



Population Council
Knowledge Commons

Reproductive Health

Social and Behavioral Science Research (SBSR)


2018

Shifts in female genital mutilation/cutting in Kenya: Perspectives of families and health care providers

Samuel Kimani

Caroline W. Kabiru
Population Council

Follow this and additional works at: https://knowledgecommons.popcouncil.org/departments_sbsr-rh

 Part of the [Family, Life Course, and Society Commons](#), [Gender and Sexuality Commons](#), and the [International Public Health Commons](#)

Recommended Citation

Kimani, Samuel and Caroline W. Kabiru. 2018. "Shifts in female genital mutilation/cutting in Kenya: Perspectives of families and health care providers," Evidence to End FGM/C: Research to Help Girls and Women Thrive. New York: Population Council.

This Report is brought to you for free and open access by the Population Council.

SHIFTS IN FEMALE GENITAL
MUTILATION/CUTTING IN KENYA:
PERSPECTIVES OF FAMILIES AND
HEALTH CARE PROVIDERS

December 2018

SHIFTS IN FEMALE GENITAL MUTILATION/CUTTING IN KENYA: PERSPECTIVES OF FAMILIES AND HEALTH CARE PROVIDERS

SAMUEL KIMANI
AFRICA COORDINATING CENTRE FOR THE ABANDONMENT OF
FEMALE GENITAL MUTILATION /CUTTING (ACCAF)
UNIVERSITY OF NAIROBI

CAROLINE W. KABIRU
POPULATION COUNCIL

DECEMBER 2018

The Evidence to End FGM/C: Research to Help Girls and Women Thrive generates evidence to inform and influence investments, policies, and programmes for ending female genital mutilation/cutting in different contexts. Evidence to End FGM/C is led by the Population Council, Nairobi in partnership with the Africa Coordinating Centre for the Abandonment of Female Genital Mutilation/Cutting (ACCAF), Kenya; the Global Research and Advocacy Group (GRAG), Senegal; Population Council, Nigeria; Population Council, Egypt; Population Council, Ethiopia; MannionDaniels, Ltd. (MD); Population Reference Bureau (PRB); University of California, San Diego (Dr. Gerry Mackie); and University of Washington, Seattle (Prof. Bettina Shell-Duncan).



The Population Council confronts critical health and development issues—from stopping the spread of HIV to improving reproductive health and ensuring that young people lead full and productive lives. Through biomedical, social science, and public health research in 50 countries, we work with our partners to deliver solutions that lead to more effective policies, programmes, and technologies that improve lives around the world. Established in 1952 and headquartered in New York, the Council is a nongovernmental, nonprofit organisation governed by an international board of trustees. www.popcouncil.org



ACCAF is based at the University of Nairobi, College of Health Sciences, a premier institution for training of health care professionals, and a leader in health research and community services. Our goals and objectives are to: strengthen capacity for FGM/C research in Africa, implement FGM/C interventions, and improve care for women and girls who have undergone FGM/C, monitor progress in the abandonment of FGM/C, and inform policy programming on FGM/C issues. www.accaf.org

Suggested Citation: Kimani, Samuel and Kabiru, Caroline W. October 2018. “Shifts in Female Genital Mutilation/Cutting in Kenya: Perspectives of Families and Health Care Providers.” *Evidence to End FGM/C: Research to Help Girls and Women Thrive*. New York: Population Council. <http://www.popcouncil.org/EvidencetoEndFGM-C>

This is a working paper and represents research in progress. This paper represents the opinions of the authors and is the product of professional research. This paper has not been peer reviewed, and this version may be updated with additional analyses in subsequent publications. Contact: Dr Samuel Kimani, tkimani@uonbi.ac.ke or thuo.kimani@gmail.com.

Please address any inquiries about the Evidence to End FGM/C programme consortium to:

Dr Jacinta Muteshi, Project Director, jmuteshi@popcouncil.org

Funded by:



This document is an output from a programme funded by the UK Aid from the UK government for the benefit of developing countries. However, the views expressed and information contained in it are not necessarily those of, or endorsed by the UK government, which can accept no responsibility for such views or information or for any reliance placed on them.

Table of Contents

Acronyms	iv
Acknowledgments	v
Executive Summary	vi
Introduction	1
Background	1
Objectives	3
Methods.....	4
Study Design	4
Study Location (Sites).....	4
Study Participants	5
Sampling and Sample Size	5
Recruitment and Interview Procedures.....	6
Ethical Considerations	7
Data Management and Analysis	7
Results	8
Reasons Why Families Practise FGM/C.....	8
Context of FGM/C in the Three Communities.....	13
Shifts (Changes) in FGM/C	16
Perceptions around Re-infibulation in the Somali Community	21
Discussion.....	23
Limitations	28
Conclusion	28
Study Implications	29
References	31

Acronyms

ACCAF	Africa Coordination Centre for Abandonment of Female Genital Mutilation/Cutting
FGD	Focus Group Discussion
FGM/C	Female Genital Mutilation/Cutting
IDI	In-Depth Interview
KES	Kenya Shillings
KII	Key Informant Interview
KNBS	Kenya National Bureau of Statistics
NACOSTI	National Commission for Science, Technology and Innovation
NGO	Non-Governmental Organisation
PRB	Population Reference Bureau
SDA	Seventh Day Adventist
TBA	Traditional Birth Attendant
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WHO	World Health Organisation

Acknowledgments

The authors thank colleagues at Africa Coordinating Centre for the Abandonment of Female Genital Mutilation/Cutting (ACCAF); Jaldesa Guyo and Tammary Esho for their insights during the conception of this study. We also thank Jacinta Muteshi of the Population Council and Carlyne Njue formerly of the Population Council, Kenya who provided critical insights and expertise that greatly assisted the design and implementation of this research. We thank Jerry Okal for his support during the qualitative data analysis as well as Esther Lwanga for the logistical support. Similar gratitude is expressed to the reviewers of the report, especially Bettina Shell-Duncan of the Department of Anthropology, University of Washington, Seattle, Washington.

Executive Summary

Background

Female genital mutilation/cutting (FGM/C) is a cultural practice that is widely considered an extreme form of violence, abuse, and violation of human rights against girls and women. Despite compelling reasons and efforts to eradicate it, the practice has persisted, albeit with some changes. Studies have shown three key shifts in the practice of FGM/C: cutting at a younger age, less severe cutting, and medicalised cutting (cutting performed by a health care provider either in a health facility or at home). Whether these shifts signify abandonment or persistence of the practice is poorly understood. Understanding these shifts in FGM/C among communities has implications on the success of abandonment strategies. This study sought to understand the shifts in FGM/C among families and health care providers from selected Kenyan communities that practise FGM/C.

Methods

This was a qualitative study involving participants from three ethnic communities: Abagusii, Somali, and Kuria. The study was conducted in Nairobi (Eastleigh and Kawangware), Kisii, Kuria, and Garissa counties. The study targeted: families with medically or traditionally cut girls aged 0-15 years, women aged 15-49 years and their husbands and/or partners, as well as women and men aged 50 years and older. Community leaders, representatives from organisations, and health care providers were also interviewed. A total of 45 focus group discussions (FGDs), 54 in-depth interviews (IDIs), and 56 key informant interviews (KIIs) were conducted. Data were transcribed and analysed qualitatively using a framework method template. Ethical clearance was granted by the Kenyatta National Hospital-University of Nairobi Ethics and Research Committee and the Population Council Institutional Review Board. In addition, permission to conduct research was obtained from the National Commission for Science, Technology, and Innovation (NACOSTI) and respective counties.

Results

There are variations in the practise of FGM/C. FGM/C is reportedly performed by experienced traditional practitioners often in rural settings and often during long school holidays. According to participants, the choice of cutters is determined by their respectability, referral, clan lineage, and cost of cutting. Among the Kuria, the cutter and venue (bushes/shrines) are selected by the council of elders. In the case of Abagusii and Somali girls, FGM/C is performed individually and in secrecy, while girls are cut in groups and in public among the Kuria. Girls are reportedly sent to the rural areas or across national borders to be cut. Christianity, education, and awareness of the negative health consequences of FGM/C are associated with abandonment of FGM/C.

The reasons why families practise FGM/C are similar across ethnic groups. Participants suggested that FGM/C is practised to: conform to cultural traditions and social pressure, enhance girls' marriageability, gain respectability, promote identity and belonging, fulfil religious obligations, and control women and girls' sexuality. FGM/C is perceived to prevent immorality by suppressing women's and girls' sexual urges. In some cases, girls are cut in fear of social pressure, discrimination, stigmatisation, or fear of a spell; a clear indication of social norms upheld by sanctions. Among the Kuria, FGM/C was reported to be practised typically as a rite of passage. Thus, alternative ritual approaches might make sense among the Kuria, but not among the Abagusii or Somali communities.

Cutting at a younger age, less severe cutting, and medicalisation are the main shifts in FGM/C. Cutting at a young age and medicalisation are common among the Abagusii and Somali, while less severe cutting is practised across the three communities. Cutting at a young age and lesser cutting were perceived to reduce health complications, shorten the healing process, and lower the risk of legal sanctions. Among the Kuria, there was no reported shift in the age at cutting because FGM/C is a rite of passage to adulthood.

Families across the communities have adopted less severe cutting, which involves superficial cutting, nicking, and pricking for faster healing and few health complications. Among Somalis, the less severe form—which they referred to as the *Sunna* cut—is reportedly performed by either health care providers or traditional circumcisers. The shift from infibulation to the *Sunna* cut was attributed to Islamic religion, increasing education, and awareness of health complications. Less severe cutting was perceived to be sexually advantageous to women as well as men. According to participants, pharaonic FGM/C (infibulation) is a marker of “virginity” and is still performed in the rural areas among Somalis.

Families across the Abagusii and Somali communities were reported to have adopted medicalised FGM/C, while it was a rare practice among the Kuria. Medicalised FGM/C was perceived to have few health complications, quicker healing, and enables families to maintain secrecy. Participants stated that medicalised FGM/C is performed at home or in private health facilities by health care providers working in both private and public facilities. According to some participants, medicalisation is not a step towards abandonment of FGM/C but a form of modernisation.

