

**ASSESSMENT OF ANTI-FEMALE GENITAL MUTILATION PROGRAM IN
GARISSA COUNTY, KENYA**

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DECLARATION

This project report is my original work and has not been presented for a degree in any other University

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This project report has been submitted for review with our approval as university supervisors.

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DEDICATION

To my children and family

ACKNOWLEDGMENT

My gratitude to my family for their unwavering support and constant encouragement. You have been a pillar to lean on. I am grateful to my supervisors for their guidance and my fellow students for the spurring we have had on each other.

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ABBREVIATIONS AND ACRONYMS

- FGM/C - Female genital mutilation/cutting
- IQC - Interquartile range
- KDHS - Kenya demographic health survey
- NACOSTI - National commission for science technology and innovation
- NGO - Non-governmental organization
- UNICEF - United Nations Children Fund
- WHO - World Health Organization

DEFINITION OF TERMS

- AntiFGM - Against the practice of female genital mutilation
- Female genital mutilation - The excision of parts of the external female genitalia for nonmedical reasons as part of a traditional practise.
- Medicalization - The practiced of FGM by any class of health care worker, be it in private or public practice or elsewhere.

ABSTRACT

Female genital mutilation (FGM), is a social traditional practice performed by cutting parts of the external female genitalia. Globally, over three million women take part in the practice each year. The practise of this rite was made illegal in Kenya in 2011 and a board established to spearhead its abandonment in a program referred to as AntiFGM campaign. Garissa County in north eastern Kenya has the highest practise of FGM with a prevalence of 94%. This study aimed to investigate the success of the antiFGM programs in Garissa County with specific objectives being to determining the level of knowledge of adolescents/youth of Garissa County towards the anti FGM law, to determine the attitude of area residents towards the anti FGM law and to determine factors that influenced the implementation of the antiFGM law in Garissa County. Mixed methods study design was used in this study. A cross-sectional design using interviewer guided questionnaires to collect data was conducted among 108 randomly selected participants and results used to answer objectives one to three. Desktop review of previous studies was use to answer objective four. Data was analyzed using SPSS version 25. Chi-square and Fishers exact were used to compare participants characteristics against study outcome variable. Of the 108 participants, 53.7% were female. The median age of participants was 23 years (Interquartile range [IQR] 15-40). The prevalence of FGM was 62% with the mean age of circumcision being 8.3 years (SD 2.7 years). There was a statistically significant association between practicing Islam and FGM ($p=0.001$). There was an improvement on the level of awareness of the antiFGM law among youth in Garissa at 84%. Two thirds of participants did not support FGM. Mothers were the main influencers and decision makers on having FGM practiced. Excision was the main type of FGM practiced with traditional circumcizers being the preferred circumcizers followed by trained nurses and midwives. Introduction of the antiFGM law and advocacy by NGOs focused on combating FGM has led to a reduction in the prevalence of FGM and a reduction in the support of the act. There is an increase in the medicalization of FGM in Garissa with evidence of the practice going underground. This study recommends NGOs to have a clearer focus on the method chosen in advocating for abandonment of FGM.

CHAPTER ONE: INTRODUCTION

1.0 Background of the study

Female genital mutilation (FGM), a traditional social practice involving the cutting of parts of the external female genitalia in various forms is largely practised in some Asian communities and in more than 25 African countries as a way of controlling female sexuality and to uphold a cultural practice of rite of passage to womanhood (Toubia, 1999). Over the past 20 years, there has been an increase in agitation aimed at inhibiting the practice of FGM, however, due to heightened hostilities from the political and legal world over the issue, this awareness is yet to translate to measurable changes in the prevalence of FGM (Toubia & Sharief, 2003). Even so, the precise statistics of girls and women who have gone through FGM worldwide remains unknown, however, it is estimated that globally, not less than 200 million girls and women have been circumcised.

Current estimates indicate in excess of three million women, the majority under 15 years of age, undertake the cut each year. The World Health Organization (WHO) has classified FGM into four major types (Figure 1.1): clitoridectomy (partial or total removal of clitoris or prepuce), excision (partial or total removal of clitoris or prepuce and *labia manora* with or without excision of *labia majora*), infibulation (narrowing of the vaginal orifice with creation of a covering seal) and others (WHO, 2016).

In Kenya, FGM is practiced by some ethnic groups as part of beliefs about what is considered proper sexual behavior for women and what is necessary to prepare them for marriage (KDHS, 2014). The practice of FGM is widely recognized as a violation of children and women's rights due to its potential to cause serious medical complications (Armelle Andro & Lesclingand, 2016). For instance, it is incredibly painful, traumatizing to those on whom it is inflicted, results in numerous negative

health consequences that may last for a life time and can even cause death (Armelle Andro & Lesclingand, 2016).




TYPE	DESCRIPTION	DIAGRAM
Type 1: Clitoridectomy	This is the partial or total removal of the clitoris or the prepuce.	
Type 2: Excision	This is the partial or total removal of the clitoris or the prepuce and the labia minora, with or without excision of the labia majora.	
Type 3: Infibulation	This is narrowing of the vaginal orifice with the creation of a covering seal by cutting and appositioning the labia minora and labia majora with or without excision of the clitoris.	
Type 4: Others	This is the pricking, piercing, incising of the clitoris and/or labia; stretching of the clitoris and/or labia; cauterization by burning of the clitoris and surrounding tissue; scraping of tissue surrounding the vaginal orifice or cutting of the vagina; introduction of corrosive substances or herbs into the vagina to cause bleeding or for purpose of tightening.	

Figure 1-1: Types of FGM

Source : (WHO, 2016)

A study by the WHO found that women who had taken part in FGM had poor obstetric outcomes with increased risk of caesarian section delivery and death of the new born (WHO, 2016). The risk increased depending on the severity of FGM the woman had received. In 2011, Kenya passed a law ‘the Prohibition of Female Genital Mutilation Act 2011,’ which prohibited the practice of female genital mutilation in the country. Under this law, it is illegal to practice FGM in Kenya or to take someone abroad for FGM. Pursuant to this, a board was created to protect against defilement of female mental or physical integrity through the practice of FGM (KDHS, 2014).

According to the KDHS 2014 report, among the communities that practice FGM in Kenya, Somalis are leading with up to 94% of women in this community having been circumcised. The level of FGM acceptance among persons from this community is also high compared to other communities at 92% with a worrying observation of

women being the main people perpetrating the practice at 81% compared to male at 79% (KDHS, 2014).

1.2 Statement of Problem

Female genital mutilation has negative effects on the health of women which is classified into immediate and long-term effects. Severe bleeding, infection and shock comprise some of the immediate effects while long term effects include pain during sex, recurrent urinary tract infections, difficulty during menstruation, keloids as well as difficulties during childbirth. Also, babies born to these women are likely to die at childbirth as a result of the practice. Some of the serious complication at childbirth that arise among women who had FGM include the need to have a caesarean section, dangerously heavy bleeding after the birth of the baby and prolonged hospitalization following the birth. FGM is also associated with increased risk of HIV transmission from use of unhygienic instruments to conduct the cut (Kimani, Kabiru, Muteshi, & Guyo, 2020).

Garissa County has Somalis as the predominant community. It is important to note that neonatal death and adverse obstetrics outcomes such as bleeding among women in this community is high compared to other counties where FGM is not practiced. Similarly, the literacy levels in the county are low. Due to this, the practice of FGM in the county is high which relate to early marriages and adverse obstetric outcomes.

1.3 Justification

Objective 3 of UN SDG aims to alleviate all harmful practices that curtail health (UNFPA-UNICEF, 2016). Effects of FGM include: increased risk of child birth complications, excessive bleeding, pain during intercourse, trauma to those on whom

it is inflicted and death. The progress to curtail the continuation of FGM in some countries is being impeded by healthcare professionals who administer the cut (Shell-Duncan *et al*, 2017). This practise also called FGM medicalization has its highest rates in 5 countries: Egypt (38%), Sudan (67%), Guinea (15%), Kenya (15%), and Nigeria (13%) (WHO, 2010). Though the government has banned FGM, the practice still persists and has even become medicalized (UNFPA-UNICEF, 2016).

1.4 Research questions

1. What is the level of knowledge of Garissa adolescents/youth towards the anti-female genital mutilation law?
2. What is the attitude of Garissa residents towards the anti-female genital mutilation law?
3. What are the factors influencing the implementation of the anti-female genital mutilation law in Garissa county?
4. What strategies have been put in place to address female genital mutilation in Garissa County?

1.5 Research objectives

1.5.1 Broad Objectives

The main aim of this study was to investigate the success of anti-female genital mutilation programs in Garissa County.

1.5.2 Specific Objectives

The study addresses the following specific objectives;

1. To determine the level of knowledge of adolescents/youth of Garissa county towards the anti-female genital mutilation law.

2. To find out the attitude of residents of Garissa county towards the anti-female genital mutilation law.
3. To determine factors influencing the implementation of the anti-female genital mutilation law in Garissa county.
4. To determine the outcomes of anti-female genital mutilation program in Garissa County.

1.6 Conceptual framework

Several factors have been associated with FGM among them, traditional beliefs, female gender in communities practicing the rite, religious belief and education level. The resultant of this practice is early marriage, child death at birth, adverse obstetric outcomes, and defects to the woman. In order to reverse the effect of this practice, advocacy, legislation and promotion of education especially of the girl child will be needed. This will lead to change in attitude of those practicing this rite, which will lead to reduction in the practice of FGM and hence alter the harmful effects of FGM among women. This conceptual framework is self-developed from the literature review used.

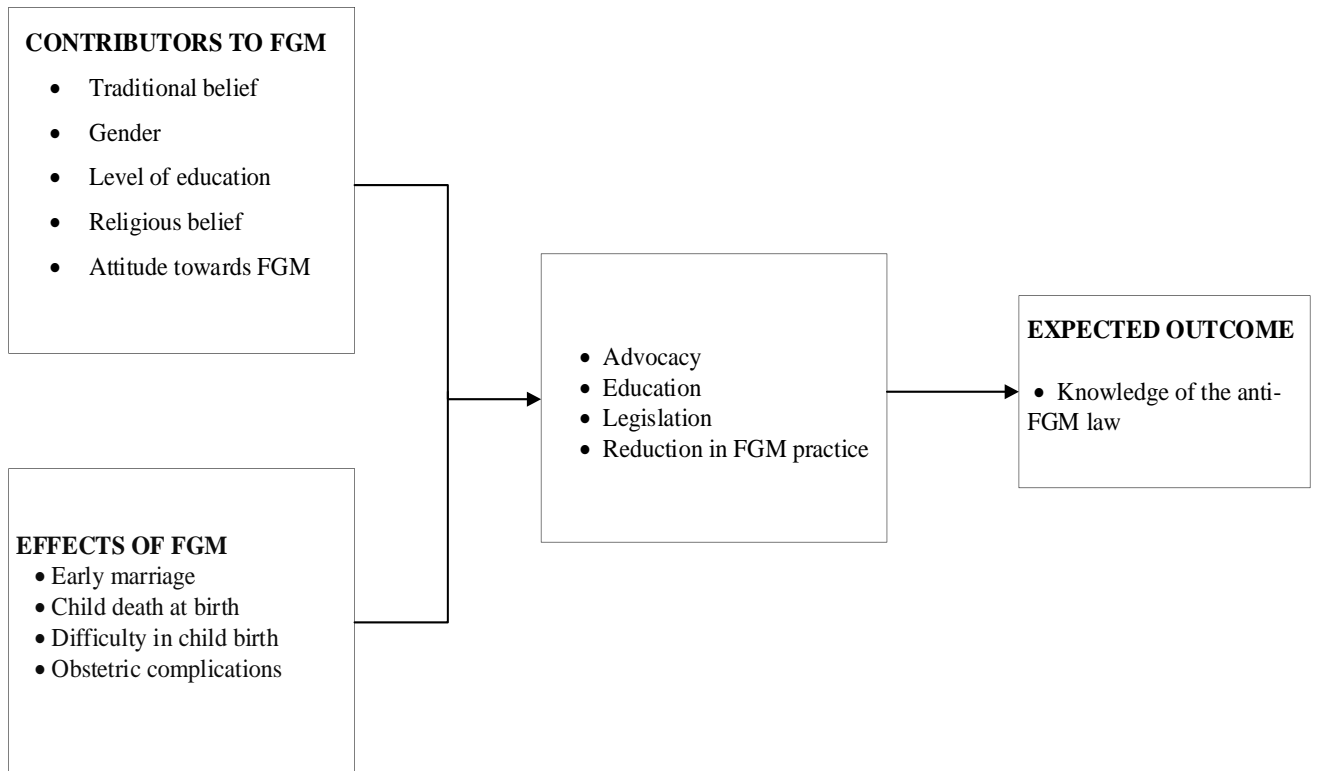
INDEPENDENT VARIABLES**INTERVENING VARIABLES****DEPENDENT VARIABLES**

Figure 1-2: Conceptual framework

(Source: Researcher 2021)

CHAPTER TWO: LITERATURE REVIEW

2.1 Origins of Female Genital Mutilation

The precise past and geographical beginning of FGM is unknown with part of the assumption that theorize the practice as having begun in the Middle East and the Arabian peninsula and latter spread across the African continent by Arab merchants not having the backing of all historians (Erlich, 1986; Hosken, 1982). Nonetheless, all experts concur FGM to be an ancient practise dating to as far back as ancient Egypt with the current Sudan and Egypt as possible areas of origins. Marks found on some Egyptian mummies have left the archaeological community divided over whether they are evidence of excision (Knight, 2001). The earliest reference to female genital cutting was found in Egypt recorded on papyrus that dates back to the second century BCE (Hosken, 1982). Later sources comprised narrations of Strabo, the Ancient Greek geographer and traveller, who, after travelling to Egypt (around 25 BCE), described the operation as a customary practice(Hosken, 1982).

