
8	Submitted to Brigham Young University Student Paper	<1%

Appendix C: Near East University Ethics Committee Approval



YAKIN DOĞU ÜNİVERSİTESİ
BİLİMSEL ARAŞTIRMALAR ETİK KURULU

ARAŞTIRMA PROJESİ DEĞERLENDİRME RAPORU

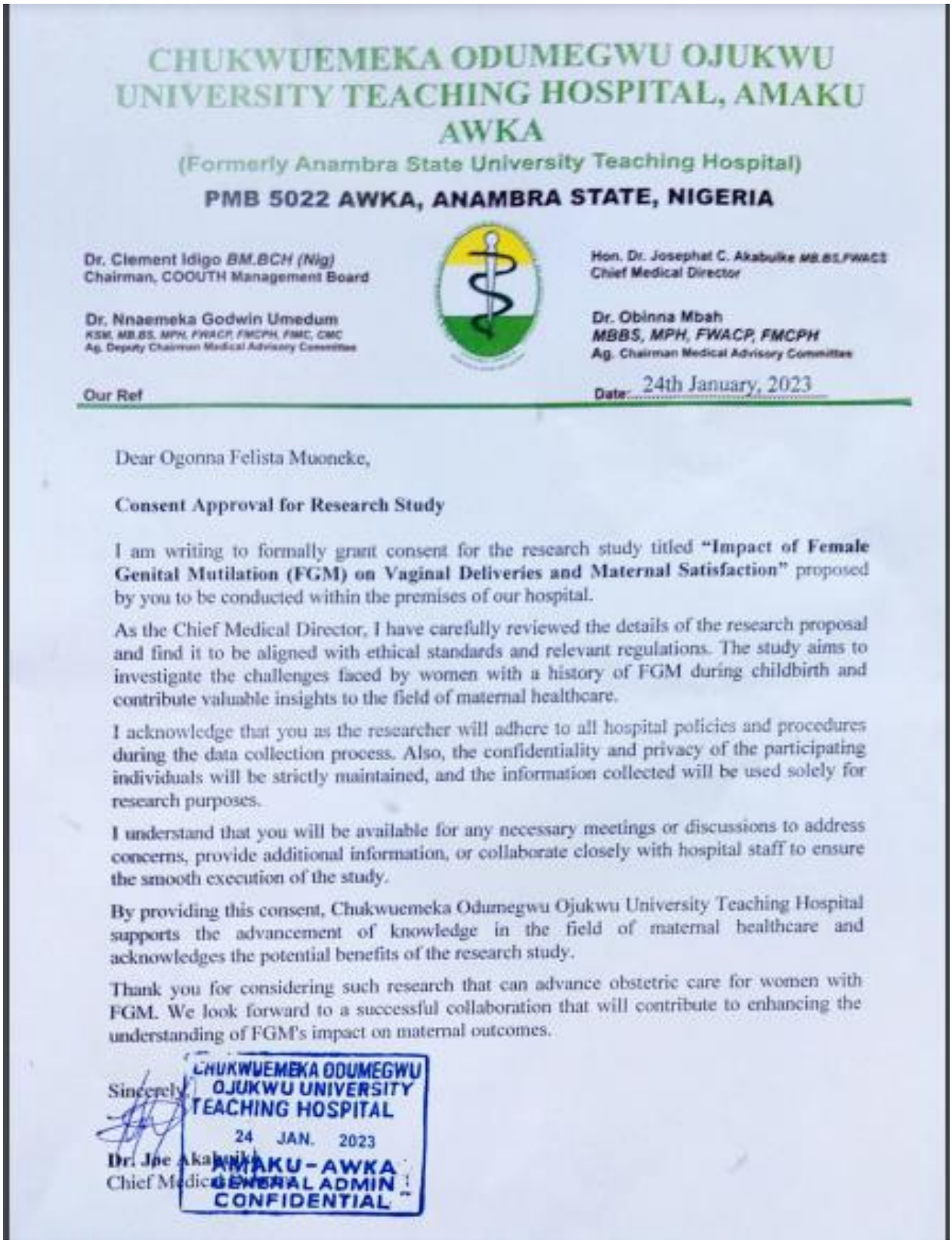
Toplantı Tarihi :30.11.2022
Toplantı No :2022/108
Proje No :1662