Health care providers performed hidden medicalised FGM/C at girls’ homes and in private clinics. Medicalised FGM/C was reportedly conducted in secret because of the fear of arrest and sanctions. Medical professionals stated that they counselled clients before cutting to help them make informed decisions. Health care providers’ motives for cutting girls were reported to be income and the desire to mitigate health complications.

Although the medical professionals’ regulatory bodies were noted to condemn FGM/C and could withdraw licenses of those who performed FGM/C, the topic is not adequately covered in health professional training programmes. Lack of training on FGM/C issues was reported to increase the likelihood of medicalised FGM/C.

Girls were reported to first seek care for FGM/C complications from cutters and later from health care providers. Awareness of the health complications of FGM/C was noted to drive the perceived decline of FGM/C.

Re-infibulation among Somalis was perceived to be declining but mainly performed by health care providers in health facilities. Re-infibulation is reportedly performed to ‘tighten’ the genitalia to increase husbands’ sexual pleasure. It is also reportedly performed so that girls who have had pre-marital sex or divorced women can ‘regain virginity’ to enhance their marriageability. Economic gain was also noted to be a reason why health care providers performed re-infibulations. Although re-infibulation was perceived to increase men’s sexual pleasure, it was also reported to have disadvantages for both the man and the woman.

Abandonment of FGM/C was perceived to be associated with religion, social developmental factors, and awareness of FGM/C as a health, human right, legal, and religious violation.

Conclusion

FGM/C remains prevalent in the studied communities. Our findings highlight similarities and differences across three distinct Kenyan communities. FGM/C appears to persist through two models: first, shifts (changes) in the practice, notably cutting at a younger age, lesser cutting, and

medicalisation as depicted among the Abagusii and Somali communities. Secondly, through stability and consistency with minimal change, as seen in the Kuria community. The two diverse models appear to rely on and sustain social norms that support FGM/C in these communities.

The shifts are an adaptation to the dynamics surrounding FGM/C practice, notably awareness of health complications and legal banning of the practice. The shifts are driven by determinants of social development, health and legal risks, cultural and traditional norms, religious reasons, as well as supply-side factors such as a desire by health care providers to reduce health risks and respond to clients' requests. Medicalisation is not always perceived to be a transitional step toward abandonment but rather a way of sustaining the practice especially considering social determinants that appear to normalise the "modernised" practice of FGM/C in urban settings and a few pockets in the rural areas. Thus, FGM/C interventions should account for these dynamics.

Strategies should be developed to address these shifts for abandonment to be achieved. These should include law enforcement, FGM/C awareness programmes targeting health care providers and the community, involvement of health professionals' regulatory organisations and religious leaders in prevention programmes, and cross border initiatives. Abandonment programmes should also focus on religious factors, social developmental factors, and awareness creation of FGM/C as a health, human right, legal, and religious violation.

Study Implications

The study findings highlight several possible avenues for leveraging positive change:

Training of health care providers

The adoption of medicalised FGM/C underscores the need to target health care providers in abandonment efforts. Health care providers should be trained on FGM/C-related complications, legal and human rights issues of FGM/C, and their role in the prevention of the practice. They should also be trained and supported to offer management interventions for women and girls who have FGM/C-related complications, and to counsel clients against FGM/C. To effectively train health care providers, FGM/C should be incorporated into the pre-service training curriculum and continuous professional development programmes.

Training of religious leaders

Adoption of the *Sunna* cut by the Somali community is linked to perceived religious obligations to undergo FGM/C. Among Christians, on the other hand, despite religious proscriptions against FGM/C, some religious leaders may continue to secretly practise FGM/C to conform to social norms. Religious leaders should, therefore, be targeted in abandonment efforts. Programmes that increase their understanding of FGM/C-related complications, legal and human rights issues of FGM/C, as well as outline their role in the prevention of the practice are warranted.

Awareness creation on FGM/C-related complications

Raising awareness of FGM/C-related complications may deter severe cutting but not promote the abandonment of the cut. Awareness-raising programmes should clarify that cutting at a younger age, mild cutting, and medicalisation are detrimental to health. To ensure wide reach, programmes should use multiple communication channels and should be escalated during school holidays when most FGM/C takes place.

Improved health system monitoring and surveillance system

The findings showed that medicalised FGM/C is primarily conducted at home and in private health facilities. Improved surveillance and regular supervision to monitor and track the activities of these clinics and providers may lower the provision of medicalised FGM/C. In addition, FGM/C complications, incidences, and activities should be monitored at the health service points that interface with women and girls who have been exposed to FGM/C.

Anchoring FGM/C abandonment efforts to the Nyumba Kumi (ten houses) initiative

The Nyumba Kumi initiative—a community policing or neighbourhood watch strategy—has been used with some success to fight crime and improve security. The strategy is premised on community vigilance and monitoring and could be effective in empowering community members to contribute to FGM/C abandonment efforts by identifying girls who have been cut or who are at risk.

Regional integration of FGM/C prevention policies

To prevent cross border FGM/C, notably Kurias of Kenya crossing to Tanzania and Somalis of Kenya crossing to Somalia for cutting, there is need for regional integration of FGM/C prevention and control policies, as well as involvement of local leaders from the communities in neighbouring countries, to develop a working strategy.

Need for further research

Further research is needed to better understand the shifts in the practice of FGM/C and to identify the most appropriate interventions to curb the shifts and improve the health care system's capacity to respond to the management and prevention of FGM/C. In addition, despite the existence of a law prohibiting FGM/C, the practice remains common in some communities. Further research is therefore warranted to understand how anti-FGM/C law enforcement can be strengthened.

Introduction

Background

Female genital mutilation/cutting (FGM/C) is a form of violence, abuse, and violation of human rights against children, girls, and women (Reza et al., 2001; WHO, 2006, 2008, 2016). The practice entails all procedures involving partial or total removal of the female external genitalia or other injuries for cultural or non-medical reasons (Rymer, 2003; WHO, 1997, 2008). There are four defined types of FGM/C (WHO, 1997): partial or total removal of the clitoris and/or the prepuce (although it is actually the glans and/or the body of the clitoris that is cut) (Abdulcadir et al., 2011) (type I); partial or total removal of the clitoris and the labia minora, with or without excision of the labia majora (excision) (type II); narrowing of the vaginal orifice with the creation of a covering seal by cutting, and apposition or sewing together of the labia minora and/or the labia majora, with or without excision of the clitoris (infibulation) (type III); and all other harmful procedures to the female genitalia for non-medical purposes such as pricking, piercing, incising, scraping, and cauterization (type IV) (WHO, 2008). Types I, II, and III are common among practising communities in Kenya (Kenya National Bureau of Statistics [KNBS] and ICF Macro, 2014). Type IV FGM/C (nicking, pricking, and scraping) is increasingly practised (Shell-Duncan, Njue et al., 2018).

The magnitude of FGM/C is largest in Africa and Asia with pockets of the practice found in other continents. FGM/C is practised in about 30 African countries (East, North East, and West Africa), the Middle East, Asia, Latin America, and in some Western nations among migrant populations (PRB, 2013; UNICEF, 2014; WHO, 2008; Yoder et al., 2013). In Western nations, it is primarily carried out during return home (visiting/holiday) trips by diaspora community members (Berg and Denison, 2013; Elgaali et al., 2005). Some cutting is performed by visiting practitioners sneaked into these continents (Europe, North America, and Australia) (Elgaali et al., 2005; Johnson-Agbakwu et al., 2014; Litorp et al., 2008; Moeed and Grover, 2012; Thierfelder et al., 2005). An estimated 200 million women/girls have been cut, while 3.6 million risk being cut each year (UNICEF, 2016; UNICEF et al., 2013).

In Kenya, FGM/C is practised by all except five (Luo, Luhya, Pokomo, Teso, and Turkana) ethnic groups, although to varying degrees. The Kenyan FGM/C prevalence among 15 to 49-year-olds decreased from 37.6 percent in 1998 to 21 percent in 2014 (KNBS and ICF Macro, 2014). However, the change in prevalence varies greatly when broken down by ethnicity and region (Shell-Duncan, Njue et al., 2018). Thus, combined strategies need to be devised and scaled up to prevent new cases of FGM/C as well as mitigate suffering on already cut girls/women in high FGM/C practicing communities.

In many settings, including Kenya, FGM/C has persisted due to various social-cultural factors (Varol et al., 2014). The actions and decision for performing the cut are highly meaningful and are aimed at preserving the valued ways of life for the community. Women undergo FGM/C to gain cultural conformity, social significance, and a sense of identity and respectability as an ideal member of the community (Berg and Denison, 2013). Girls and families of those who undergo FGM/C receive social approval, respect, and honour. In contrast, uncut girls, together with their mothers and the family, are insulted, teased, socially rejected, and their prospects of being married are diminished (Gali, 1997), affecting the ultimate value of being a wife and a mother (Nkrumah, 1999). FGM/C has been, and is, used to control women's sexuality by limiting their sexual desire and satisfaction (Berg and Denison, 2013), and promoting premarital virginity as a guarantee of moral standards and an assurance of marriageability (Berg and Denison, 2013). The practice

predates all major religions and no religion, condones FGM/C. FGM/C is practised by Muslims, Christians, Jews, and people of other religions alike (Berg and Denison, 2013).

Accordingly, for FGM/C abandonment efforts to be successful, interventions need to address the social norms that reinforce the practice. Social norms theory has been used to understand health-related behaviours (Campo et al., 2004; Rah et al., 2004; Scholly et al., 2005), including FGM/C (UNICEF, 2016). According to the theory, practices like FGM/C are associated with social motivations. Beliefs about what others do, and what others *think* people should do, often guide a person's actions in their social setting (Mackie et al., 2015). If a harmful practice is social in nature, then programmes that focus on educating the individual rather than the community, or that increase the availability of alternatives or the provision of external incentives, may be insufficient to modify the practice meaningfully (Mackie et al., 2015). Compliance is inevitable if individuals or families are motivated by expectations of rewards for adherence to the norm (e.g., higher chances of marriageability among the girls of the family), and fear of sanctions for non-adherence (e.g., social exclusion and stigmatisation). Adhering to a community's social norms is, therefore, perceived as important, not only to maintain an individual's acceptance and social status in the community, but to preserve the status of the individual's family. For a beneficial new norm to come into existence, enough members of a group must believe that enough of them are adopting the new norm.