Gerry (1996), theorizes that FGM spread to the western and southern parts of Africa having begun in the western shore of the Red Sea. He also established an association between slave trade, especially during the Islamic spread in Africa and infibulation which is predominantly practised in eastern Africa (Eritrea, Djibouti, Somalia, Egypt and Sudan). Infibulation (derived from the Latin *fibula* meaning a brooch or pin), is an extreme type of FGM, which is thought to have been practiced in Ancient Rome on female slaves as a way of curtailing sexual intercourse and hence prevent pregnancies, which would have lowered the labour force (Hosken, 1982). The origins of female genital mutilation notwithstanding, available evidence suggests the practice to have been in existence for centuries prior to the introduction and spread of Islam in Africa,

despite religious rationalizations having been used afterwards to legitimize it. This thought is backed by the fact that FGM is also practised in communities practising Jews, Christians (Copts, Catholics and Protestants), and animists religions. No book among the main monotheistic religions has a commandment requiring female circumcision as opposed to male circumcision, which is the sign of a covenant between God, Abraham and his descendants in the holy writings of Judaism and Islam (Armelle Andro & Lesclingand, 2016).

2.2 Overview and current knowledge on female genital mutilation

The first international conference on FGM conducted by the World Health Organization was held in 1979 in Khartoum. This conference in cooperated the international health and development assistance community who support programs aimed at eradicating the practice of FGM. The hallmark of this conference was in its endorsement of the total eradication of the practice of FGM hence dealing a blow to the proposal of substituting the physically deforming form of FGM with the lesser evil of medicalised FGM performed within medical facilities (WHO, 1982). For the next twenty years following the conference, programs based on the dominant thinking's, attitudes and trends within the international development community were designed to help eradicate this practise. During this period, it was antiFGM programs focused on addressing the health risks brought about by FGM that received funding as this was viewed to be the least sensitive and most acceptable approach in combating FGM (O El-Gibaly, B Ibrahim, B Mensch, & . 1999).

Concurrently, this was the era of the women rights (1980-1990) during which matters of gender disparities and their consequences on women's health was highlighted. By the 1990s the idea of women's rights as a human right was conceived and during the World Conference on Human Rights in 1993, gender-based violence was included as

an abuse of human rights. These evolutions began to coalesce concepts focused on women's and children rights, which focused on the opinion of the victims rather than the social authorities that controlled them. In other cases, the effect of investing in projects targeting women's social and economic development raised an awareness and empowerment that made some to question the practice, even when the project's direct inputs did not include mention of FGM (Chege, Askew, & Liku, 2001). Twenty years after the Sudan conference, donors, technical agencies and program managers made review of antiFGM programs and raised questions on whether any progress had been made towards FGM abandonment. The ultimate questions revolved around the following issues: Can the practice of FGM be stopped? What is the evidence of change if any? Is it possible to identify which actions are most likely to bring about change? How best to use current knowledge to design more effective actions? What would be effective and practical means to monitor and evaluate progress in the future?(N. F. Toubia & E. H. Sharief, 2003).

2.3 Cultural reasons for female genital mutilation/cutting

In many societies, FGM/C is a rite of passage to womanhood with strong ancestral and sociocultural roots. Rationalizations for the procedure's perpetuation include the preservation of ethnic and gender identity, femininity, female "purity," and family honor; the maintenance of cleanliness and health; and assurance of women's marriageability (A. Ali, 2012). In many contexts, social acceptance is the primary reason for continuing the practice. Other reasons include ensuring fidelity after marriage, preventing rape, providing a source of income for circumcisers, and enhancing aesthetic appeal (Williams-Breault, 2018). FGM/C is usually carried out by an older woman in the community, such as a relative or a traditional birth attendant, without the use of anesthetics, analgesics, aseptic techniques, or antibiotics. Immediate

and long-term complications are common and can have a significant effect on the individual (Williams-Breault, 2018). Women who have undergone the procedure often refer to it as “cutting” or “being cut.” Nurses have heard patients use traditional names for FGM/C, such as *halalays* and *qodiin* (Somalia), *kutairi* (Kenya), *megrez* (Ethiopia), *niaka* (Gambia), *thara* (Egypt), and *sunna* (Nigeria and Sierra Leone). The English expression “female genital mutilation” emerged in the 1970s and eventually proved to be problematic, as parents resented the suggestion that they were mutilating their daughters. After the UN addressed the risk of demonizing certain cultures and traditions in 1999, the term “cutting” has been increasingly used to avoid alienating communities, hence the use of the more inclusive acronym FGM/C (Williams-Breault, 2018).

Non-cultural and non-historical reasons for perpetuating FGM/C also exist. For example, people in countries such as Mali and Burkina Faso, as well as in most of West Africa, perceive the clitoris as a dangerous organ and require its removal (Shah, 2015). According to this view, the clitoris is poisonous and causes a man to become ill or die if it comes in contact with his penis. Other beliefs suggest that an uncut clitoris creates male impotency and kills babies upon delivery. Performing FGM/C is also perceived as a way to minimize a woman’s libido and assist her in resisting sexual activity by preventing her from acting promiscuously, thereby making her more appealing to her future husband (Williams-Breault, 2018).

2.4 Health complications for girls and women due to female genital mutilation/cutting

FGM/C is performed mainly on children and adolescents and has a ritual origin (Williams-Breault, 2018). The procedure is painful and traumatic, and there are no

health benefits (Williams-Breault, 2018). It violates a series of human rights principles, including the principles of equality and non-discrimination on the basis of sex, the right to life (when the procedure results in death), the right to freedom from torture and cruel, inhuman, or degrading treatment or punishment, and the rights of the child. All forms of FGM/C carry the risk of adverse health consequences. Almost all girls and women who have undergone the procedure experience pain and bleeding (Khosla, Banerjee, & Chou, 2017). Immediate health complications include shock, hemorrhage, and infection. FGM/C can also cause death, disability, miscarriage, stillbirth, problems during urination, infertility, ovarian cysts, open sores in the genital region, bacterial infections (tetanus or sepsis) during and after pregnancy, and increased risk of newborn deaths (WHO, 2016).

The intervention itself is traumatic, as girls are usually physically held down during the procedure (Alsibiani & Rouzi, 2010). Those who are infibulated often have their legs bound together for several days or weeks. The immediate consequences, such as infections, are usually documented only when girls and women seek hospital treatment. The long-term health risks of FGM/C include chronic pain, infection, keloids, fibrosis, primary infertility, and psychological suffering, such as post-traumatic stress disorder (Alsibiani & Rouzi, 2010). FGM/C is often performed under unsterile conditions by a traditional female practitioner who has little knowledge of female anatomy or how to manage possible adverse events (WHO, 2017). Of all types of FGM/C, type III appears to pose the greatest risk of immediate harm, and these events tend to be considerably underreported (Berg, Underland, & Odgaard-Jensen, 2014).

A 2006 WHO study in which more than 28,000 women participated concluded that women living with FGM/C are significantly more likely than those not living with FGM/C to experience adverse obstetric outcomes and that this risk seems to be greater with more extreme forms of the procedure (Berg, V. Underland, J. Odgaard-Jensen, A. Fretheim, & G. Vist, 2014). Given that some types of FGM/C involve the removal of or injury to sexually sensitive structures, including the clitoral glans and part of the labia minora, some women report a reduction in sexual response and diminished sexual satisfaction. In addition, scarring of the vulvar area may result in pain, including during sexual intercourse (WHO, 2016). Other findings from the WHO study confirm that women who have undergone FGM/C are at significantly increased risk of adverse events during childbirth (WHO, 2016). Such women also experience higher rates of Caesarean section and post-partum hemorrhage compared to those who have not undergone the procedure, and this risk increases with the severity of the procedure (Williams-Breault, 2018).

2.5 Role of health care providers in female genital mutilation campaign

Health professionals have a critical role to play in the prevention and management of FGM (Fabienne, 2017). However, several KAP (Knowledge, Attitudes and Practices) studies conducted in high- and low-income countries have shown a lack of knowledge on WHO classification, diagnosis and management of FGM (WHO, 2017). Although several countries have developed FGM guidelines for professionals and have voted specific laws against the practice, the studies showed that these measures are not sufficient and that educational activities are needed to implement existing guidelines. Integration of the thematic in the curriculum of health professionals is a longstanding recommendation, but few countries have done it. Evidence of best practices in educational programs is lacking (Fabienne, 2017).

The persistence of FGM/C is attributed to time and generational linked social norms observed and adhered across different practicing communities. These norms have sustained the practice albeit changes in form and context. Noticeable shifts in FGM/C include cutting by health professionals (medicalization), (Kimani, Kabiru, Muteshi, & Guy, 2020) less severe cutting, and cutting girls at a younger age than previously done (WHO, 2010a). Medicalization represent a change that entails situations where health care professionals (doctor, nurse, midwife, or other health professionals) perform FGM/C either in a health facility, at home or a neutral place, often using surgical tools, anesthetics and antiseptics (Kimani, Kabiru, Muteshi, & Guyo, 2020). It also includes re-infibulation—re-closing external genitalia of women who had been de-infibulated to allow for sexual intercourse, birth delivery, and/or related gynecologic procedures by doctors or nurse-midwives (Kimani, Kabiru, Muteshi, & Guyo, 2020). Although these shifts are supported by community social norms passed for generations, other dynamics appear to play important role. Emerging evidence from demographic and health surveys (DHS), multiple indicator cluster surveys (MICS), and qualitative research suggests that some families and communities are shifting how FGM/C is practiced, to sustain rather than abandon it, mainly due to—reduce the health risks, willingness of some health providers to carry out the procedure, financial incentive or social recognition (Kimani, Kabiru, Muteshi, & Guy, 2020).

Medicalization of FGM is defined by the World Health Organization as “situation in which FGM is practiced by any category of health-care provider, whether in a public or private clinic, at home, or elsewhere”(WHO, 2010b). Though there is agreement internationally that female genital mutilation/cutting (FGM/C) is a violation of human rights there has been growing concern on FGM medicalization as this procedure is

conducted by health care professions in some countries which hampers progress towards the abandonment of FGM in these countries (Shell-Duncan, Moore, & Njue, 2017).

Egypt (38%), Sudan (67%), Guinea (15%), Kenya (15%), and Nigeria (13%) are the top five countries with the highest rates of FGM medicalization (WHO, 2010b). Even so, Egypt leads in this practise with fifty-one percent of women who reported having been cut by a health care professional residing in Egypt, on the other hand, 99% of women who reported having experienced medicalized FGM/C reside in just three countries: Egypt, Sudan and Nigeria. The medicalisation of FGM is a growing trend especially among daughters of cut women as is indicated by comparative statistics from Egypt where 82% of daughters were medicalised compared to 38% of women. The trend is also on an increase in Kenya with approximately 20% of daughters having had medical FGM compared to approximately 15% of mothers (Shell-Duncan *et al.*, 2017).

2.6 Antifemale genital mutilation/cutting legislation

Female genital mutilation/cutting violates several human rights outlined under the Universal Declaration of Human Rights, the Convention on the Elimination of all Forms of Discrimination against Women, and the Convention on the Rights of the Child. Human rights-based approaches to eradication include, but are not limited to, the enforcement of laws, education programs focused on empowerment, and campaigns to recruit change agents from within communities (Williams-Breault, 2018). The United Nations General Assembly in 2012 adopted a series of resolutions aimed at abolishing the practices and violations that exact serious danger on the health of women and girls. Of the five resolutions that were passed and ratified by the 194 member countries on 20th December 2012, one was focused on the promotion of

women's rights with the aim being to intensify global efforts for the abandonment of FGM (A/RES/67/146). This resolution urged member countries especially where FGM is practised to censure all injurious practices that affect women and girls, FGM in particular, and to take all feasible actions, including passing and implementing laws, raising awareness and allotting enough funds towards the safeguarding of women and girls against FGM. It also called for the safeguard and maintenance of women and girls who are at risk of or who have undergone FGM (Armelle Andro & Lesclingand, 2016).