Yakın Doğu Üniversitesi Hemşirelik Fakültesi öğretim üyelerinden Prof. Dr. Gülşen Vural'ın sorumlu araştırmacısı olduğu, YDU/2022/108-1662 proje numaralı ve **"The effects of famale genital mutilation on vaginal deliveries and maternal satisfaction in Nigeria"** başlıklı proje önerisi kurulumuzca değerlendirilmiş olup, çalışmanın yapılacağı kurumdan izin alınması şartıyla onay verilmiştir.

Prof. Dr. Şanda Çalı
Yakın Doğu Üniversitesi
Bilimsel Araştırmalar Etik Kurulu Başkanı

Kurul Üyesi	Toplantıya Katılım	Karar
	Katıldı(✓)/ Katılmadı(X)	*Onay(✓)/ Ret(X)*
Prof. Dr. Tamer Yılmaz	✓	✓
Prof. Dr. Şahan Saygı	✓	✓
Prof. Dr. Mehmet Özmenoğlu	✓	✓
Prof. Dr. İlker Etikan	✓	✓
Doç. Dr. Mehtap Tınazlı	*X*	*X*
Prof. Dr. Nilüfer Galip Çelik	✓	✓
Yrd. Doç. Dr. Dilek Sarpkaya Güder	✓	✓

Appendix D: Hospital Institutional Authorization



CHUKWUEMEKA ODUMEGWU OJUKWU UNIVERSITY TEACHING HOSPITAL, AMAKU AWKA

(Formerly Anambra State University Teaching Hospital)

PMB 5022 AWKA, ANAMBRA STATE, NIGERIA

Dr. Clement Idigo *BM.BCH (Nig)*
Chairman, COOUTH Management Board

Dr. Nnaemeka Godwin Umedum
KSM, MB.BS, MPH, FWACP, FMCPH, FMC, CMC
Ag. Deputy Chairman Medical Advisory Committee

Hon. Dr. Josephat C. Akabuike *MB.BS,FWACS*
Chief Medical Director

Dr. Obinna Mbah
MBBS, MPH, FWACP, FMCPH
Ag. Chairman Medical Advisory Committee

Our Ref

Date: 24th January, 2023

Dear Ogonna Felista Muoneke,

Consent Approval for Research Study

I am writing to formally grant consent for the research study titled **"Impact of Female Genital Mutilation (FGM) on Vaginal Deliveries and Maternal Satisfaction"** proposed by you to be conducted within the premises of our hospital.

As the Chief Medical Director, I have carefully reviewed the details of the research proposal and find it to be aligned with ethical standards and relevant regulations. The study aims to investigate the challenges faced by women with a history of FGM during childbirth and contribute valuable insights to the field of maternal healthcare.

I acknowledge that you as the researcher will adhere to all hospital policies and procedures during the data collection process. Also, the confidentiality and privacy of the participating individuals will be strictly maintained, and the information collected will be used solely for research purposes.

I understand that you will be available for any necessary meetings or discussions to address concerns, provide additional information, or collaborate closely with hospital staff to ensure the smooth execution of the study.

By providing this consent, Chukwuemeka Odumegwu Ojukwu University Teaching Hospital supports the advancement of knowledge in the field of maternal healthcare and acknowledges the potential benefits of the research study.

Thank you for considering such research that can advance obstetric care for women with FGM. We look forward to a successful collaboration that will contribute to enhancing the understanding of FGM's impact on maternal outcomes.

Sincerely,

CHUKWUEMEKA ODUMEGWU OJUKWU UNIVERSITY TEACHING HOSPITAL
24 JAN. 2023
AMAKU-AWKA
GENERAL ADMIN
CONFIDENTIAL

Dr. Jpe Akabuike
Chief Medical Director