FGM/C has no health benefits, is associated with negative health consequences and poor health indicators (Almroth et al., 2001; WHO, 2006). The health problems associated with the practice include physical, psychological, social, and sexual harms on women and girls, as well as men (Almroth et al., 2001; Vloeberghs et al., 2012). The health effects span from immediate, short, to long-term (Kaplan et al., 2011; Morison et al., 2001; WHO, 2000, 2006, 2008). The consequences attributed to FGM/C portend that the health sector is strategically positioned to be in the frontline of abandonment efforts. The health sector-led abandonment approach should be anchored on a multidisciplinary, multi-pronged model capable of responding to girls and women who have undergone FGM/C as well as preventing new cases of cutting (Kimani et al., 2016). Additionally, FGM/C constitutes violence and abuse against children, girls, and women (Reza et al., 2001; WHO, 2008).

There is evidence that the practice of FGM/C is undergoing three key changes—cutting at a younger age, less severe cutting, and medicalised FGM/C (UNICEF, 2013). Whereas it is unclear why families are choosing to cut daughters at a younger age, emerging evidence suggests that the change could be an adaptation aimed at circumventing health complications (Jaldesa et al., 2005; Shell-Duncan, 2001; WHO, 2010), law enforcement, and resistance to the practice by well-informed grown-up girls (Powell and Yussuf, 2018). However, cutting at an earlier age is more easily sustained when the social norm is changing (UNICEF et al., 2013) and appears to be a new society practice to sustain FGM/C. Surprisingly, the suggestion that cutting girls at a younger age is safe is contrary to the findings by Bjälkander et al. (2012) who found that girls who undergo FGM/C before ten years of age seem to be more vulnerable to serious complications than those who are cut when they are older. However, cutting at a younger age is a poorly documented and understood shift in FGM/C practice. Therefore, it is critical to investigate and understand the shift with a view to developing strategies to curb the practice.

The second and related shift is less severe cutting. This shift has been associated with societal developmental factors such as education and urbanisation (Powell and Yussuf, 2018). Indeed, educated and urban families prefer less severe cutting for their daughters (Islam and Uddin, 2001). This shift appears to take two forms: one is a move from type II or III towards type I or type IV cutting, in which the skin around the genitals is “nicked”, “pricked” or “scraped” rather than deeply cut or removed, for a symbolic cutting to draw blood so that the family and the girl herself can

declare she has undergone FGM/C (Njue and Askew, 2004; Shell-Duncan, Njue et al., 2018). The other is a shift from infibulation to what is termed “*Sunna*” cutting among Muslim populations (Koski and Heymann, 2017). What is described as *Sunna* is unclear, as it refers vaguely to a small amount of cutting or causing of bleeding, and so could be type I, type II, or type IV nicking (Gele, 2013). Clinical evidence also suggests that many women who claim to have *Sunna* FGM/C are infibulated (Johansen, 2017). *Sunna* is generally described as less extensive and harmful than infibulation, often as a “minor cut”, but in practice the term is used to refer to any of the four types (Crawford and Ali, 2014; MOWDAFA, 2012). The shift to less severe cutting appears to be taking root to address FGM/C-related immediate or long-term health complications (Njue and Askew, 2004). The shift is widespread among Eastern Africa Muslim populations that normally practise infibulation and want to sustain FGM/C (Abdi and Askew, 2009). With heightened awareness of health complications associated with “conventional” FGM/C, other communities are likely to follow suit and engage in shifts in cutting. It is, therefore, critical to understand whether this shift influences abandonment strategies.

The third shift is the increasing proportion of girls who are cut by health care providers—medicalisation (Serour, 2013; WHO, 2010). Obstetricians, gynaecologists, paediatricians, midwives, and nurses are commonly requested to perform FGM/C on adult women and girls (Leye et al., 2008; Moeed and Grover, 2012; Purchase et al., 2013; Sureshkumar et al., 2016; Tamaddon et al., 2006; Turkmani et al., 2017). The practice is reportedly performed in hospitals, clinics, homes, or neutral places using surgical tools, anaesthetics, and antiseptics in the hope of mitigating the immediate complications associated with the cutting (Jaldesa et al., 2005; UNICEF et al., 2013; WHO, 2010). Re-infibulation (re-closure of female external genitalia in women with type III FGM/C who have been de-infibulated to allow for sexual intercourse, delivery, and/or related gynaecologic procedures) is often medicalised (Serour, 2010, 2013; WHO, 2010). The justification for medicalisation includes reducing the risk of immediate complications, enabling women to fulfil cultural obligations whilst respecting their rights, and financial gains for the practitioners (Berggren et al., 2004; Njue and Askew, 2004; Pearce and Bewley, 2013; Serour, 2013; Shell-Duncan, 2001). Health care providers may also come from practising cultures and believe that it is an acceptable practice. Medicalisation has, however, been condemned and challenged because it does not prevent long-term medical, psychological, or sexual complications associated with the practice (Kimani and Shell-Duncan, 2018). In addition, it legitimises the continuation of FGM/C among practising communities because the practice is performed by health care providers, who are respected members of society (UNICEF et al., 2013; WHO, 2010).

There is evidence that these shifts are occurring in practising communities in Kenya. Medicalised FGM/C has been documented among the Kisii (Njue and Askew, 2004) and Somali communities in Kenya (Jaldesa et al., 2005), and there is some recent documentation of the shifts in the age at cutting, type of cut, and medicalisation (Shell-Duncan, Njue et al., 2017). Whereas the factors that generally perpetuate FGM/C are well documented, those promoting and sustaining these shifts at individual, family, community, as well as from the health care providers’ perspectives are poorly understood (Modrek and Sieverding, 2016). Understanding whether the shifts mark the beginning of a norm change that could be further shifted towards total abandonment of FGM/C, or whether they represent a hardening of support for the practice is critical for developing policies and programmes that promote total abandonment.

Objectives

This qualitative study sought to understand shifts in FGM/C among families and health care providers from selected Kenyan communities. To achieve this goal, the following objectives were pursued:

- i. To understand the general view of FGM/C practice in the three communities
- ii. To establish the reasons that underpin the practise of FGM/C in the three communities
- iii. To explore families and health care providers' experiences regarding shifts in FGM/C among the three communities
- iv. To explore families and health care providers' experiences regarding re-infibulation among the Somali community

Methods

Study Design

We conducted a cross-sectional, qualitative study anchored on grounded and social norm theories with an objective to understand the shifts in FGM/C, including the medicalisation of cutting in families with cut girls. Data were collected through key informant interviews (KIIs), in-depth interviews (IDIs) and focus group discussions (FGDs). An analysis was conducted to establish the interdependent factors that drive the practice and how they interact to influence on the shifts in the practice of FGM/C.

Study Location (Sites)

The study was conducted in Nairobi (Eastleigh and Kawangware), Kisii (Gucha and Gucha South sub-counties), Migori (Kuria East and Kuria West sub-counties), and Garissa (Garissa township constituency and its sub-counties) counties. The study sites are described as follows:

Nairobi County

Nairobi County is Kenya's administrative and commercial capital. It is the most populous county/city with a population of 2.75 million (World Population Review, 2018). The county has 17 administrative areas or constituencies. The city is cosmopolitan and home to people from diverse ethnic groups. In addition, Nairobi hosts many international organisations and United Nations bodies such as UNEP, UN Habitat, UNFPA, and UNICEF.

The prevalence of FGM/C in Nairobi is much lower (14%) than the national average (21%) owing to urbanisation (KNBS, 2010). Migrants from communities that traditionally practise FGM/C bring the practice with them to Nairobi. Among the communities who contribute substantially to FGM/C prevalence in Nairobi are Somalis, mainly living in Eastleigh, and the Abagusii who are commonly found in Kawangware. The Somalis traditionally practised type III FGM/C (pharaonic circumcision) and possibly re-infibulation. However, recently they have been reported to adopt the *Sunna* cut (Jaldesa et al., 2005; Powell and Yussuf, 2018). The Abagusii practise mainly type I FGM/C, with recent trends of medicalisation, lesser cutting, and early age cutting being reported (Njue and Askew, 2004). The two communities were targeted in this study to answer the questions on shifts in FGM/C and medicalisation of FGM/C, including re-infibulation.

Kisii County

Kisii County is found in the Southern Nyanza region of the former Nyanza province in Kenya. The county is host to the Abagusii ethnic group, which is the sixth largest ethnic group in Kenya, with a population of about 1,152,282 according to the 2009 national census (KNBS, 2010). Over 80 percent of Abagusii are Christians. The community traditionally practised male and female circumcision as rites of passage (Njue and Askew, 2004). However; with the prohibition of FGM/C, girls are cut at a younger age and mostly by health care providers (Njue and Askew, 2004). Despite

extensive FGM/C abandonment efforts, the practice and its prevalence has persistently remained high (86%) among this community (KNBS and ICF Macro, 2014).

Migori County

Migori County in the former Nyanza Province is home to the Kuria community, a Bantu ethnic group. The Kuria community is found in both Kenya and Tanzania. By 2006, the total Kuria population was estimated to be 609,000, with 435,000 living in Tanzania and 174,000 in Kenya. The practice of FGM/C among the Kuria is almost universal with a prevalence of 96 percent. The main reasons cited for FGM/C among the Kuria are that it is a rite of passage and suppresses women's sexual desire; thus, preventing pre-marital sex and infidelity in marriage (28 Too Many, 2013; KNBS and ICF Macro, 2010). In Kuria, the FGM/C ceremony is performed in public on a date decided by the council of elders (Oloo et al., 2011). There have been reports of medicalisation and less severe cutting to reduce trauma (Oloo et al., 2011).