The right to participate in cultural life and the right to freedom of religion are protected by international law. However, international law stipulates that the freedom to manifest one's religion or beliefs might be subject to limitations necessary to protect the fundamental rights and freedoms of others. Therefore, social and cultural claims such as those protected in article 4 of the International Covenant on Civil and Political Rights cannot be evoked to justify FGM/C (WHO, 2010b). The resolution that was aimed for countries where FGM is traditionally practised and to the countries of settlement of women who have migrated from those regions has been gradually expounded in several faces. This resolution is founded on the triptych of human rights, the right to health, and women's rights, principles that themselves gained official recognition through the International treaties adopted in the latter half of the twentieth century (Armelle Andro & Lesclingand, 2016). Based on this Kenya, a signatory to the treaty, passed a law—the Prohibition of Female Genital Mutilation Act 2011—that banned female genital mutilation nationwide.

2.7 Summary and Gaps

The government of Kenya has taken initial steps towards curbing FGM in the country by enacting the necessary laws banning the practice and setting up a board to

spearhead campaign against the practice. However, more than five years after enactment of the law and setting up of the antiFGM board, the practise of FGM in Kenya still persists with reports of increase in its medicalization. FGM is a deeply entrenched practice among those practising it especially the Somali, hence information is needed on what makes the practise persist among this community in order to design programs that will stop it. Similarly, the activities of the antiFGM board in the county need to be evaluated to assess its success and challenges as well as outline actions to be taken to achieve the purpose of the program.

CHAPTER THREE: MATERIALS AND METHODS

3.1 Study design

This study used mixed methods in its designs. Mixed method research design helps the researcher to best understand or develop more complete understanding of the research problem by obtaining different but complementary data from the respondents (Creswell & Clark, 2011). The design prioritizes both qualitative and quantitative methods equally, keep the data analysis independent, mix the results during the overall interpretation, and try to look for convergence, divergence, contradictions, or relationships of two sources of data (Creswell & Clark, 2011). To answer the first three objectives a descriptive cross-sectional design was conducted. For the fourth objective, desk review design was used by retrospectively comparing results from the cross-sectional study with those of a baseline study conducted in 2017 by UNICEF.

3.2 Study area

This study was conducted in Garissa Sub-county of Garissa County. Garissa County is an administrative county in the former North Eastern province of Kenya; it covers an area of 44,174.1 km². The county borders the Republic of Somalia to the East, Lamu County to the South, and Tana River county to the west (H. Ali, 2013). It has seven sub-counties namely: Fafi, Garissa, Ijara, Lagdera Balambala, Hulugho and Dadaab. Of the seven sub-counties, Garissa sub-county is the most densely populated and seat of county government of Garissa County.

Garissa County has a total population of 630, 000 of whom 288,121 are female. 110,383 of Garissa County's female population reside in Garissa Sub-county (2009 Census report). Somali is the main ethnic community, while Islam is the main religious belief practiced in the county (Garissa County gov website).

3.3 Study population

This study's population was residents of Garissa county. It targeted three groups of the population: women of childbearing age, adolescent between 12 and 18 years and the

elderly above 60 years of age living in Garissa sub-county. Data from a similar study previously conducted in the area will form the baseline for comparison with our results.

3.4 Sampling technique

Systematic random sampling was employed in selecting study participants. Six residential areas (Bullas) within Garissa Sub-county Township were randomly selected. A total of 18 participants comprising 6 participants from each target group were enrolled from each Bula. Every 10th person reached and falling within the target population in each Bula was recruited in the study, those who agree to participate were enrolled. This continued until the target of 18 participants had been attained in each Bula.

A recent study on female genital mutilation conducted in Garissa county was purposely be selected to act as the baseline study against which results from the current study was compared.

3.5 Sample size determination

The study population was determined using the Fishers formula (1998). Previous studies had reported the prevalence of FGM in Garissa to be 94%.

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

Where:

n = the desired sample size

Z = the standard normal deviate at the required confidence level (95% = 1.96).

p = the proportion in the target population estimated to have characteristics being measured (94% prevalence of FGM) (KDHS, 2014)

$q = 1-p$

d = the level of statistical significance set (0.05)

$$= \frac{1.96^2 \times 0.94 \times (1-0.94)}{0.05^2}$$

$$= 86.6$$

An additional 10% of study sample will be added to cater for non-responders

hence:

$$= \left(\frac{10}{100} \times 87 \right) + 87 = 95.7$$

Hence 96 women were to be enrolled in this study

3.5 Data collection

Interviewer administered questionnaires were used in data collection to answer study questions. The questionnaire was coded and administered on the participant. A Likert scale was incorporated in the questionnaire to assess the attitude of area residents towards FGM.

Secondary data was reviewed to give baseline data on FGM in the county prior to passing of antiFGM law and start of antiFGM program in the county.

3.6 Instrument Validity and Reliability

Validity

Five research assistants were trained on the contents of the questionnaire and on how to carry out the interviews. The research instruments were pre-tested in a pilot study conducted in one of the residential areas in Garissa sub-county. Both the Bula and participants who took part in the pilot study were excluded in the main study. The questions were reviewed and modified based on outcome of the pilot outcome.

Reliability

A mini analysis was done after data collection from the pretest, after which the instruments were reviewed accordingly to confirm their repeatability. The generated data was analyzed using statistical package for social sciences to ensure study questions are well answered. Double checking was also done to ensure all responses were entered correctly.

3.7 Data analysis

Statistical Package for Social Sciences (SPSS) version 25 was utilized in data analysis. Characteristics of the study respondents were analyzed descriptively and presented in form of frequencies, bar graphs and percentages. In addition, Fischer's exact and Chi-square were used to determine ability of independent variables to predict the study outcome in the study. A p value of <0.05 was set as statistical significance.

3.8 Ethical and Logistical consideration

Approval to conduct the study was obtained from the following bodies: Board of Postgraduate Studies of Kenyatta University (Appendix IV), Kenyatta university ethical review committee (Appendix V), NACOSTI (Appendix VI) and the administration of Garissa county hospital.

Signed informed consent were required from each participant prior to enrolment in the study. Parent/guardian assent was requested from parents/guardians of adolescent participants prior to their involvement in the study.

CHAPTER FOUR: RESULTS

4.1 Introduction

Between October and November 2019, a total of 150 residents of Garissa country were invited to participate in this study. In total 108 eligible residents of different age groups and gender consented to participate in this study. From these, 108 questionnaires were filled. Empirical data extrapolated from the base line study report: Female Genital Mutilation/ Cutting and Child Marriage among the Rendille, Maasai, Pokot, Samburu and Somali Communities in Kenya conducted by UNICEF in 2017 to compare with results obtained from interviews (UNICEF, 2017).

4.2 Response rate

As indicated in table 4.1, this study targeted to a population of 96 persons, however, 108 participants were enrolled this being a response rate of 112%. Three groups of participants (women, adolescents and elderly) were enrolled. These were enrolled as per the proportions indicated in the table below.

Table 4:1 Proportions of study responders

Age group	Gender of respondent			
	Male		Female	
	n	%	n	%
Adolescent	25	53.20%	22	46.80%
Childbearing	17	41.50%	24	58.50%
Elderly	8	40.00%	12	60.00%

n population percentage, % percentage

4.3 Sociodemographic characteristics of study population

As summarized in table 4.1, study's participants in this study had a median age of 23 years (Interquartile range [IQR] 15-40). Approximately half (46.2%) were aged below 18 years, about one in five (21.7%) were aged between 19 and 35 years while one in three (32.1%) were aged above 36 years. Female participants were slightly more (53.7%) than male (46.3%) participants. Islam was the main practiced religion (n=95, 88.0%) by area residents. Approximately two in three (69.4%) of participants had primary education as the highest level of education, on the other hand, less than one percent (0.9%) had tertiary education.

When students were excluded, nearly half of residents were married (49.1%) while 2.8% were single. One in five of respondents (23.1%) were either traders or businessmen, one in twenty (5.6%) were in formal employment while one in four (25.9%) were unemployed.

Table 4:2 Sociodemographic characteristics of study participants

Participant characteristics		Total (N=108) (100%)
Age group	≤18	49 (46.2%)
	19-35	23 (21.7%)
	≥36	34 (32.1%)
Age (median)	23 years (Interquartile range [IQR] 15-40)	
Gender	Male	50 (46.3%)
	Female	58 (53.7%)
Religion	Muslim	95 (88.0%)
	Christian	13 (12.0%)
Education	Primary	75 (69.4%)
	Secondary	13 (12.0%)
	Tertiary/college	1 (0.9%)
	Madrassa	5 (4.6%)
	No formal education	14 (13.0%)
Marital status	Single	3 (2.8%)
	Married	53 (49.1%)
	Divorced	1 (0.9%)
	Widowed	2 (1.9%)
Occupation	Formal Employment (Salaried)	5 (5.6%)
	Informal Employment (Casual)	1 (0.9%)
	Trader/Business	25 (23.1%)
	Agriculture Unemployed	2 (1.9%)
	Student	47 (43.5%)
	Unemployed	28 (25.9%)

n population percentage, % percentage

4.4 Prevalence of FGM among study participants

Out of the 58 female participants in this study, 56 responded to the question on their circumcision status. Of this, 62.5% (n=35/56) had undergone female circumcision (Figure 4.1). The mean age of participants at the time of circumcision was 8.34 years (SD 2.69 years)

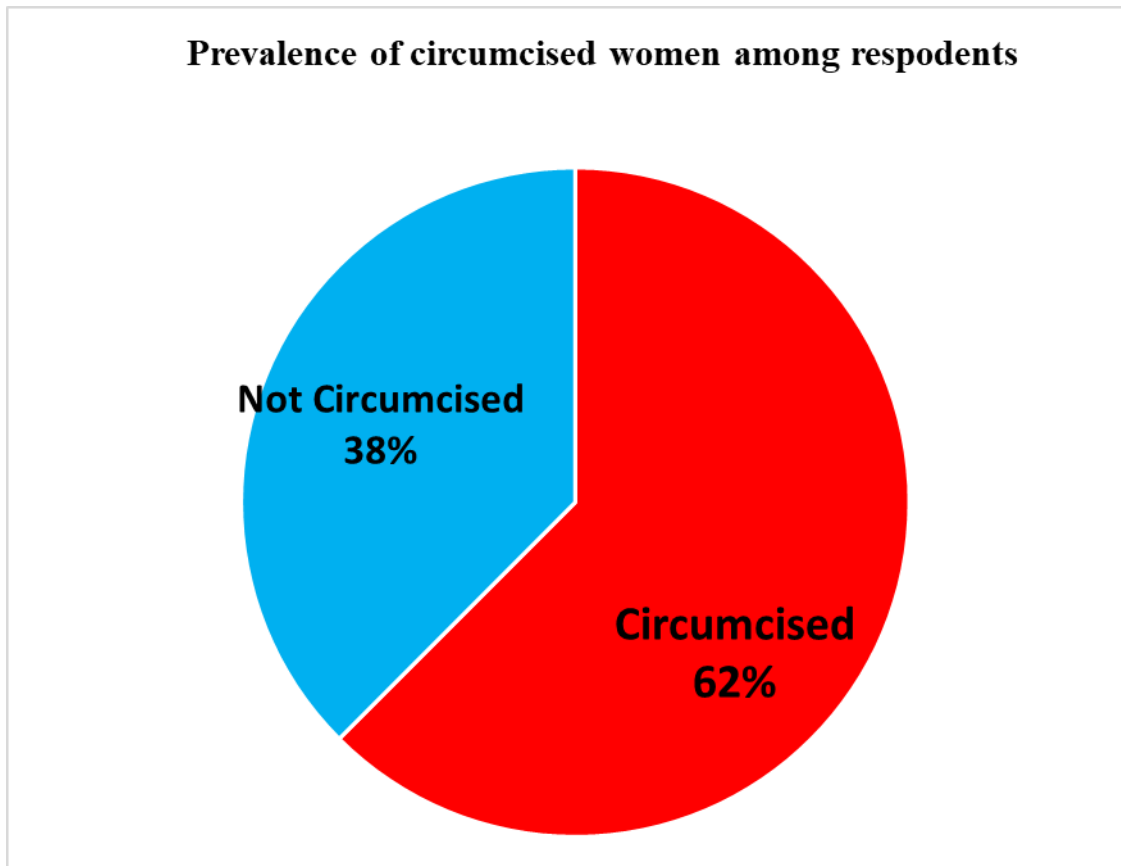


Figure 4-1 Prevalence of FGM

4.4.1 Prevalence of FGM by age group

As summarized in table 4.3, approximately two thirds of participants aged 18 years and below 15/23 (65.2%) had undergone FGM as were those aged between 19 and 35 years 9/13 (69.2%). On the other hand, slightly more than half of those aged above 36 years were circumcised 11/20 (55.0%).