Garissa

Garissa County is found in the former North Eastern Province that is mainly inhabited by Kenyan Somalis. In 2014, the county had a population of close to 700,000 (KNBS and ICF Macro, 2014). The county consists of six administrative sub-counties corresponding to constituencies namely, Garissa Township, Ijara, Fafi, Balambala, Daadab and Lagdera (Garissa County Government, 2018). The prevalence of FGM/C is 94 percent (KNBS and ICF Macro, 2015). In the Somali community, FGM/C is practised to ensure a girl's virginity and purity prior to marriage, which is considered essential for maintaining her family's honour, and to fulfil perceived religious obligations. FGM/C among the Somalis does not play a role as a rite of passage for women (Jaldesa et al., 2005). As the community practises type III FGM/C, many women undergo de-infibulation during childbirth. Following childbirth, many women request to be re-infibulated (Jaldesa et al., 2005). UNICEF has been engaging religious leaders in the abandonment of FGM/C in the area (UNICEF, 2011).

Study Participants

To understand recent shifts in the practise of FGM/C, the study participants included families (fathers, mothers, or guardians) with one or more living daughters aged 0-15 years who had been cut (medically or traditionally), cut women aged 18-49 years, and cut young girls aged 14-17 years. Husbands or male partners of cut women and girls were also included. Participants also included health care providers offering medicalised services (doctors, nurses, midwives, and clinical officers), traditional birth attendants (TBA), and community leaders (diverse professionals, administrative officials, religious leaders, and officials from community organisations), as well as representatives from local non-governmental organisations (NGOs).

Sampling and Sample Size

Participants were selected using combined purposive and snowball sampling based on the principles of qualitative research using FGDs, IDIs, and KIIs data collection methods (Table 1). The FGDs involved groups of 6-12 participants of similar age, gender, and ethnicity. The FGDs were conducted among women of reproductive age, young mothers, older women, young fathers, older men and young girls. The IDIs and KIIs were held with administrative, religious, and community leaders, as well as health sector stakeholders, in each region to give information based on their experience and knowledge. Some health care providers refused to participate in the interviews, possibly because of the illegality of FGM/C. The final sample size was informed by thematic saturation of data during the discussions.

Table 1. Study participants' characteristics by interview type

Characteristic	Communities									Total
	Somali			Kisii			Kuria			
	FGD	IDI	KII	FGD	IDI	KII	FGD	IDI	KII	
Gender										
Male	8	1	14	4	6	8	1	3	9	54
Female	12	3	18	12	26	10	8	7	5	101
Age (years)										
Not indicated	11	4	28	6	2	4	7	1	2	65
below 14	5		2	3	1					11
14 - 17				2	11		2	2		17
18 - 49			1	2	13	10		2	8	36
Above 49	4		1	3	5	4		5	4	26
Education										
Not indicated	19	4	17	16	26	11	9	8	3	113
Primary								2		2
Secondary					3					3
Tertiary	1		14		2	7			11	35
Marital status										
Not indicated	18	3	28	15	1	5	9	1		80
Not married			1	1	12	3		2	1	20
Married	2	2	2		19	10		7	13	55
Religion										
Not indicated			4							4
Islam	20	4	27							51
Christians				16	32	18	9	10		85
Profession										
Not indicated	16	4	8	16	18	7	9	10	6	94
House wife		1								1
Healthcare Providers	2		14			4			3	23
Chief			3			2			1	6
Business			2		8					10
Religious Leader	1		3			2			2	8
Students	1				6					7
Politician			1							1
Teacher						3			2	5

Recruitment and Interview Procedures

FGM/C is a culturally sensitive issue, with legal implications because it is prohibited under the Kenyan FGM/C Prohibition Act of 2011. Locally networked community-based organisations and individuals, as well as local administrators, helped recruit the study participants. In addition, families and health care providers who participated in medicalisation were identified through snow-ball sampling. Once participants were identified, the researcher approached the household head or the facility administrator, explained the purpose of the research, and obtained permission to conduct the study. Potential participants were assured that all information provided was to be treated with confidentiality and all discussions and interviews were conducted in private spaces

and at times convenient to the participants. FGD participants' demographic characteristics were recorded on a self-completed participant record form. The FGDs, IDIs, and KIIs were conducted in local languages by trained locally-recruited research assistants of the same ethnic group as participants.

Ethical Considerations

Ethical approval for the study was granted by the Population Council's Institutional Review Board, the Kenyatta National Hospital-University of Nairobi Ethics and Research Committee, and the National Commission for Science, Technology, and Innovation (NACOSTI). In addition, permission to carry out the study was granted by local administrators in each county. Study participants aged 18 years and older granted informed consent, while assent was obtained for participants younger than 18 years. Participants were informed about the study and measures taken to ensure the confidentiality of information shared. They were also informed that they could withdraw from the study at any time. Interviews and discussions were audio recorded with permission from the participants.

Data Management and Analysis

Demographic data were entered in anonymised form into password-protected Excel spreadsheets and descriptively analysed. Digital audio recordings of the group discussions and interviews were subjected to a multi-stage transcription translation process to ensure data quality. First, recordings were transcribed verbatim by experienced Kisii, Kuria, and Somali-speaking transcribers. Second, the anonymised transcripts were independently reviewed by target language-speaking translators, checking the transcripts against the original audio recordings for accuracy, spelling, and content. Any differences detected between the two formats were identified, discussed, and resolved between the original transcription and the translator. Third, finalised transcripts were translated from Kisii, Kuria, and Somali to English by bilingual translators. A sample (10%) (n=15) of the transcripts were reviewed by three independent reviewers and differences between the original English translation and the reviewed samples were identified and anomalies discussed until consensus on accurate translations was achieved. The finalised translated versions were then subjected to qualitative analyses.

The framework method for qualitative content analyses was adopted for this study (Ritchie et al., 2013). The framework method is appropriate for thematic analysis of textual data, particularly interview transcripts, where it is important to compare data by themes across many cases (Gale et al., 2013). This approach combines deductive and inductive analyses of textual data with the flexibility to adapt emerging data and produce a coding framework or 'template'. The themes/codes were selected through a combined approach: deductively based on previous literature and the specifics of the research question from the interview guides, as well as inductively generated from the obtained data in the transcripts, followed by their refinement.

The principal investigator and three research analysts jointly developed a thematic coding framework through analysis of the study instruments and reading of the transcripts to reconcile and gain insights on emerging issues. The team reviewed the framework and definitions of each theme/code for consistency and understanding before commencement of coding using NVivo 11® (Bazeley, 2007). Data were first coded with descriptive labels, then categorised into "code families" based on identified patterns. Each analyst coded two transcripts to check the effectiveness of the coding framework. The team then refined the final coding framework that was used in the subsequent analyses. The analysts were then assigned the remaining transcripts. Issues emerging during coding were addressed in regular meetings. Researcher triangulation (using three data

analysts) and method triangulation (using three different interview types [IDIs, KIIs, and FGDs]) were used to ensure the methodological rigour and trustworthiness of the study data. Inter-rater coding reliability was assessed by having analysts code a random sample of two transcripts coded by another analyst. Differences in coding were compared, discussed, and integrated by consensus.

Results

The findings are presented and structured on the following FGM/C themes: reasons why families practise FGM/C; general context of FGM/C in the three communities; shifts in FGM/C; and experiences with re-infibulation. We compare findings across the three ethnic groups.

Reasons Why Families Practise FGM/C

FGM/C is a culture and tradition

Although the national prevalence of FGM/C in Kenya is declining, the practice remains pervasive among the Abagusii, Kuria, and Somali ethnic groups (KNBS and ICF Macro 2015). As illustrated in the following quotes, participants suggested that the practice persists because it is a cultural and traditional practice passed through generations. As a member of the council of elders from the Kuria community explained with an angry tone, *"FGM/C is a culture and tradition we have to respect. It was a tradition from our forefathers meant for both boys and girls. It is very bad when you talk of abandoning our culture."* FGM/C is therefore anchored on community social norms, which are strong and influential to the family as the custodial unit as indicated below.

"FGM/C is a cultural and traditional practice, we found it being done by our forefathers and people are still doing it. It is deeply down engraved in our roots, which is not bad."

Woman, FGD, Kawangware

"FGM/C is a cultural thing that people can't do away with. I personally have three girls and two of them have already undergone FGM because if you have daughters you have a responsibility to follow the cultural practice"

Married Man, IDI, Eastleigh

In addition, as illustrated in the following quote, among the Abagusii, cutting was also suggested to confer identity, thus differentiating them from their non-circumcising neighbours, the Luo and Luhya communities.

"The Kisii say that they cannot marry an 'egesagane' (uncut woman). They used to equate the uncut girls to 'Omogere' (the Luo). Let the Kisii girls be cut so that they can be married, so that they don't become like our neighbours."

Elderly woman, IDI, Kawangware

FGM/C is performed as a religious obligation

Neither the Abagusii nor Kuria participants highlighted a religious basis for FGM/C. In contrast, many Somali participants explained that FGM/C is practised for religious purposes. However, there were varied views on whether FGM/C is obligatory for Muslims. Many agreed that *Sunna* cutting—which was often described as a milder form with few complications—is supported by religion as described in the hadiths of Prophet Mohamed, while the pharaonic cut (infibulation) was described as a cultural practice passed down generations. Some of those who viewed FGM/C as a practice that was supported by religion believed that girls who have undergone FGM/C are purified and are able to pray. A few participants, however, noted that all types of FGM/C are prohibited in Islam and that no part of the Quran supports it. According to them, the lack of a religious basis for FGM/C

had resulted in the abandonment of FGM/C by some people in the community. The differing views around FGM/C as a religious practice among Somali participants are illustrated in the following quotes:

“If we follow the hadith, the top most part of the clitoris is to be cut to make blood come out, this has no problem. It is the Sunna of the prophet (Peace Be Upon Him [SCW]).”

Older man, FGD, Eastleigh

“The religious leaders have talked against pharaonic cutting, they say it should be stopped. They believe in the Sunna, the Sunna of the prophet and now that is what the girls go through, the Sunna of the prophet (SCW). Only little blood is removed from the girl and after two days they just start walking.”