Table 4:3 Prevalence of FGM by age group

Age group	Circumcision Status			
	Circumcised		Not circumcised	
	n	%	n	%
≤18	15	65.20%	8	34.80%
19-35	9	69.20%	4	30.80%
≥36	11	55.00%	9	45.00%

n population percentage, % percentage

4.5 Individual female participant characteristics associated with female circumcision in Garissa county

Table 4.3 summarizes the influence of individual female participants characteristics on female circumcision. As summarized, the prevalence of FGM was highest among participants aged below 18 years (26.8%) with approximately one in four in this age bracket having been circumcised. Approximately, one in five participants aged above 36 years was circumcised. Approximately two in three of those circumcised (60.7%) were Muslims while less than 2% (1.8%) were Christians. Majority of those circumcised had primary education (35.7%) as the highest level of education, with one in ten (10.7%) having secondary education, another one in ten (12.5%) lacked formal education. On the other hand, most of the circumcised women were married (30.9%). Majority of those circumcised were primary school students (20.5%) followed by the unemployed (16.1%) and traders (12.5%). There was no difference between participants who had undergone FGM based on age group, highest level of education, marital status or occupation. However, there was a significant difference between the two groups based on religious practice ($p=0.001$).

Table 4:4 Influence of individual characteristics of female participants on female circumcision

Demographic characteristics	Response	Circumcision status				P
		Circumcised		Not circumcised		
		n	%	n	%	
Age group	≤18	15	65.2%	8	34.8%	$\chi^2 = 0.804$ df = 2 P = 0.669
	19-35	9	69.2%	4	30.8%	
	≥36	11	55.0%	9	45.0%	
Religious	Muslim	34	72.3%	13	27.7%	0.001*
	Christian	1	11.1%	8	88.9%	
Level of education	Primary	20	54.1%	17	45.9%	0.112*
	Secondary	6	66.7%	3	33.3%	
	Tertiary/college	1	100.0%	0	0.0%	
	Madrasa	1	50.0%	1	50.0%	
	No formal education	7	100.0%	0	0.0%	
Marital status	Single	17	63.0%	10	37.0%	$\chi^2 = 0.029$ df = 1 P = 0.864
	Married	17	60.7%	11	39.3%	
Occupation	Employed	4	80.0%	1	20.0%	0.428*
	Trader/Business	7	63.6%	4	36.4%	
	Unemployed	24	60.0%	16	40.0%	

n population percentage, % table percentage, df degrees of freedom, χ^2 Chi-square, * Fischer's exact (one sided)

4.6 Objective one: Level of knowledge of adolescents/youth of Garissa county towards the anti-female genital mutilation law.

4.6.1 Level of knowledge of the anti-female genital mutilation law by adolescents/youth of Garissa county.

As indicated in Figure 4.2, out of the 73 adolescents and youth (participants aged below 35 years) who participated in this study, 84% (n=61) knew of the antiFGM law.

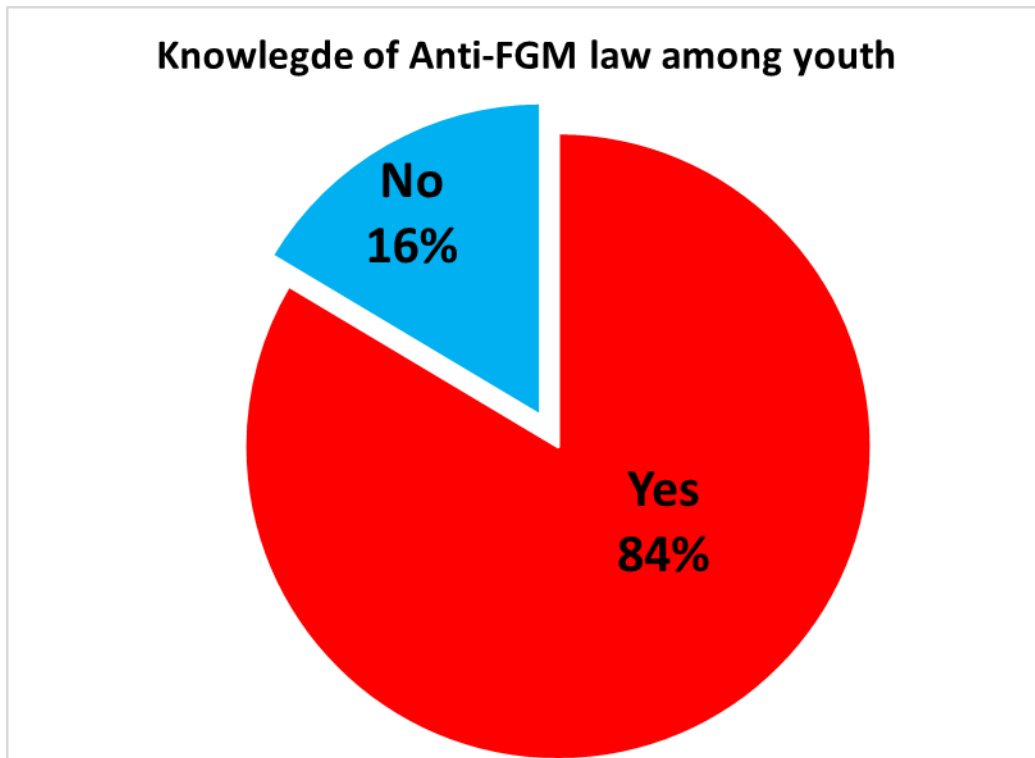


Figure 4-2 Knowledge of antiFGM law among youth

4.6.2 Influence of individual youth and adolescents' characteristics on knowledge of the antiFGM law in Garissa county

As summarized in table 4.5, knowledge of the antiFGM law among the youth and adolescents was highest among female participants at 89.2% (n=33/37). More Christians 100% (n=12/12) knew of the law compared to 80.3% (n=49/61) of Muslims. All participants with tertiary/college and high school education knew of the law compared to 81.8% (n=45/55) who had primary education and only 50% (n=1/2)

with madrasa education. 81.0% of respondents were married while all singles knew of the law. All employed persons knew of the law.

Table 4:5 Influence of individual characteristics on knowledge of the antiFGM law among youth and adolescents in Garissa county

Participant characteristics		Have knowledge of the anti FGM law				P
		Yes		No		
		n	%	n	%	
Gender	Male	28	77.8%	8	22.2%	$\chi^2 = 1.730$ df = 1 P = 0.188
	Female	33	89.2%	4	10.8%	
Religious	Muslim	49	80.3%	12	19.7%	0.196**
	Christian	12	100.0%	0	0.0%	
Level of education	Primary	45	81.8%	10	18.2%	0.402**
	Secondary	9	100.0%	0	0.0%	
	Tertiary/college	1	100.0%	0	0.0%	
	Madrasa	1	50.0%	1	50.0%	
	No formal education	5	83.3%	1	16.7%	
Marital status	Single	42	84.0%	8	16.0%	0.5*
	Married	17	81.0%	4	19.0%	
Occupation	Employed	4	100.0%	0	0.0%	0.836**
	Trader/Business	6	85.7%	1	14.3%	
	Unemployed	50	82.0%	11	18.0%	

n population percentage, % table percentage, df degrees of freedom, χ^2 Chi-square, Fischer's exact * one sides ** two sides

4.7 Objective two: Attitude of residents of Garissa county towards the anti-female genital mutilation law

4.7.1 Support of FGM by residents of Garissa county

Of the 108 participants, 104 gave a response on their attitude towards FGM. Out of thee, 34.6% (n=36) supported FGM while 1.9% (n=2) were not sure of their stand on the subject. Two in three participants (63.5%, n=66) did not support the practice (figure 4.3).

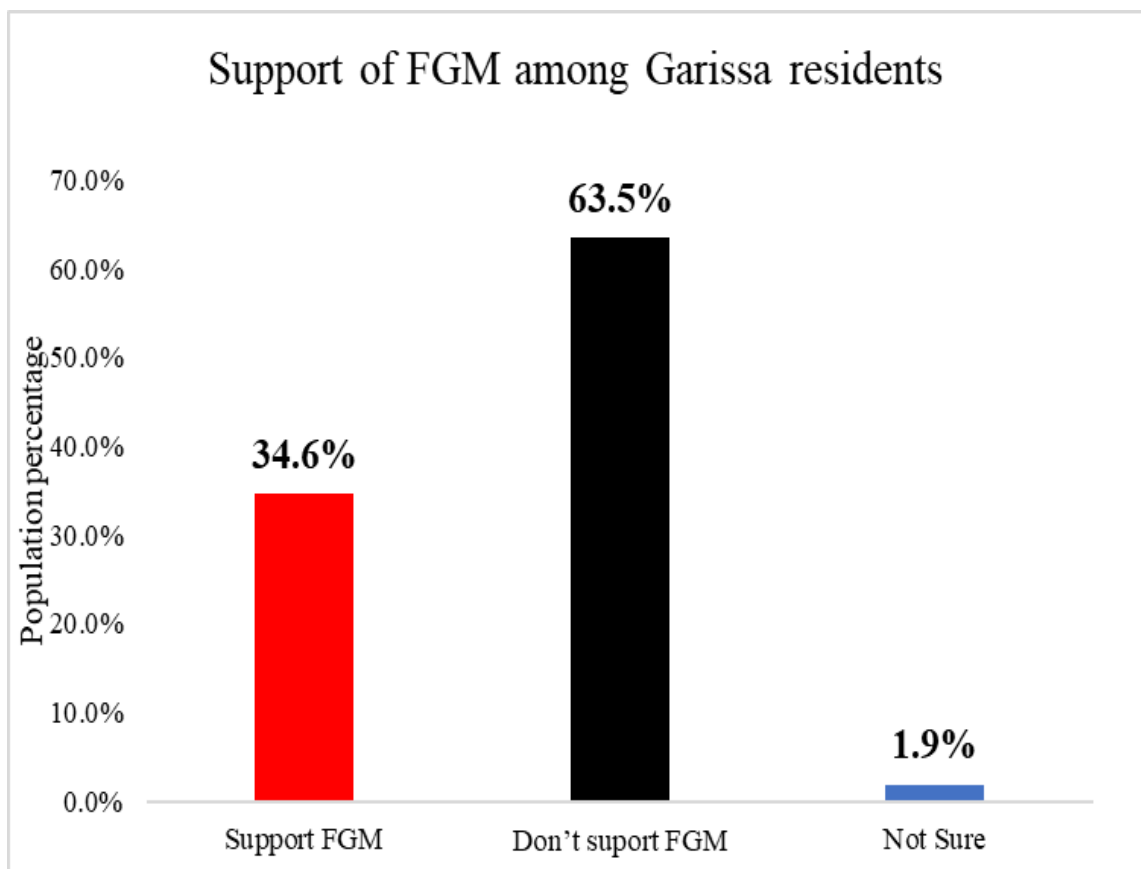


Figure 4-3 Percentage of residents supporting FGM in Garissa County

As indicated in table 4.5, pairwise comparison between participants knowledge of antiFGM law and those who advocate for FGM found that most study participants who had knowledge of the antiFGM law (n=50, 46.7%) did not support the practice compared to those who had knowledge of the law and supported the practice (n=19, 17.8%). This difference was statistically significant (p=0.001).

Table 4:6 Comparison between participant knowledge of antiFGM law practice and their advocating for FGM

	Have knowledge of antiFGM law		<i>P</i>
	Yes	No	
Advocate for FGM	Yes	19 (17.8%)	$\chi^2 = 15.005$ df = 2 P = 0.001
	No	50 (46.7%)	
	Not Sure	18 (16.8%)	

% percentage, χ^2 Chi-square, Fischer's exact

4.7.2 Reason for supporting or not supporting FGM

As displayed in figure 4.4, reasons for advocating for or not advocating for FGM were grouped into four: religious, cultural, social and sexual. Among those who advocate for FGM, 39% did due to religious reasons, 29.3% due to social reasons, 22% due to sexual reasons and 41.5% due to cultural reasons. On the other hand, those opposed to the practice due to the same reasons were 11.0%, 58.9%, 26.0% and 17.8% respectively. When grouped by gender, male respondents supported FGM due to religious, cultural, social and sexual reasons while female responders did so due to religious and sexual reasons.