Married man, IDI, Eastleigh

“Traditionally FGM/C has to continue, religion has not spoken about it clearly in the Quran, its only talking about the baby boy. The religious leaders say there should be no FGM/C because God would have stated in the Quran. Sunna/lesser cutting has to do with religion, most people believe religion says it’s the best.”

Male, community leader, KII, Eastleigh

“It is a religious thing for us, our Prophet (Glory to Him, the Exalted) and his companions directed us to do the Sunna type, and, also, it is part of our culture.”

Male, religious leader, KII, Eastleigh

FGM/C is performed as a rite of passage in Kuria

Most Kuria participants stated that FGM/C is a rite of passage marking the transition from childhood to adulthood. As a grandmother who participated in an IDI in Kuria noted *“Circumcision has been there and every woman has to pass through it before being married and for her to be called an adult.”* As illustrated in the following quote, participants explained that undergoing the practice also gives girls a sense of belonging with peers who undergo the rite at the same time:

“We do get a hard time in barring our girls from FGM/C because our age-sets demand that we should give them ‘ekenama’ (the thigh meat of a cow). This meat is only shared during that occasion (FGM/C) and is highly valued by the age-set members. It welcomes and brings together all the age-set members. A cow is slaughtered and one whole thigh is given to them only. They eat and celebrate as a sign of belonging and togetherness among their age-set members. The uncut girls are isolated from mingling with the circumcised ones during social functions like the traditional ceremonies.”

Married woman, FGD, Kuria

FGM/C enhances marriageability

Across the three communities, FGM/C is regarded as an important prerequisite for marriage. Women and girls who are cut are considered mature, respectful, and faithful in marriage. As illustrated in the following quotes, cut women and girls are considered to have better marriage prospects and, in some instances, women who are uncut at marriage are reportedly cut during childbirth:

“The Abagusii people believe that when a girl is cut, that’s when she can find a husband...In our culture someone could not marry a girl who is not cut, it will mean that you have married a child. Yes, some say they won’t marry uncut girls, commonly known as ‘egesagane’, (laughs) meaning she does not have respect.”

Married man, FGD, Kawangware

“Those who are cut are the ones who have an upper hand for getting married within the community.”

Married woman, FGD, Kuria

“What I heard is that Somali men prefer to marry women who have undergone FGM/C and also the Somali community believes that a woman who has undergone FGM/C is respected. If a woman did not undergo FGM/C it is very shameful to the community and no one will marry her. The main reason is for the girl to get married and gain respect from her husband because if the girl undergoes FGM/C, and she still has those stitches done during the cutting, the husband will trust her.”

TBA, KII, Eastleigh

“For the woman who is married uncut, when time for her to give birth comes, she had to be cut.”

Married man, FGD, Kawangware

“If they marry an uncut woman, when she goes to the hospital to deliver she would be cut by the birth attendant.”

Elderly woman, IDI, Kawangware

FGM/C is performed for fear of negative sanctions

The participants suggested that there is intense social pressure exerted by the community for girls to undergo FGM/C. Claims that girls and women who are uncut are discriminated against and stigmatised were commonplace. Participants noted that girls who have not undergone the cut are reportedly called derogatory names, disrespected, and shamed. The fear of stigma was said to put pressure on girls to undergo the cut to gain respect in the community. The important role that social pressure, stigma, and fear of sanctions for violating social norms play in driving FGM/C is illustrated in the following quotes:

“If a girl is uncut she is called names in school. My sister used to perform medicalised FGM/C, and she was once called to go cut some twins somewhere. Their parent, who was a police officer, had already said that his girls could not be cut. But the girls used to be called names in school by the other kids, especially when they play. Those girls were already big, and they were being beaten by the cut girls. So, when they heard that the cutter was somewhere cutting some other girls, they escaped from their home at night without their parent’s knowledge and they went for the cut.”

Female religious leader, KII, Kisii

“Our girls get a lot of peer influence and pressure from those who have already undergone FGM/C. This happens against the wish of many parents and especially after the anti-FGM/C seminars have ended. The cut girls harass and abuse the uncut girls whenever they happen to meet. This then makes it difficult for us as parents to convince girls not to undergo FGM/C. We get more pressure from our age-set... Then as the parent you are forced to take your young girl for FGM/C before she is mature enough.”

Married woman, FGD, Kuria

“Girls that are not cut are subjected to stigmatisation. She is abused by her age mates and can even end up dropping from school. To the mother, the advantage is that her daughter will not get stigmatised or insulted. She will get respect since she is grown up. He will be convinced that he has got a virgin girl”.

Female traditional cutter, KII, Garissa

FGM/C prevents sexual immorality (enhances sexual restraint)

Participants from the three communities noted that FGM/C ensures girls’ sexual purity. Interview findings suggest that it is widely believed that cutting the clitoris lowers girls’ libido and prevents premarital sex, immorality, or prostitution. Sexual purity was often highlighted as an important prerequisite for marriage that would confer dignity on the family. Participants from the Somali community noted that infibulation, in particular, is considered a marker of virginity and purity. As such, some participants claimed that infibulated girls easily get married while uncircumcised girls

lack suitors or are divorced on their wedding night upon the discovery that they have not been infibulated.

"I have interacted with the community, and the various groups, that is, the council of elders, the mothers, men, and the young people. FGM/C is still seen as it reduces the sexual urge of the girls."

NGO representative, KII, Kuria

"For those supporting FGM/C, they know if a cut girl is married she won't be promiscuous because those are their beliefs."

Young cut woman, IDI, Kawangware

"The advantage for the young women is that it helps them maintain their purity and virginity. If women are not cut, they will sexually misbehave with men in daylight. For the young women, if the cut is not observed the libido is high and can lead them to such activity at an early age."

Older man, FGD, Eastleigh

"Men come from different parts of the world to get a good girl and when girls are taken to the hospital for de-infibulation this is a sign that shows she is a virgin. This makes men believe that she is a virgin."

Husband, FGD, Garissa

"The reason for FGM/C is to show that the lady is safe from other men (virgin) before marriage. When meeting with her husband, he will easily identify that she has never slept with other men before him."

Male Muslim cleric, FGD, Garissa

"The community belief is that if a girl is not infibulated during the marriage she will be divorced because the man will say they have not brought a virgin girl to him."

Female traditional cutter, KII, Garissa

FGM/C is a source of income for cutters and council of elders

Some participants noted that FGM/C is a source of income for the cutters, including health providers offering medicalised FGM/C. As illustrated by the following quotes, some of these participants reported that medicalised FGM/C boosts health care providers' income, which incentivises them, in some cases, to convince parents to cut their daughters:

"FGM will not end because it's like a business to the doctors who cut. It comes to a point where the parents take their girls to the doctors and to them, that's money."

Older woman, FGD, Kawangware

"The health workers are doing FGM/C for money. You are given money by parents and they convince you to cut their girls."

Nurse, KII, Kisii

However, some providers were noted to secretly offer medicalised FGM/C because they feared negative sanctions from the community. Further, as illustrated in the following quotes, for some providers, agreeing to perform FGM/C was also reportedly driven by a desire to reduce the negative impacts of the practice, even when they were aware of the illegality of the procedure.

"Some do it for business purposes and some are enlightened with knowledge about FGM/C and they want to help reduce the risk of FGM/C."

Healthcare provider, KII, Garissa

"Their [clients'] opinion is based on their reasoning that the person performing the procedure is the person looking for money. But our motivations were quite clear, just to prevent a major harm, bigger harm."

Clinical officer, KII, Eastleigh

“When we were doing it, we did not care about the illegality of the law because we knew that this is a procedure we were doing at the clinic and we were not advertising it. We were doing it after we’d counselled the mothers not to do it and we only went ahead with it to prevent a major risk or a major harm.”

Clinical officer, KII, Eastleigh

Related to income, the participants from Kuria community suggested that, the council of elders benefited substantially from organising FGM/C activities. Thus, the council was noted to perpetuate FGM/C to maintain a steady income. Women in an FGD in Kuria also noted that the council of elders threatens those who oppose FGM/C because of the financial benefits linked to the practice. The views around financial incentives underlying FGM/C are illustrated in the following quotes:

“The council of elders strongly support FGM/C as they consider it as their source of income. And they threaten those who are trying to oppose it.”

Married woman, FGD, Kuria

“To some extent, today, it is a kind of commercial excuse to hold this practice. Like the council of elders benefit financially during the process of FGM/C, and this is the key factor for FGM/C perpetuation.”

Government officer, KII, Kuria

“The council of elders, in some way, they look at it [FGM/C] as a merry exercise where they can eat, dance, and enjoy. Now like the elders here are telling me that there’s no cutting, they say ‘hunger has increased’”.

NGO representative, KII, Kuria

Abandonment of FGM/C is associated with religion, social factors, and awareness

Some participants from the three communities noted that some families were abandoning the practice of FGM/C. Proscription of FGM/C by the Christian church, increased awareness of the negative health consequences of FGM/C, and higher levels of education were cited as reasons for the increasing abandonment of the practice. Abandonment was reportedly more common in urban areas. Further, participants’ responses suggested that increasing levels of abandonment meant that those who chose to abandon the practice faced fewer negative sanctions. Participants’ views about abandonment are illustrated in the following quotations:

“But now there are alternatives such that if a person decides not to cut her girls, it becomes normal because it shows that she has gone the Christian way.”

Married man, FGD, Kawangware

“Some have stopped, like most of the people who live in towns have not cut their daughters because they’ve got some know-how of its problems. For example, I have a sister who lives in Nakuru and has a daughter, she has decided to leave her daughters like that.”

38-year-old father of a cut girl, IDI, Kawangware

“FGM/C is in most cases, common in the rural areas, but in town it’s hard to find it because already most people know and are aware about the repercussions (health consequences) of FGM/C, but in the rural areas most of them don’t know.”

Young woman, FGD, Kawangware

“The families that are into religion, go to church and those that are educated are not practising FGM/C on their daughters.”

Male nurse, KII, Kuria

“Yes, as we are talking there are those families which have abandoned FGM/C in the Kuria community. Also, the numbers of girls who are joining learning institutions are increasing.”

Male health care provider, KII, Kuria

“Yes, I have a few personal experiences with FGM/C. Families are refusing to allow their girls to be cut. Education has enlightened people, making most of our girls not view female cutting as an important practice. It is only a matter of time until female cutting will end.”

Father of cut girl, IDI, Kuria

“Those declining to perform FGM/C are mainly from families that understand the difficulties/complications that come with FGM/C.”

Male nurse, KII, Kuria

“FGM/C has changed a lot and it is ending, totally. And this is because of awareness creation/campaigns from NGOs, doctors, and the religious leaders - all of them made people aware of the effect of the FGM/C. The problems are urine retention and periods retention, de-infibulation at marriage, death, and after birth death, that's why people abandoned it.”

Male Somali, IDI, Eastleigh

“I have seen families whose daughters are not circumcised, and I am happy with our effort as an organisation. We started efforts against FGM/C in 2006 and we are seeing a lot of impact. So many women are delivering in our hospitals who are not circumcised, and we don't see complications like before.”

Health care provider, KII, Garissa

Context of FGM/C in the Three Communities

Hidden nature of FGM/C practice

Although FGM/C is prevalent, participants noted that the practice is often conducted in secrecy because the practice is legally prohibited in Kenya. As one young woman who participated in an FGD in Kawangware noted, *“For those saying circumcision is not there, they are lying because it's done secretly. They do it secretly without people knowing. Outsiders do not know that it is done.”* Some participants also suggested that medicalised FGM/C is also conducted in secrecy presumably because of the anti-FGM/C law. Indeed, most health care providers were hesitant to disclose whether they or their colleagues performed medicalised FGM/C, while others stated that they knew of colleagues who performed it. For example, a nurse in Eastleigh noted, *“Other health workers maybe outside this facility, I hear there are people who do it, but I don't know where they go to do it - in the women's home or they may have a clinic. I don't know where and how they do it.”* Some providers indicated that they did not or no longer performed FGM/C because professional bodies are against medicalised FGM/C and could withdraw the licenses of those providers who offer medicalised FGM/C. As one nurse in Kisii noted, *“I decided I don't want to continue as I heard there is penalty and a fine for practicing FGM/C. Your practice license can be withdrawn if implicated in medicalised FGM/C.”*

The need to maintain secrecy was also noted to have resulted in changes in the ceremonies that surround the actual cutting. Among the Abagusii and Somali, girls are reportedly cut individually rather than in groups and ceremonies are confined to the immediate family. As a health care provider who participated in an KII in Eastleigh explained, *“Yes, when we were young FGM was done during holidays, with many children being cut together, but nowadays it's you and your family and even your neighbour will not know a girl was cut in that house. There is secrecy not like before when we were young.”* Further, as one young cut girl who was interviewed in Kisii explained, some girls in the Kisii community were reportedly cut alongside boys to keep the practice secret. Describing her experience, she said, *“We were told that there were boys going to be circumcised and we [girls] were hidden among them. The people cheering thought that there were only boys going to be circumcised. This was done because girls are not supposed to be circumcised.”*

Conversely, girls from the Kuria community are still cut in group ceremonies reportedly in public spaces, such as in the forest or shrines (referred to as 'Kibega') that are identified by the council of elders. A programme manager working with an NGO in Kuria explained; *"Personally, I have not been to where they do it, but I am told they do it in a forest. It is in a secluded place where girls are taken very early in the morning and have it done on them. The place appears "holy" to them and is chosen by the elders."*

FGM/C is conducted during school vacations

In the three communities, participants reported that girls are usually cut during school holidays. The December holiday, which is the longest school vacation (8 weeks), was reported to be the most preferred because there is ample time for girls to recover and cutting ceremonies could be disguised as Christmas festivities.

Urban girls are sent to rural areas for FGM/C

The participants suggested that some of the girls who are due for cutting were taken to their rural ancestral home for cutting. This could be because of respect for traditions, bonding with extended family members and relatives, as well as availability of cutters who are more available in rural than urban settings. In the urban setting, the cutters may be few and the family of the girl may fear questioning from non-cutting communities on the whereabouts of their daughter. In the rural areas, secrecy can easily be maintained because law enforcement is not very strict, while homogeneity of community members may offer a perfect ground to conceal the practice. This pattern was mostly reported by Abagusii and Somali participants as expressed by the quotes below:

"For those with girls in Nairobi they take them to the rural area for cutting, or they get female doctors (from the Kisii community) to cut the girls."

Father of a cut girl, IDI, Kawangware

"Even if we have migrated to Nairobi, when it comes to cutting season, I will carry my daughter to the village for FGM/C and when we are done we will come back to the city."

Married woman, IDI, Kawangware

"Those in towns send their girls from town to the rural area for cutting. To some extent this has become a challenge to ending it completely."

Nurse, KII, Kisii

"Nothing can change the cutting of girls because people come all the way from Nairobi to rural areas to circumcise their daughters."

Young man, IDI, Eastleigh

"Parents run away with their children deep into the villages for the cutting of their girls and everybody will do it in a secret way."

TBA and cutters, FGD, Garissa

Prohibition of FGM/C promotes cross-border FGM/C activities

Some participants explained that there was cross-border FGM/C activity among Somalis of Kenya and Somalia, as well as between the Kuria of Kenya and Tanzania. As illustrated in the following quote from a government officer in Kuria, cross-border FGM/C was cited as a response to the criminalisation of the practice and strict enforcement of the law in Kenya: *"Some girls cross over the border to Tanzania for cutting when the law is very tough here in Kenya."*

Monetary costs of FGM/C increases with risk and type of performer

Some Abagusii and Somali participants suggested the cost of medicalised FGM/C is between 300 and 1,000 Kenyan Shillings (KES) (~3 to 10 US dollars in 2017). The cost was reported to have increased over time because of the risk involved, as the practice is illegal. Explaining the

association between the cost and the illegality of FGM/C, a project manager with an NGO in Kisii stated, *“I knew about a figure of 500 shillings and then I was told that the fee was hiked to 1,000 shillings because the business is now risky [because of the law] so they pay more so that in case the cutter is caught he/she will know how to behave [give a bribe to the law enforcers].”*

Some participants noted that the costs are lower if there is a high number of girls to be cut. The cost is also reportedly dependent on whether the cut is done by a traditional cutter or a health care provider. However, there are differing views on which cutter is cheaper. Many Abagusii participants noted that traditional cutters are cheaper than health care providers, probably because the demand for their services is declining in the advent of medicalisation. In contrast, Somali participants noted that traditional cutters are paid more than health care providers. The reasons for the traditional cutters being expensive were not given but it is possibly because they are experts and considered experienced in carrying out the cutting as the culture dictates. These views are illustrated in the following quotes:

“The doctor was paid. We were a group of us so we each contributed something small but if you were alone you could pay up to 1,000 KES but since we were many we paid 500 bob (KES) each and the doctor made their cash.”

Young girl, FGD, Kawangware

“The traditional cutters are paid up to 3,000 – 4,000 KES, more than doctors/health professional who even take 500 KES.”

Male community leader, KII, Eastleigh

Preference for experienced FGM/C practitioners

Narratives from Abagusii and Somali participants underscore the importance of experience and a history of performing “problem-free” and “painless” FGM/C as criteria for selecting a practitioner to perform the cut. Experienced cutters were described as “retired nurses” with more skills and knowledge, and older women who “could cut like nurses”, “have a good reputation,” or who had experience “cutting lots of girls.” Some participants from the community suggested that “doctors” did not have the training and experience to perform FGM/C as expressed by an old man from Garissa in an FGD, *“Doctors don’t know how to circumcise because that is not their profession.”*

As illustrated in the following quotes, experienced cutters are reportedly referred to people from other families.

“The cutter is usually a referral, based on what people say about her cutting; if she cuts off everything or if she removes only part of it; then you will select the cutter depending on which type of cut you want for your girl.”

Young mother of a cut girl, FGD, Kisii

“Somebody who has already circumcised the daughters of my neighbours and I have full information of the person. If people are living together then you can inquire and know who does a certain thing which makes it easy to select a qualified circumciser. If I heard that she is someone who is good in doing the job and has the experience to perform it.”

Married woman, FGD, Garissa

“You must ensure he is respected, and he has been doing this for several years and that you have never heard of any problems from the people she has cut, that none of them have bled to death or become sick. They should have enough experience because there are those that can cut your daughter and she doesn’t heal.”

Older woman, FGD, Kawangware

Experience was also tied to lineage, with some participants noting that the role of being a circumciser is passed down from one generation to the next. As illustrated in the following quotes,

the centrality of lineage was particularly noted among the Kuria, among whom the council of elders decides who becomes a circumciser:

“The council of elders normally use the lineage “obokoo” of the descendants. If, for example, a grandfather was a circumciser, then the probability of his grandchild inheriting is high. The council of elders “wazee wa kimira” uses that criteria to get a circumciser in our community. Once you are selected, you have no objection since it’s a taboo to deny that duty.”

Older mother of a cut girl, IDI, Kuria

“The council of elders “wazee wa kimira” choose the circumciser according to inheritance patterns of the circumcisers’ descendants.”

Cut woman, FGD, Kuria

The amount of money one charged was also an important consideration when selecting a circumciser. As a young mother of a cut girl in an FGD noted *“It depends on the type of cut and the price they charge”*. Older women in an FGD in Eastleigh also noted that people preferred circumcisers who charged less.

Care seeking for FGM/C-related complications varies

Participants suggested that in case girls developed FGM/C-related complications after the cut, they would seek help, first from the cutter who could either be a medical or traditional practitioner. Among the Kuria, however, girls who experience FGM/C-related complications reportedly seek help from the council of elders who use herbs in managing the problem, as well as perform some rituals. However, in all three communities, those with severe complications would seek care from health facilities.

“It is the cutter that is called and asked what he did wrong, and he/she looks for medicine and treats the girl at home. When it becomes too complicated, the cutter tells you to look for a doctor to treat your daughter.”

Community women leader, KII, Kisii

“They only go to hospital because they don’t have any other alternative.”