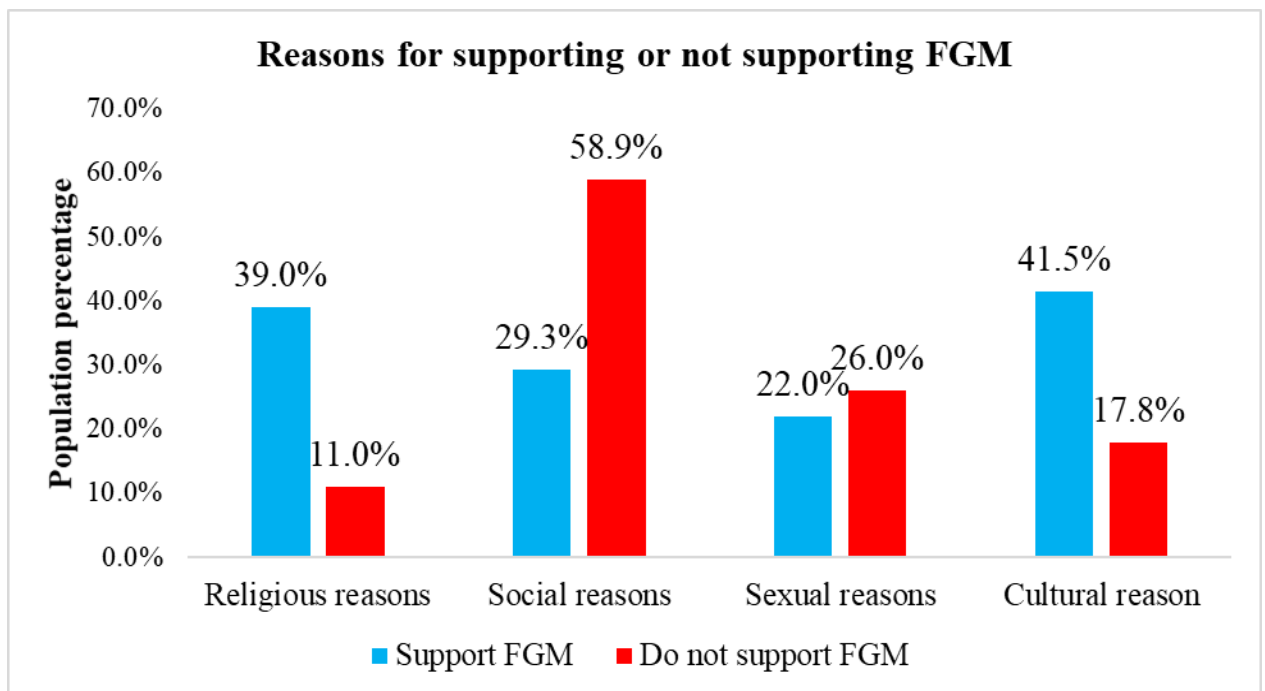


Figure 4-4 Reasons for supporting FGM

4.7.3 Perception on the negative effects of FGM

The main negative effects of FGM given by male respondents was problems during labor (15.2%), followed by difficulties during menstruation (4.3%), impaired intercourse (3.3%) and fertility problems (1.1%). Female respondents viewed problems during labor (26.3%) as the main negative effect of FGM followed by difficulties during menstruation (13.0%) and sexual problems (2.2%). In total, 44.6% of respondents viewed problem during labor as the main negative effect of FGM followed by difficulties during menstruation (17.4%), sexual problem (5.4%) and fertility problem (1.1%). On the other hand, 19.6% of male and 12.0% of female respondents viewed FGM as not having any negative effect.

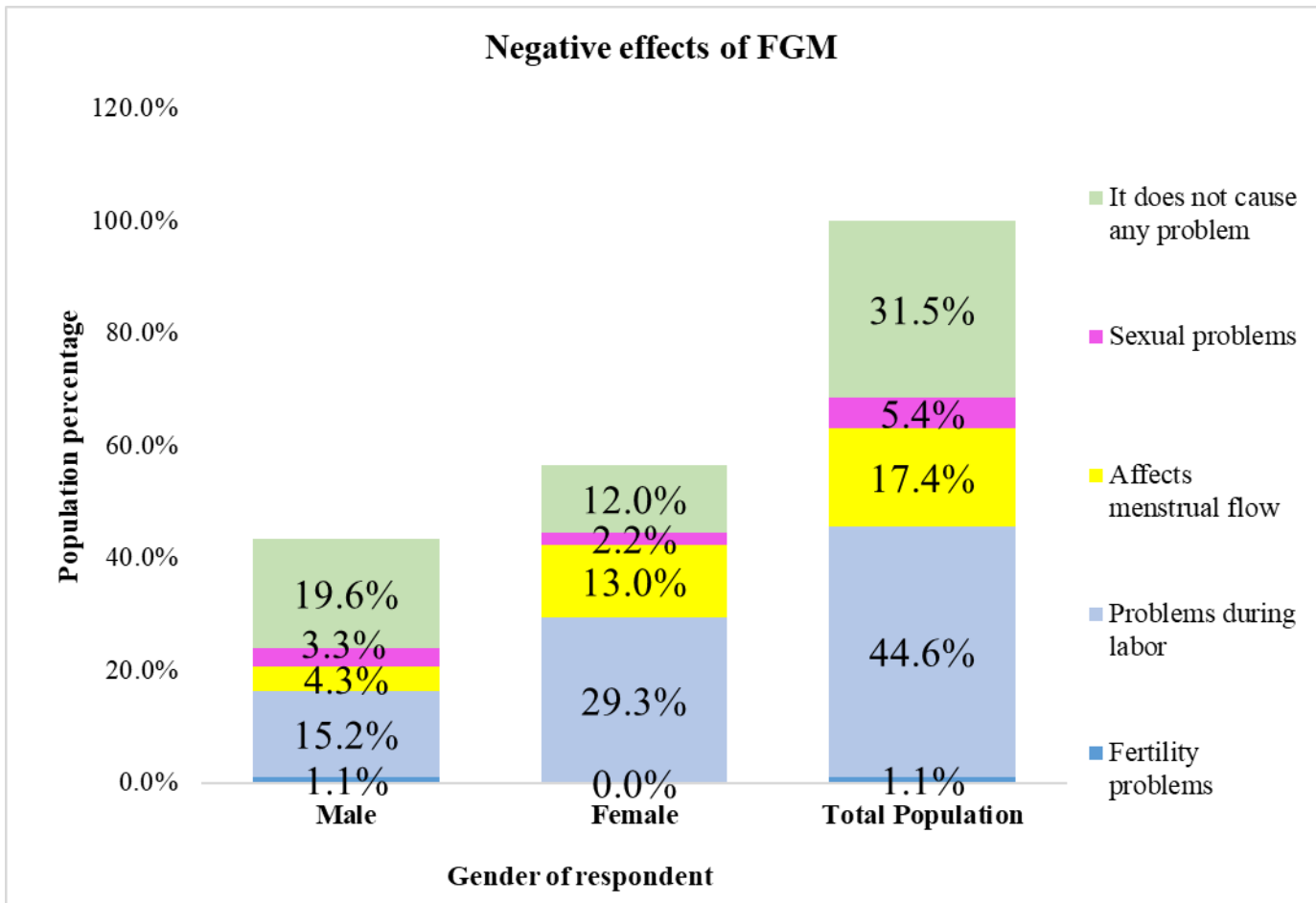


Figure 4-5 Negative effects of FGM

4.8 Objective three: Factors influencing the implementation of the antiFGM law in Garissa county

4.8.1 Person making decision for FGM to be performed on girls

The decision to circumcise girls for approximately two thirds of participants was made by their mothers (68.8%) while for approximately one in ten of participants (12.5%) the decision was made by fathers (Figure 4.6). On the other hand, 6.3% of participants of their own volition decided to be circumcised.

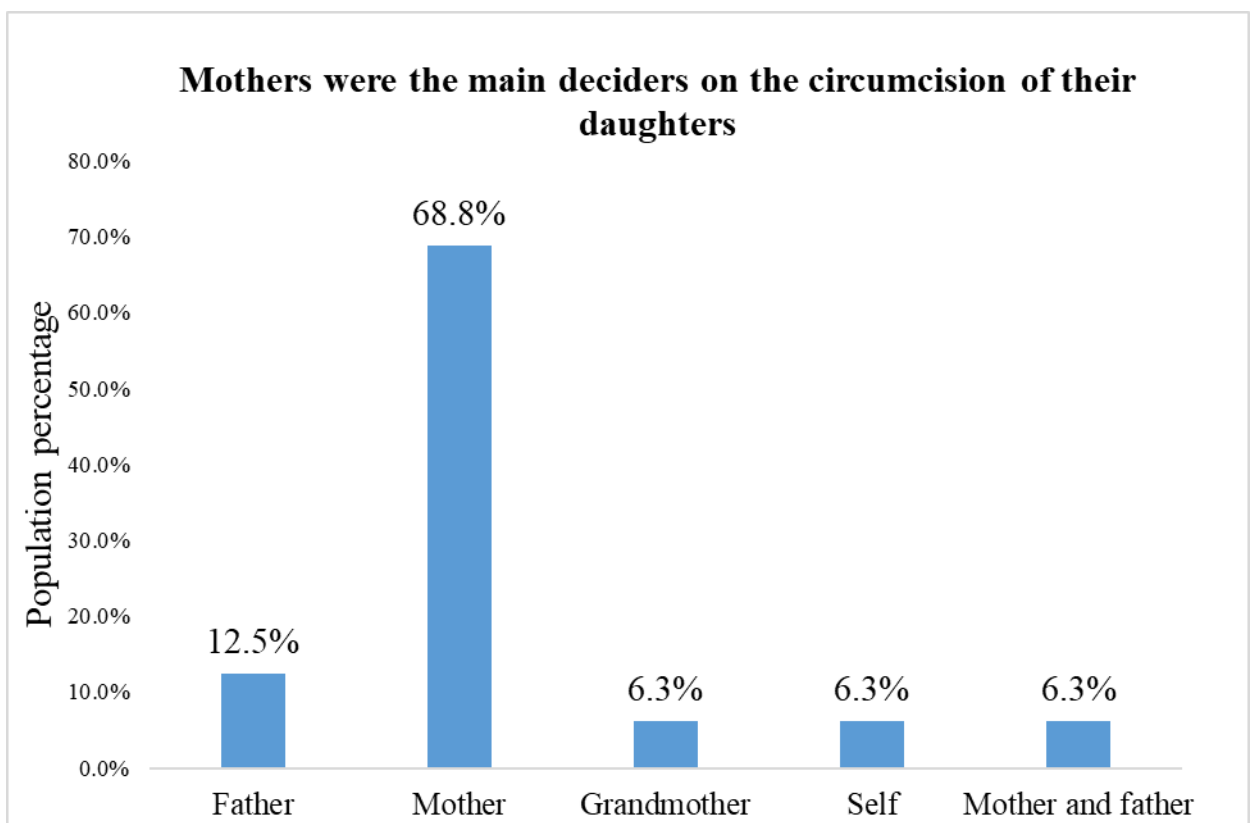


Figure 4-6 Decision maker for daughter to be circumcised

4.8.2 Type of circumcision performed

As indicated in figure 4.7, the circumcision of participants either involved removal of flesh from the genitals or nicking of the genital without flesh removal. Two thirds of the participants – 66.7% (20/31) had a portion of their flesh removed while for 16.1% (5/31) of participants, the genital was nicked without flesh removal.