Female assistant chief, KII, Eastleigh

“If the girl is bleeding excessively, they will be taken to the same council of elders or to the local healers. When the condition becomes more critical, they are taken to public hospitals for management. Those who trust those herbs, it works with them. But mainly the victims will end up being taken to hospitals from the elders.”

Male chief, KII, Kuria

Shifts (Changes) in FGM/C

The participants’ narratives suggest that the practise of FGM/C is changing. The main changes or shifts are cutting at a younger age, less severe cutting, and the medicalisation of FGM/C. These changes are reportedly common among the Abagusii and Somali communities. The participants suggested that the changes are strongly supported by women, as they enforce cultural compliance, avoid resistance by the girl, and supposedly prevent FGM/C-related complications. Among the Kuria community, the changes are reportedly not very common except for lesser cutting, which was suggested to be supported by the council of elders and women. In the following sections we summarise the findings related to the shifts in FGM/C.

Cutting at younger age

The participants suggested that the Abagusii and Somali girls were reportedly being cut at a younger age than previously, with most cut by the time they are aged 13 years. According to participants, the shift to cutting at a younger age stemmed from perceptions that cutting girls when they are younger prevents FGM/C-related complications, overcomes resistance associated with physical strength and intellectual development, as well as facilitates faster healing. According to some participants, older girls could resist the practice while younger girls were thought to be more likely to comply with their parents' instructions and are not fully aware of the dangers of FGM/C. The risk of bleeding was also thought to be lower for younger girls, while the procedure was perceived to be easier and less painful because the clitoris had not "hardened." This shift is also linked to the need to conduct FGM/C in secret, presumably because of the anti-FGM/C law, as younger girls are perceived to heal faster and are less aware of what is happening. These views are illustrated in the quotes below:

"The difference is that back in the old days, girls were cut having reached a certain age, and they were a little mature but these days, because it is being done secretly and to keep it secret, the girl is cut when she is still very young and doesn't know what is happening."

Married man, FGD, Kisii

"The cutting of younger girls prevents them from feeling the pain than older girls of above 13 years. Also, you are the one who directs her, and you cannot direct her when she is over 13 years. Another thing is, these girls of seven to ten years old, can heal faster and have few complications than older girls"

Older woman, FGD, Kawangware

"At an older age they will not accept to be cut. If not circumcised at a tender age, the place [clitoris] will increase in size and become strong and to cut it will be a problem because of the hardening of the clitoris. At the age of sixteen or eighteen they cannot be circumcised because they will feel more pain and cannot withstand the pain unlike young girls of age six."

Married woman, FGD, Garissa

Among the Kuria, cutting at younger ages was not observed as most of their girls were reportedly cut when aged 12 to 17 years. The relatively higher age at cutting for Kuria girls was reportedly because FGM/C is performed as a rite of passage; a transition from childhood to adulthood. As such, Kuria girls are "ready" for marriage after FGM/C. Even then, as noted by married women in an FGD in Kuria, FGM/C would not occur after 18 years "because of the risk of getting married or pregnant before FGM/C (laughing)."

Less severe cutting

Participants' narratives suggest shifts to milder forms of FGM/C in the three communities with girls reportedly undergoing clitoridectomy (type I) or nicking or pricking (type IV). Some participants also considered these milder cuts to be symbolic or "superficial". As illustrated in the following quotes, the shift to milder forms of FGM/C is reportedly to reduce/prevent the health complications associated with cutting and to shorten the recovery period.

"In the Kisii community, the whole clitoris used to be cut, which was a deep cut that caused a lot of complications on girls, sometimes leading to death. But because of the realization of these complications, they started removing only the tip which is done currently with fewer problems."

Project manager with NGO, KII, Kisii

"In the past they used to remove the whole clitoris but nowadays they only cut the tip of it, just superficially. Nowadays it's like they're not being circumcised."

Male village elder, KII, Kuria

"Some say the mothers have gone through torture, when having menses, they get very sick, when having coitus, they get very sick, when the man is breaking their virginity, taking several nights disturbing them. It is better with less cutting. There is my aunt who has been doing FGM/C, but she said she will do lesser cutting."

Mother of young uncut girls, IDI, Eastleigh

"I have seen where one was being cut, I even wondered if that was how I was also cut (all laugh), they cut something very small. I didn't see the difference of whether she was cut or not. The girl didn't shed any blood."

Old woman, FGD, Kawangware

"Usually some very small part of her clitoris is removed, it is just like blood coming out. It's not that something is removed, you can circumcise a girl and by evening she can be fine, running and doing her own things."

Mother of cut girl, IDI, Kawangware

Although a shift from pharaonic circumcision (type III) to the *Sunna* cut was reported by Somalis, the shift was reportedly more common in urban areas. Feedback from participants suggested that there are varied definitions for *Sunna* circumcision. According to a TBA in Eastleigh, in the *Sunna Kabir* cut *"the tip of the clitoris is removed (she demonstrated with her fingers) then the two lips [labia minora] are stitched together with a thread"* while in the *Sunna Saqir* cut *"the clitoris is removed and then they do not stitch."* This explanation underscores the divergence in the meaning. Indeed, *Sunna* could mean types IV, I, II or even type III FGM/C unless verification through clinical examination by a competent clinician is conducted.

"Currently we are doing Sunna, something that does not involve anything. You just make her bleed a little, but you don't cut it or destroy anything, it is only to show that the girl is circumcised, and it is acceptable."

Religious leader, KII, Garissa

Women who had undergone a milder form of FGM/C were reported to have "sexual desire" for their spouses, experienced less pain during intercourse, and were less likely to experience health complications. Thus, participants claimed that men found sex with these women more pleasurable. For women, a milder cut enabled them to meet societal or religious expectations for circumcision without negatively impacting their marital sexual relations as demonstrated by quotes below.

"Lesser cutting will be advantageous for a husband. They say when someone is complete, the person will be so romantic. They say it's less painful during sex."

Community leader, KII, Eastleigh

"The women with lesser cut has desire for her husband. A husband gets a wife who can satisfy him and did not go through major cutting. To the women the lesser cutting is compliant with religion, she has desire for her husband, and sex becomes easy and pleasurable. She won't have problems in future, neither will she need hospitalisation"

Religious leader, KII, Eastleigh

"To women with lesser cutting has a lot of benefits. If she is done the Sunna way she will meet [make love] her husband in the normal way."

Young male, IDI, Eastleigh

FGM/C is performed by health care providers (medicalisation)

Participants from the communities reported that FGM/C is sometimes performed by health care providers (doctors, nurse-midwives, and clinical officers) at home or in a health facility. Medicalised

FGM/C is reportedly more common in urban areas than rural areas and is driven by beliefs that it reduces the risk of health complications (or ensures that they are addressed in a timely manner), shortens the recovery period, reduces the spread of communicable diseases, such as HIV, is discreet, and enables women to give birth normally.

“A nurse does the cutting, because one can encounter a big problem and she will address it. She will stitch the girl if there is a problem like bleeding, and she gives her medicine.”

Mother to cut girls, FGD, Eastleigh

“There are medications doctors are giving/applying to the girl such that after one week she is healed. That is why women prefer the doctors since after one week she will be healed.”

Community women leader, KII, Kawangware

“Right now, FGM/C is safe compared to the past because of being performed by doctors. Transmitting of diseases is reduced, and other things like bleeding are less likely because dressing is done to them.”

Married man, FGD, Kawangware

Few health providers disclosed that they performed FGM/C or had done so in the past. Some of the providers explained that clients who sought medicalised FGM/C came from all socioeconomic backgrounds and that the procedure was either done at the girls' homes or in a health facility. A nurse in Kisii explained, *“Both educated and non-educated people, like teachers, come with a vehicle to pick me to go cut their daughters. Both the rich and poor come for my services.”* Providers further noted that families who seek their services find medicalised FGM/C safer. In describing the procedure, many described performing “minor” cuts in response to clients' demands. Some providers also stated that they first counselled the client against undergoing FGM/C and only performed the cut if the client insisted.

“Yes, I have performed medicalised FGM/C. I would like to call it female genital modification or a less severe form or the Sunna. I have not done it for the last five years. I practised medicalised FGM/C a few times in form of Sunna (clitoridectomy).”

Clinical officer, KII, Eastleigh

“The procedure of cutting a girl involves several steps; we were taking a client and putting them on a bed or a couch inside the facility, undressing them, cleaning the area with surgical spirit and cotton, giving [injecting] local anaesthesia, mainly lignocaine, and then we were making a horizontal cut and doing a suture, a single suture just to stop the bleeding.”

Clinical officer, KII, Eastleigh

“For us it's more of like I said earlier; doing a less severe form of FGM/C. We mainly focused on providing counselling and educating the mothers who were coming to our facility on the effects of severe forms of FGM/C. If we failed to convince them to abandon FGM/C, we would decide to perform a less severe form of FGM/C.”

Clinical officer, KII, Eastleigh

“When it is done by medics under medication, the probability of having severe complications is very minimal. If there are complications, the probability of solving them is very high so there will be a possibility of less complications.”

Clinical officer, KII, Eastleigh

Some participants suggested that medicalised FGM/C could be a response to the law prohibiting the practice because it allows FGM/C to be performed in secret. As a 40-year-old woman who was interviewed in Kawangware noted, *“medicalised FGM/C allows families to cut and hide their girls because they do not stay for long while recuperating in the house. For the medicalised FGM/C, no one will even know a girl have been cut.”* Similar sentiments were shared by a 64-year-old mother

in Kisii who stated, *“Currently people may not realise that girls have been cut because there is no celebration done publicly; FGM/C is done secretly by health care workers.”*

Although some girls were reportedly cut in private health facilities, having the health care provider perform the cut at home enabled families to keep the event secret. Having a girl cut in a public health facility was considered a risky undertaking. However, even providers from the public sector were noted to engage in the practice:

“Nowadays you call the doctor to your house, he performs the cutting there, injects and gives the girl medicine, after two to three days she is fine, and you can’t even notice.”

Mother, IDI, Kawangware

“FGM/C is done by health care providers nowadays. The nurse will perform the cutting at the home of the girl.”