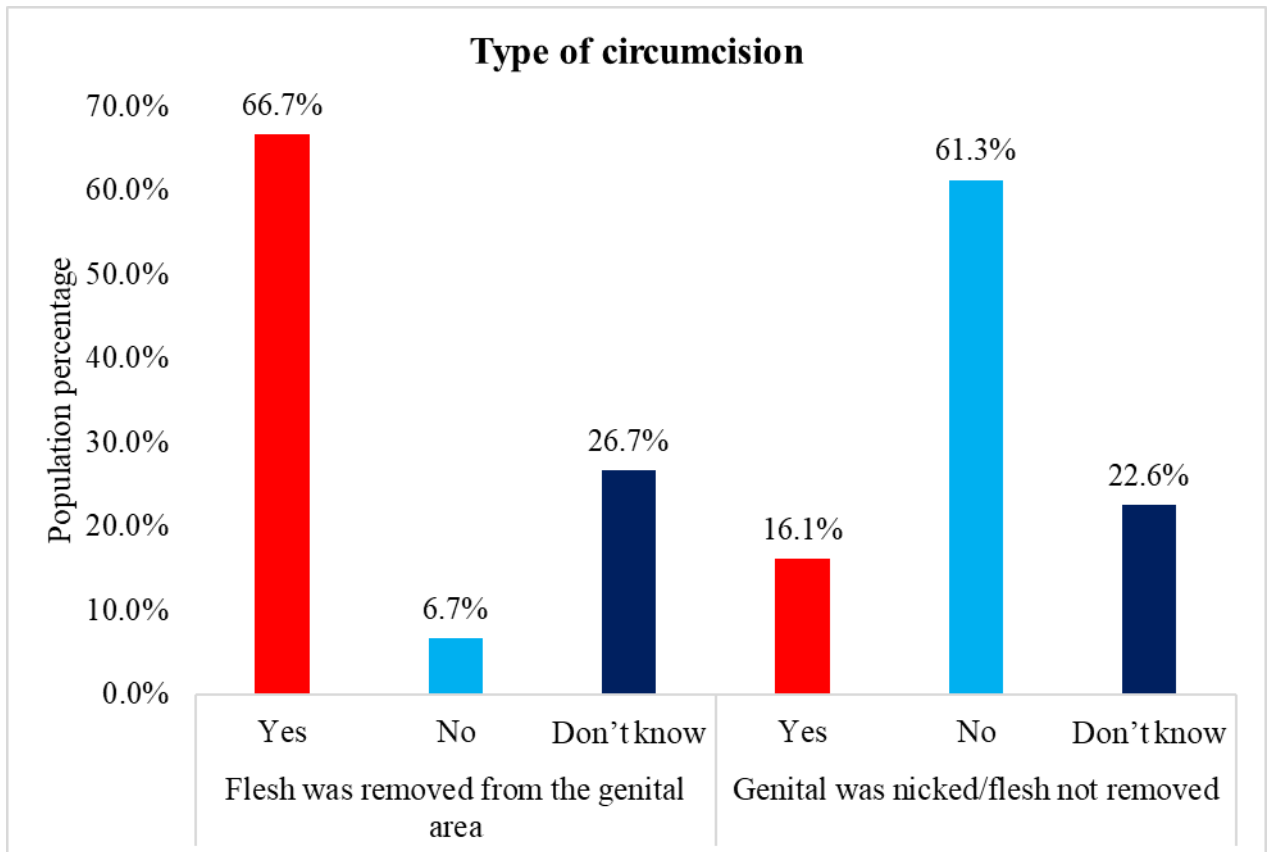


Figure 4-7 Types of FGM participants underwent

4.8.3 Person performing the FGM cut

Traditional circumcisers were the main persons performing the act with approximately two thirds of respondents (61.8%) having been circumcised by them. On the other hand, 17.6% of respondents were circumcised by traditional birth attendants. Trained nurses/midwives circumcised 14.7% of respondents (Figure 4.8).

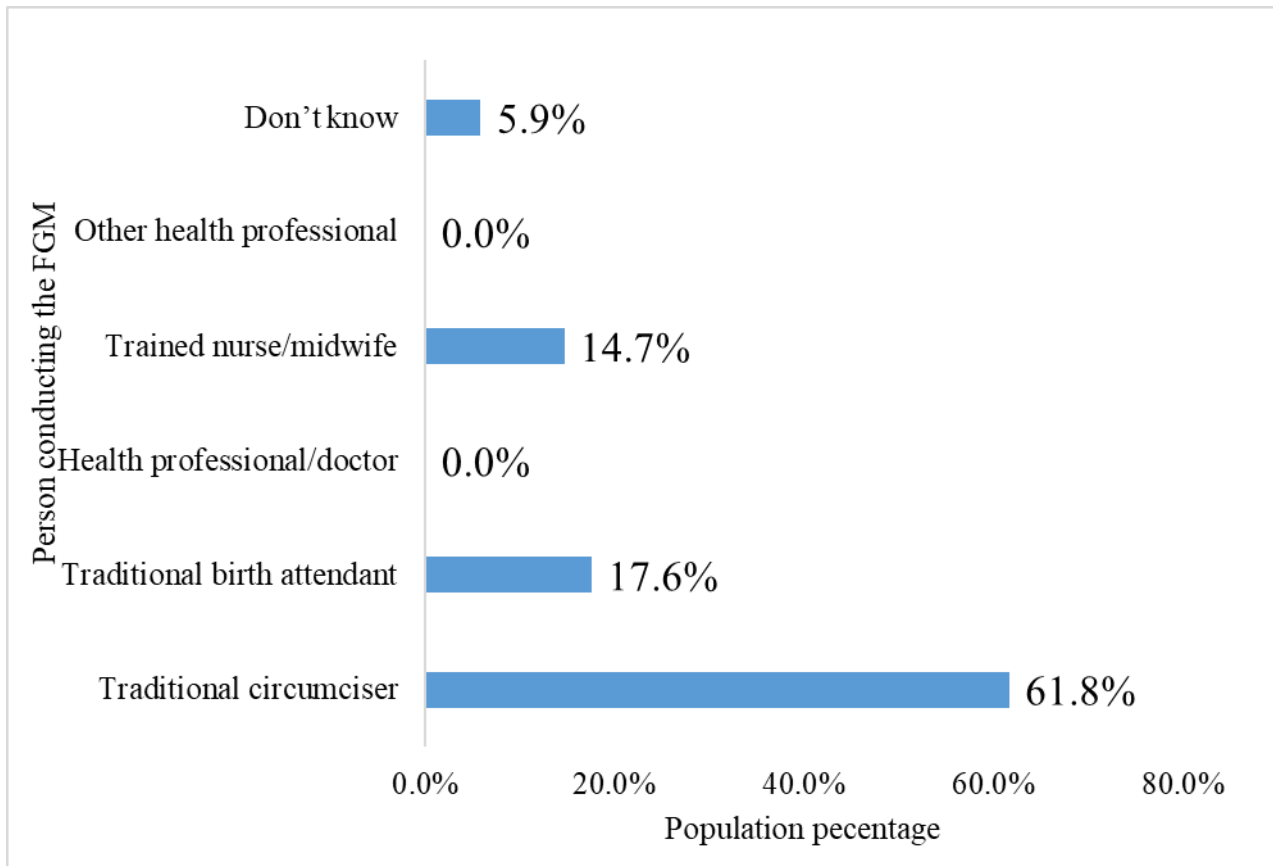


Figure 4-8 Person performing the circumcision

4.9 Objective four: Outcomes of anti-female genital mutilation program in Garissa County.

The study by UNICEF from which data was extrapolated was conducted among 6,100 participants aged between 10-49 years. In Garissa county, the study was conducted in Balambala sub county using a population of 510 participants of whom 176 were male while 433 were female participants.

4.9.1 Prevalence of FGM in Garissa

The UNICEF study reported the prevalence of FGM in Balambala as 94% with the prevalence rate being higher among girls and women of Somali origin at 96%. Among Muslims, the prevalence was 95%, 65% among Catholics and 69% among protestants.

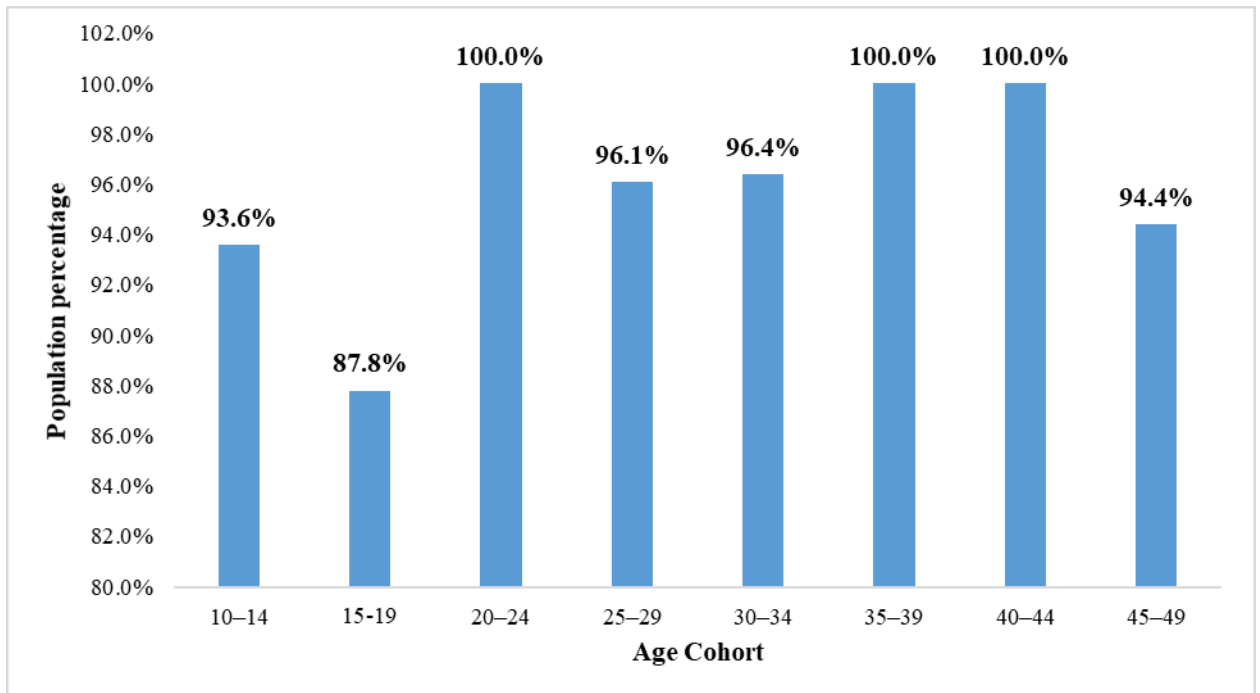


Figure 4-9: Prevalence of FGM by age group

4.9.2 Age at circumcision

Most women in Balambala (82%) underwent circumcision prior to attaining the age of 10 years. Majority of these (76%) were women of Somali origin and professed Muslim faith (76%). Protestants (94%) and Catholics (91%) generally circumcised their daughters when aged 10 years and above.

4.9.3 Reasons for participating in FGM

The four main reasons for practicing FGM according to the UNICEF report were: to enhance marriageability and prevent premarital sex; social acceptance; personal hygiene and religious identity (Table 4:7). More female respondents compared to male respondents held to these perceptions. Muslims in Balambala subcounty mainly practiced FGM for personal hygiene. FGM/C as a religious requirement was reported by 32% of Somalis residing in Balambala sub county.

On the other hand, circumcised girls were more likely to have little or no education compared to their uncircumcised counterparts. From the report, 73% of those circumcised lacked formal education and were married before reaching 18 years.

Table 4:7 Reason for practicing FGM

Reasons for practicing FGM/C	Female	Male
For the girl to be ready for marriage	60%	58%
Cleanliness, hygiene	66%	68%
Social acceptance	39%	39%
Preserve virginity, prevent premarital sex	5%	1%
More sexual pleasure for the man	3%	0%
For religious approval	33%	35%
To aid future childbirth	4%	6%
They are more attractive	0%	0%

% percentage

4.9.4 Awareness of risks associated with FGM

As summarized in table 4.8, there was a low awareness of risks associated with FGM/C with the practice mainly being associated with health related and social factors. The health factors associated with the practice were bleeding and difficulty during child birth, infection, pain during sex, reduced sexual satisfaction and death. The main social factor associated with the practice was dropping out of school and child marriage. From all communities sampled in the study, a lower level of risk awareness was observed among Somalis especially girls, women and boys living in Balambala sub county.

A lower awareness of the ban on FGM/C in Kenya was recorded among all population of girls, boys, men and women in Balambala sub county compared to other study

areas. This trend was mainly low among ethnic communities of Somali. Significantly lower proportions of Muslims, largely resident in Balambala were aware that FGM/C had been outlawed in Kenya.

Table 4:8 Perceived risks associated with FGM

Perceived risks associated with FGM/C	Female	Male
Continuous bleeding	88%	86%
Infection	34%	34%
Difficulty during childbirth	24%	45%
Pain during sex	15%	13%
Death	6%	6%
Dropping out of school	2%	1%
Child marriage	2%	4%
Feeling of incompleteness	2%	0%
Impaired sexual satisfaction	1%	0%

% percentage

4.9.5 Type of FGM/C and circumciser

Nearly all girls and women (99%) interviewed in Balambala reported having been circumcised by a traditional circumcizer with 1% having sort the service from a health care profession. Even so, the role of the health care professions was mainly to administer pain relieve and was done in secret to avoid ridicule of the girl as being “weak”.

Removal of flesh from the genital (excision) was the main type of FGM/C performed among girls and women in Balambala (73%) with 24% being nicked with no removal of flesh while infibulation was performed on 1% of respondents.

4.9.6 Support for continuation of FGM/C

Significantly more women in Balambala (73%, $p < 0.05$) than other study areas supported continuation of FGM/C. Similarly, a significant proportion of women of Somali origin (55%, $p < 0.05$) supported continuation of the practice. By age, significantly more women aged 18-49 compared to girls aged 10-17 years supported continuation of FGM/C. On the other hand, women with no education supported continuation of the practice compared to those with primary education (21%), secondary education (19%) and college education (11%). Similarly, women who had undergone FGM/C (74%) compared to those who 18% of those who were not circumcised supported continuation of the act.

Significantly more boys and men in Balambala (60%, $p < 0.05$) compared to other areas supported continuation of the practice. These were mainly boys and men of Somali origin (49%). Similarly, more Muslims men (48%) compared to protestants (18%) and Catholics (25%) supported continuation of the practice. Support of the practice reduced with increase of level of education. A universal reason provided by girls and women as well as boys and men for support of the continuation of FGM/C was “preservation of our culture”.

CHAPTER FIVE: DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

At 62.5%, the prevalence of FGM/C in Garissa county area was lower than what has been reported in previous studies, even so, it is still higher than the reported average national prevalence of 15% (KDHS, 2014). Previous studies conducted in Garissa country and among persons of Somali origin have reported An FGM prevalence of 98% (WHO, 2016) . Even so, this prevalence falls within the range reported by Johansen, Diop, Laverack, and Leye (2013) in their review of FGM among 28 countries who reported an FGM prevalence ranging from 0.6% to 98%. However, it is noteworthy to mention that the 62.5% FGM prevalence reported in this study is significantly lower than the 98% which had been reported by KDHS (2014), and 95% prevalence reported by UNICEF (2017).

The reduced prevalence in this study could be explained by the introduction of the antiFGM law, sensitization of residents on the negative effects of the act and the punitive measures proposed on those who practice or perpetrate the act. The previous studies that were reporting prevalence of up to 98% had been done either before or just a year after the establishment of the anti FGM board tasked with alleviating the vice whole our study has been conducted after more than three years of the antiFGM program. Our findings however, differed from those of Johansen et al. (2013) who reported an overall decline in the prevalence of FGM with girls and young women being less likely to have undergone FGM than older women.

In the current study, we had more young girls and women aged below 18 years (26.8%) who had undergone circumcision compared to older women (19,6%). Even so, this study agree with findings of KDHS (2014), WHO (2016) and Johansen et al.

(2013) of the average age of circumcision being 9 years, participants in our study were circumcised at an average age of 8.34 years. In our study, there was a statistically significant association between participation in FGM and practice of Muslim faith ($p=0.001$), similar results have been reported by Johansen et al. (2013), Armelle Andro and Lesclingand (2016) and UNICEF (2017) who found FGM to be practiced mainly by persons practicing Muslim faith.

5.1.1 Level of awareness of the antiFGM law by adolescents/youth in Garissa county

There was high level of knowledge of the antiFGM law among youth and adolescents in the study area. At 84%, the level of knowledge of the antiFGM law was higher than had been reported in the baseline study by UNICEF (2017) study who noted a lower awareness on the ban on FGM/C among all population of girls, boys, men and women in Garissa county compared to other study areas. This high awareness of the antiFGM law could be one of the factors that have contributed to lowering of the FGM prevalence among Somalis in Garissa from 99% in 2017 to the current 62.5% reported in this study.

Our study found that knowledge of the anti FGM law increased with increase in the level of education, persons in a marriage relation had lower knowledge of the law compared to single (unmarried) persons higher knowledge of the law among persons in singles than married persons. On the other hand, there were more female who knew of the law compare to male participants. These finding partly agree with those of UNICEF (2017) who reported awareness of the antiFGM law to increase with increase in the level of education.

5.1.2 Attitude of residents of Garissa county towards the anti-female genital mutilation law

There were mixed attitudes among study participants towards the antiFGM law with two thirds of participants (both male and female) not in support of the practice of FGM. The percentage of those opposing FGM as reported in this study is higher compared to that in previous studies that reported higher acceptance of the practice by area residents (both male and female) (KDHS, 2014). According to the KDHS (2014) findings, 90% of women in Garissa county were in support of continuation of FGM in comparison to 76% of men. Having knowledge of the antiFGM law also led to a reduction in support of the practice. Hence the lack of support of the practice could be due to fear of the consequences of breaking the law rather than abandonment of the practice. Several studies have noted that in order to evade facing the law, most persons have resorted underground practice of the act by transporting their daughters to neighboring communities or other countries so as to participate in the cut (Johansen et al., 2013; KDHS, 2014; UNICEF, 2017). Such people have been found to faint support of the antiFGM law while practicing FGM/C in secret.

Our study grouped the reasons for advocating for or not advocating for FGM into four: religious, cultural, social and sexual. A majority of those who supported FGM (41.5%) did so due to cultural reasons while a majority of those who did not support FGM did so due to social reasons (58.9%). The move that led to pronouncing FGM/C as an abuse against women right was born out of the negative health effects FGM conferred on those who had gone through the acts (WHO, 1982). To this date, the negative health and social effects FGM has on women who have participated in it still constitute the major push for the abandonment of the act (R. Berg, V. Underland, J. Odgaard-Jensen, A. Fretheim, & G. Vist, 2014; Johansen et al., 2013; Kimani, Kabiru,

Muteshi, & Guyo, 2020). The finding of this study of cultural reasons being the main reason for practice of FGM contravene opinions of UNICEF (2017) who reported religious reasons to be the main reason for Muslim persons of Somali origin participating in the act. Even so, grouping of the reasons by gender of respondent had religious reason as the main reason for supporting the act. Hosken (1982) has reported FGM as not being part of the Somali culture and that though members of the Somali descent who practice FGM do so in the name of religious reasons, no one of the three monotheistic religions of Judaism, Christianity and Islam has a commandment in their religious books that requires female circumcision, rather practice of the act has been noted as a cultural norm that predates both the Bible and Koran (Zurynski, Sureshkumar, Phu, & Elliott, 2015).

Sharing information about the health risks associated with FGM has been the most common and effective way used to educate the public on the negative effects of FGM and also combat the act. Participants in the current study reported fertility problems to be the main negative effect of FGM. This observation agrees with other studies that have reported FGM to be associated with negative health outcomes especially during childbirth (Johansen et al., 2013; UNICEF, 2017; WHO, 1982; Zurynski et al., 2015). It is however important to note that approximately one third of area residents did not think FGM had any negative effects on the health and wellbeing of women, persons of the male gender were the majority those who had this opinion. The baseline study by UNICEF (2017) among communities practicing FGM in Kenya reported similar results with male participants being the majority of those with the opinion that FGM did not cause any negative health complications.

5.1.3 Factors influencing the implementation of the antiFGM law in Garissa county

According to our study, mothers of daughters were the main decision makers on whether their daughters would get circumcised or not. These findings differ from previous findings by Johansen et al. (2013), UNICEF (2017) and WHO (1982) who reported the grandmother as the main influencer and decision maker on girls getting circumcised. The KDHS (2014) report noted that among the Somali, it was the grandmother who mainly influenced the decision to circumcise daughters. However, our findings partly agree with RC Berg et al. (2014) observations that some women willingly decided to be circumcised. In our study, 6.3% of women reported having made the decision to be circumcised.

Excision was the main type of FGM performed on a majority of participants (66.7%) in our study with 16.1% have had their genitals nicked. The percentage of circumcision by excision in our study is slightly lower than the 74% that had been reported in the UNICEF (2017) report. However, our findings are consistent with those of UNICEF (2017) and Kimani, Kabiru, Muteshi, and Guyo (2020) of excision being the main type of FGM practiced among Somalis in Kenya. The reduction in the percentage of excision FGM could be due to an increase in knowledge among residents of Garissa of the increased harmful effects of type II and III FGM on the health outcomes of women. Though all types of FGM/C have negative effects on the health of women, excision and infibulation have been associated with worse outcomes including bleeding, pain, infections and significant psychological trauma with long term complications being recurrent urinary infections, birthing difficulties including need for emergency caesarean section, third-degree vaginal tears, and ongoing psychological and sexual problems (UNICEF, 2013; Zurynski et al., 2015). Johansen

et al. (2013) has reported abandonment of more harmful types of FGM for less harmful ones among communities practicing the act.

Our study found traditional circumcizers to be the main persons offering FGM services to 68.1% of area residents, this was a drop from the 99% that had been reported in the UNICEF (2017) baseline report conducted in the same county. The UNICEF (2017) report had noted that traditional circumcizers were the main persons conducting FGM with health care profession performing the act on 1% of the population. None of the participants in our study reported having sought the service of health care workers to perform FGM, interestingly, 14.7% reported trained midwives and nurses as the ones who performed the act while for 17.1% the cut was done by a traditional birth attendant. Many studies have noted an increase in the number of medicalized FGM (Leye et al., 2019) allegedly to reduce its negative health effects, and is thus suggested as a harm reduction strategy in response to these perceived health risks. However, this is done in secrecy since FGM/C has been illegalized. Our findings on the reduction of use of traditional circumciser in performing FGM and the increased preference for medical practitioners agree with Leye et al. (2019) observation that in many countries/ communities where FGM/C is traditionally practiced, the prevalence rates of medicalization are increasing. The reported 14.7% of FGM performed by trained midwives in our study is slightly lower than the 15% reported by Shell-Duncan et al. (2017) to be the percentage of medicalized FGM in Kenya. The use of traditional birth attendants in performing FGM as noted in our study could be a reported new way of performing the act so as to bypass the antiFGM law.

5.1.4 To determine the outcomes of anti-female genital mutilation program in Garissa County.

Prior to the introduction of the anti FGM law, the prevalence of FGM in Garissa county and especially among persons of Somali origin stood at 99% (KDHS, 2014; UNICEF, 2017). Our study found this prevalence to have dropped in the 5 years of the introduction of the antiFGM law to 62%. Hence the functions antiFGM NGOs in the area have helped reduce the vice. On the other hand, the law could have led to a reduction in the age of performing the circumcision. It has been noted that many antiFGM interventions combine two or more approaches and method while others do not have the total abandonment of all forms of FGM as the objective, though this is mostly an ultimate goal (Berg & Denison, 2012). Most NGO in Garissa combine information on the negative effects of FGM and the anti FGM law in advocating for the abandonment of the act. The baseline study by UNICEF reported an average of 10 years for performing FGM among Somalis of Garissa county, our study reported this age to have reduced to 8.34 years with a reported increased use of traditional birth attendants in conducting FGM hence implying that the act is being conducted at birth. Previously, FGM has been associated with lack of formal education, however, our study recorded high numbers of educated women who were circumcised with others willingly participating in the act.

There has been an increase in the level of awareness of the negative effects of FGM among residents of Garissa in comparison to previous years. This increase in awareness of the negative effects of FGM could be one of the reasons for reduction in FGM. It has been noted that an increased knowledge of the negative health effects can stimulate reflection and critical thinking, leading to reduce the approval of, and eventually to the abandonment of, FGM (Johansen et al., 2013).

According to our KII, most NGOs advocating for the abandonment of FGM have targeted traditional circumcizers to persuade them to stop offering the services, though this has paid off with a reduction of number of persons seeking traditional circumcizers services, there is an increase in medicalization of the act. Leye et al. (2019) has reported debate in many countries on whether FGM should be conducted by medical professions so as to make it safe and avoid the associated negative health outcomes.

5.2 Conclusion

The aim of this study was to assess the success of anti-female genital mutilation programs in Garissa County by determining the level of awareness of the antiFGM law by adolescents and youth in the county, determining the attitude of residents of Garissa county towards the antiFGM law, determining factors influencing the implementation of the antiFGM law and determining the outcomes of antiFGM program in Garissa County.

From this studys findings, antiFGM programs in Garissa county have had a measure of success in their activity as indicated by the reduction in the prevalence of FGM in the county from 99% to 62%. Similarly, there has been an increase in level of awareness of the antiFGM law as well as negative effects FGM has on the health of women. This increase in awareness has resulted in change in attitude of area residents towards practice of FGM by many not supporting the act. On the other hand, introduction of the antiFGM law has led increase in the underground perpetration of the act. There has been an increase in medicalization of FGM in the area and reduction of the age at which the act is performed.

5.3 Recommendations

Based on our study findings, this study makes the following recommendations:

1. The government should investigate health care providers and midwives suspected of practicing FGM.
2. NGOs working on FGM in the area should be trained on better ways to deliver the antiFGM message so as to be effective in their actions.
3. More focus should be placed on counseling mothers of uncircumcised girls on the negative health effects of FGM to their daughters and why they should abandon the act.
4. Further studies should be conducted to understand the reasons for women being the main advocates for FGM despite the negative outcome of the act on women.

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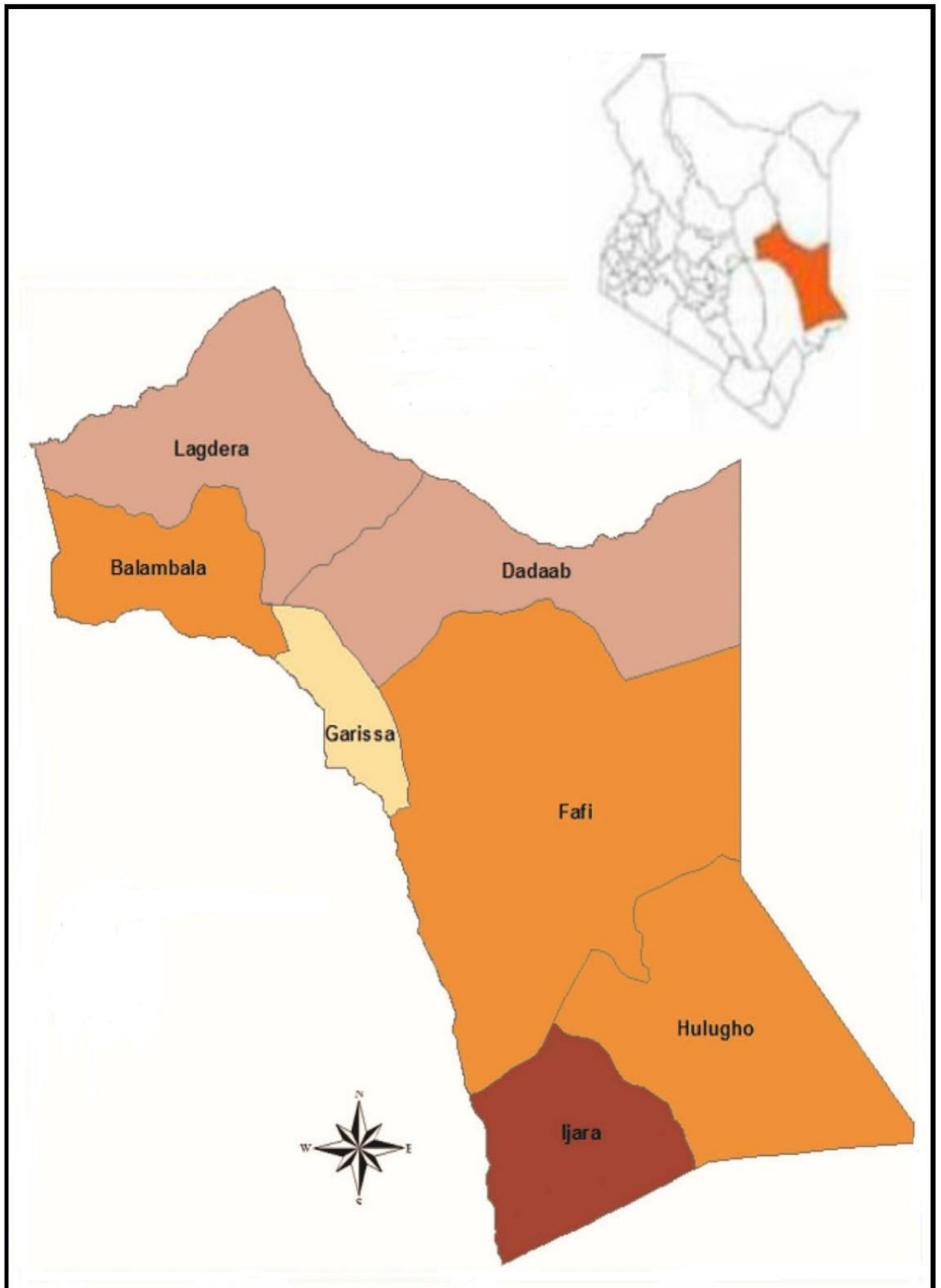
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APPENDICES

APPENDIX I: MAP OF GARISSA COUNTY



APPENDIX II: INFORMED CONSENT FORM

ASSESSMENT OF FEMALE GENITAL MUTILATION PROGRAM IN GARISSA COUNTY KENYA

Investigators

Investigator	Position	Institution
Mrs. Yasmin Hassan Derow	Principal Investigator	KU
Dr. Eliphaz Gitonga	Supervisor	KU

Principal Investigators. **Kenyatta University Ethical Review**

Committee Contact: 0712213810

+254(20)8714388

Investigators Statement

We are kindly requesting you to be a participant in a research study. The aim of this consent form is to give you the information you require in helping you decide whether to or not to participate in this study. Please read this form carefully. You may ask questions on what we are asking of you, if there is any risk, your benefits, your rights as a participant or anything else about the research or that is stated on this form and is not clear. When all your questions have been answered, you can decide whether you want to participate in the study or not. This process is called informed consent.

Background information

Female genital mutilation (FGM) is a traditional social practice of cutting parts of the external genitalia of girls or young women to uphold a cultural practice of a rite of passage to womanhood and to curb sexuality. In Kenya, this practice has a prevalence of 21% and is observed by several communities. Even so, the practice of this rite was made illegal in Kenya in 2011 due to the negative health effects associated with it and a board established to spearhead its abandonment in line with objective 5.3 of the

United Nations objective Sustainable Development Goals. Garissa County has the highest prevalence of practice of FGM in the country with a prevalence of 94%.

Purpose of the study.

This study will help us to find out the success of anti-female genital mutilation programs in Garissa County. From the findings of this study, we will be able know how to better direct efforts towards addressing this practice in Garissa county and view of residents about it.

Study procedure

Participation in this study will require that you fill a questionnaire. If you agree to participate the research assistant will guide you through filling of the questionnaire.

This is an interviewer administered questionnaire.

You may refuse to respond to any questions or you may stop the interview at any time.

However, we kindly request you to answer all questions.

Confidentiality.

All information obtained in this study will be strictly confidential and will not be released to other persons or used for any other study. Participation in this study is voluntary (at your own will). You have the right not to participate or withdraw at any time. About 100 persons who include women, adolescents and the elderly will take part in this study.

Participant’s benefits and Risks

Benefits

There is no monetary benefit from participating in this study. Even so, your participation will provide information that will help the government understand factors contributing to female genital mutilation and hence come up with better ways of addressing this scourge.

Risks

There are no risks associated with your participation in this study.

Participant’s statement

This study has been approved by the Kenyatta University Board of Postgraduate studies and the Kenyatta University Ethical Review Committee.

If you have any question on your rights as a study participant, you can call Dr. Eliphas Gitonga on 0721406609 or Prof. Judith Kimiywe the chairperson Kenyatta University Ethical Review Committee on +254(20)8714388 , email: chairman.kuerc@ku.ac.ke

Signature

Name of the interviewer:.....
Date.....

Subjects Statement

I.....have been explained to and understood the studies purpose, procedures, risks and benefits and give my consent to participate in the study.

.....

Subjects Signature/Thumb print

APPENDIX III: QUESTIONNAIRE

A. DEMOGRAPHICS

1. How old are you:.....
2. Gender of respondent Male Female
3. What religious faith do you practice:
 - Muslim
 - Christian
 - Other (specify please)
4. Highest level of education?
 - Primary Secondary Tertiary/college No formal education
 - Madrasa
5. Marital status:
 - Single Married Divorced Widowed.
6. What is your occupation?
 - Formal Employment (Salaried) Informal Employment
 - Trading/Business Livestock Keeping/Agriculture
 - Unemployed

B. KNOWLEDGE OF FGM

7. Do you have knowledge of female circumcision?
 - Yes No
8. In some communities, there is a practice in which a girl may have part of her genitals cut. Have you ever heard about this practice? (IF NO, END INTERVIEW)
 - Yes No
9. Have you yourself ever been circumcised? (IF NO, MOVE TO Q15)
 - Yes No

10. If yes, who made the decision to do it:
 Father Mother Grandmother Self
 Others (specify please)
11. Now I would like to ask you what was done to you at that time. Was any flesh removed from the genital area?
 Yes No Don't know
12. Was the genital area just nicked without removing any flesh?
 Yes No Don't know
13. Was your genitalia stiched closed?
 Yes No Don't know
14. What was your age at the time of your circumcision? IF THE RESPONDENT DOES NOT KNOW THE EXACT AGE, PROBE TO GET AN ESTIMATE.
year During infancy
15. Who performed the circumcision?
 Traditional circumciser Traditional birth attendant Health professional doctor
 Trained nurse/midwife Other health professional (specify).....
 Don't know
16. Have any of your daughters been circumcised? IF YES: How many?
 Yes No Number.....
17. Who promoted their circumcision?
 Father Mother Grandmother
 Self Others (specify please)

C. ATTITUDE TOWARDS FGM

18. a) Do you advocate for female circumcision?

- Yes No .Not sure.

b) If in favor why: (you can circle more than one)

- Religious reasons Social reasons Sexual reasons
 Cultural reasons

c) If not in favor why: (more than one answer is allowed)

- Religious reasons Social reasons Sexual reasons
 Cultural reasons

19. Do you think female circumcision can cause: (multiple answers accepted)

- Fertility problems Problems with labor Menstrual problems
 Sexual problems It does not cause any problem

20. **For females:** Do you think circumcision will:

- Increase your chances of marriage Reduce your chances of marriage
 Don't know.

21. **For males:** Do you prefer (for future partnership):

- A circumcised female Non-circumcised female Either.

22. **For males:** Does circumcision give any benefit to girls?

- Cleanliness/hygiene Social acceptance Better marriage prospects
 Preserve virginity/prevent premarital sex More sexual pleasure for the man
 Religious approval

23. Does your religion advocate for the circumcision of women:

- Yes No Not sure

24. Would you encourage women to get circumcised?
 Yes No Not sure
25. Are you in support for the continuation of this practice:
 Yes No Don't know

D. KNOWLEDGE OF ANTIFGM LAW

26. Is female circumcision prohibited by the law?
 Yes No I don't know
27. Have you heard of the antiFGM law?
 Yes No
28. From whom did you hear of the law?
 Radio Television Print media NGO
 Baraza Health facility
29. Is the government justified in criminalizing female circumcision?
 Yes No I don't know

APPENDIX IV: GRADUATE SCHOOL APPROVAL CERTIFICATE

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke

Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 810901 Ext. 4150

Internal Memo

FROM: Dean, Graduate School

DATE: 5th July, 2019

TO: Yasmin Hassan Derow
C/o Health Management and Informatics Dept.

REF: Q142/38401/2017

SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL

This is to inform you that Graduate School Board at its meeting of 26th June, 2019 approved your Research Project Proposal for the M.PH Degree Entitled, "Assessment of Anti-Female Genital Mutilation Program in Garissa County, Kenya".

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking Forms per semester. The form has been developed to replace the Progress Report Forms. The Supervision Tracking Forms are available at the University's Website under Graduate School webpage downloads.

Thank you.

HARRIET ISABOKE
FOR: DEAN, GRADUATE SCHOOL

c.c. Chairman, Health Management & Informatics Department.

Supervisors:

1. Dr. Eliphias Gitonga
C/o Department of Health Management & Informatics
Kenyatta University

HI/lmm

APPENDIX V: KENYATTA ETHICAL REVIEW BOARD APPROVAL



Kenyatta University
P.O Box 43844-00100
Nairobi-Kenya

REF: KU/ERC/APPROVAL/VOL1/3

Date: 17th September, 2019

Yasmin Hassan Derow

P.o Box 43844-00100

Nairobi

Dear Mr. Derow

RE: ASSESSMENT OF ANTI-FEMALE GENITAL MUTILATION PROGRAM IN GARISSA COUNTY, KENYA

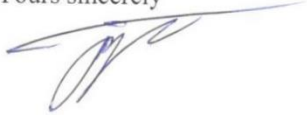
This is to inform you that *KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE* has reviewed and approved your above research proposal. Your application approval number is **PKU/1081/I1131**. The approval period is *10th September, 2019-10th September, 2020*.

This approval is subject to compliance with the following requirements;

- i. Only approved documents including (informed consents, study instruments, MTA) will be used
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by *KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE*.
- iii. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to *KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE* within 72 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to *KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE* within 72 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days upon completion of the study to *KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE*.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://oris.nacosti.go.ke> and also obtain other clearances needed.

Yours sincerely




Prof. Judith Kimiywe

CHAIRPERSON- KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE.



APPENDIX VI: NACOSTI APPROVAL CERTIFICATE

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
RefNo: 742824	Date of Issue: 20/September/2019
RESEARCH LICENSE	
	
This is to Certify that Ms. Yasmin Derow of Kenyatta University, has been licensed to conduct research in Garissa on the topic: ASSESSMENT OF ANTI-FEMALE GENITAL MUTILATION PROGRAM IN GARISSA COUNTY, KENYA for the period ending : 20/September/2020.	
License No: NACOSTI/P/19/111	
Applicant Identification Number 742824	 Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
	Verification QR Code 
NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.	