Female occupational therapist, KII, Eastleigh

“FGM/C is mostly done in most of these private hospitals in Eastleigh and some parts of Kariobangi.”

Male community leader, KII, Eastleigh

“We don’t allow circumcision to be carried out in hospitals unless it is a private health clinic where the cutting can be done.”

Female, FGD, Garissa

“People fear going to public hospital for FGM/C because they may be arrested if it is discovered. No one is ready for public hospitals so most do it in their homes.”

Older woman, FGD, Eastleigh

“I will go to the hospital and talk to the doctor in private, especially these government doctors, until they agree to come home and cut my daughter.”

Mother, FGD, Kawangware

In contrast to participants from the Abagusii and Somali ethnic groups, those from the Kuria community stated that medicalised FGM/C was rare. Highlighting the rarity of the practice in the community, a female, Kuria, religious leader noted, *“Medicalised FGM/C. No, that one I have never heard about it in our community. It’s like a taboo for a girl to be circumcised in hospital.”* Similarly, a male, health care provider in Kuria stated, *“I have heard about only one case at a health centre where a healthcare worker did it to a girl, but that healthcare worker was then arrested, and I didn’t follow it to know what happened later.”*

When asked whether medicalisation was a step towards abandonment, participants held differing views. Some suggested that medicalisation of FGM/C will not lead to the abandonment of girls’ circumcision. Proponents of this view argued that medicalised FGM/C was still FGM/C even if it is performed by health care providers. They argued that medicalised FGM/C was just ‘modernisation’ of the practice, which they believed would normalise the practice in the long run.

“The banning of FGM/C will increase the medicalisation since the nurses would want to do it secretly in their houses like in the Kisii community. For example, the percentage of FGM/C in Kisii is higher than in Kuria. But since the Kuria celebrate in public, they are considered the worst. Therefore, FGM/C will increase from what we are experiencing today.”

Social development officer, KII, Kuria

“No, this female circumcision will not end because people will now shift and take their girls for cutting in the hospitals. And this will make its abandonment difficult.”

Married woman, FGD, Kuria

“In my opinion I can say circumcision in the hospital cannot lead to abandonment of FGM/C. People can come up with an idea that can lead to reviving circumcising girls in the villages in order to follow suit with the hospitals (business competition).”

Married woman, FGD, Garissa

In contrast, those who believed that medicalisation of FGM/C would lead to the abandonment of the practice saw medicalisation as a transition stage in response to people being more enlightened about the need to abandon FGM/C. They also suggested that medicalisation gives health care providers an opportunity to create awareness on the impacts of FGM/C, which they noted would eventually lead to abandonment as quoted below.

“Now that there are nurses that means they are practising it hygienically, but I don’t think that will make many people go for the cut. If they had a legal basis, then we could say they can continue; with time people are becoming more knowledgeable and wiser.”

Chief, KII, Kisii

“I think it will contribute to abandonment; the community has practised severe forms of FGM/C for a long time and I think it will also take a long time for them to completely abandon it. I think the medicalisation is a transition stage for the community and it’s also an opportunity for the medical personnel in the community to raise awareness. They will continue to provide the service to the community because of the cultural aspects or the insistence of families to continue with the practice. But they will do it in a way where there’s less harm involved, and less risk involved, with more sterile equipment. Even as they do it, they can raise awareness of the benefits of abandoning FGM/C completely.”

Clinical officer, KII, Eastleigh

Perceptions around Re-infibulation in the Somali Community

Participants from the Somali community reported that some women undergo re-infibulation, which is common among communities that practise type III FGM/C (Berggren et al., 2006). As depicted in the following quotes, because infibulation is considered as a mark of virginity, some women—particularly those who are divorced or who have engaged in pre-marital sex—prefer to be re-infibulated to deceive their partners that they are still “virgins” or to avoid shaming their parents when they are being married. Re-infibulation is also reportedly performed on some women who feel that their genitalia have loosened up especially after childbirth for tightening in order to satisfy their husbands.

“Mainly the people who came to my clinic, asking for re-infibulation, were women who were expecting to get married soon, and their understanding of virginity was that their genitalia should be narrow.”

Clinical officer, KII, Eastleigh

“Yes, we have heard about it [re-infibulation]. Women go to hospitals to make themselves young [virgin], some divorcees also do that so that people marry her as a young [virgin] lady. Being a woman, she was stitched before and for the second time she does it again. Then it happens, she gets separated from her husband, she will require/want another so she will again go for re-infibulation in order to get another man.”

Older man, FGD, Eastleigh

“Women want re-infibulation done to satisfy their husbands. Yes, I have a case who sought my advice, she said she is loose and I told her to go ahead and it be done.”

Male, community leader, KII, Eastleigh

“Due to pressures, someone’s pelvic tissues become loose and she wants to tighten herself. You know people are different. For some, their body becomes loose and they stitch themselves. Just for the pleasures of the man. And to her, she gets problems.”

Elderly women, FGD, Eastleigh

"I don't know but I think it is to show her husband, if she gets married, that she is a virgin. The girl has bad behaviour and her family thinks she is a virgin and she wants to get married and she wants to tighten again so that she can say she is a virgin."

Young girl, FGD, Eastleigh

"That is abnormal (all laughing). They think that the man will leave them because when she feels she is not sweet like before. That makes her go to hospital and re-infibulate herself. That person is mad, and she has no religion."

Married woman, FGD, Garissa

"For girls, they do it to hide shame [having engaged in premarital sex]. They fear tarnishing/shaming their parents, if she is used to roam around [have premarital sex] then she gets someone to marry and she is not a virgin, she has to tighten again."

Young girl, FGD, Eastleigh

"People do re-infibulation and commit sins of deception. If she became a mother before getting married, and then she gets a suitor, when she is about to get married she gets re-infibulated to deceive the person who wants to marry her so that he thinks she is a virgin."

Older man, FGD, Eastleigh

"Yes, there are people who do it, those that want to cheat other people. Some are truthful, such as a girl who has lost her virginity, having been cheated by young men and repents. So, she asks people and they advise her to do the re-infibulation and the procedure takes place. Mainly, people prefer to do it in a hospital because she gets medication."

Religious leader, KII, Eastleigh

As illustrated in the following quotes, medicalised re-infibulation was reportedly preferred because health care providers are knowledgeable, experienced, discreet, and can stitch in a hygienic environment.

"The doctor performs it because he is educated, and he can tell you what to do and what not to do, including stitching well."

Married woman, FGD, Eastleigh

"They will throw away what they use on a person and use clean ones on someone else."

Married woman, FGD, Eastleigh

"A doctor, because he will hide her secret."

Married woman, FGD, Eastleigh

When asked about the advantages and disadvantages of re-infibulation, a few participants suggested that re-infibulation increased men's sexual pleasure due to the tightness of the woman's vagina, especially after child birth. However, others argued that the tightness impeded sexual pleasure and exposed the woman to infections and health complications that were expensive to manage. These views are illustrated in the following quotes.

"Men want something they can feel and is tight and gives flavour to it. He gets a tight place."

Young husband, FGD, Eastleigh

"I don't think there's a gain that comes with re-infibulation and it is never acceptable to do that. No advantage. It will only come with infection and other problems. The re-infibulation, whether done when you are young or old, it doesn't have any advantage that can be mentioned. It only causes infection and loss of blood."

Older woman, FGD, Eastleigh

"Mostly it contributes to problems when re-infibulated and further it will affect the sexual intercourse of the couples. The woman will feel pain and will need to be taken to hospital for de-infibulation... It does not contribute any benefit."

Husband, FGD, Garissa

“Men receive no advantage from the re-infibulation. The re-infibulation only comes with deceiving men. No advantage for them, only that they feel uneasy with it.”

Older woman, FGD, Eastleigh

“Re-infibulation can bring problems like when you are having sexual intercourse a new problem occurs because of tightness. This will lead to using force which may lead to cuts and may cause opening of the raw wound and I will get a lot of problems.”

Male Somali, KII, Eastleigh

“The husband will incur more expense to take care of her health wise, so that’s lots of problems. If he can’t penetrate her then he will need to take her to hospital which is an expense you will incur.”

Young husband, FGD, Eastleigh

Discussion

Findings from this study show that the practice of FGM/C is still prevalent among the Abagusii, Kuria, and Somali communities in Kenya. Although national data shows a substantial decline in the prevalence of FGM/C among women aged 15-49 years between 1998 (38%) and 2014 (21%), the prevalence among the Abagusii (86%), Somali (94%), and Kuria (96%) has remained high (KNBS & ICF Macro, 2015). Despite the high prevalence in the studied communities, the findings show that there is some decline particularly in urban areas. The decline can be attributed to increasing education, urbanisation, migration, and modernisation. Lower levels of FGM/C have been associated with high socioeconomic status (Dalal et al., 2018; Masho and Mathews, 2009), urbanisation, exposure to media that clarifies doubts and misconceptions about FGM/C (Dalal et al., 2018; Reig et al., 2014), higher education (Dalal et al., 2018; Gage and Van Rossem, 2006; Masho and Mathews, 2009), and women’s empowerment (Isman et al., 2013). These factors contribute to members of cutting communities living, interacting, and intermarrying with non-cutting ethnic groups or those who have abandoned the practice. For example, in urban settings the heterogeneity and mix of ethnic groups may create an environment for lesser accountability, bonding, and less strict adherence to social norms or change/adoption of new norms. This may enable girls who would ordinarily be cut to escape FGM/C.

Persistently high FGM/C prevalence in the three communities is likely sustained by social norms that have been passed through generations. The norms are enforced through social pressure to conform while noncompliance attracts negative sanctions in the community, social groups, and age cohorts (Shell-Duncan, Moreau et al., 2018). Studies show that social pressure and tradition are the most compelling factors for the continuation of FGM/C (Reig et al., 2015; Varol et al., 2014; WHO 2010). The actions and decision to perform the cut are highly meaningful and are aimed at preserving the valued ways of life for communities. Thus, women undergo FGM/C to gain cultural conformity, social significance, and a sense of identity, and respectability as an ideal member of the community (Berg and Denison, 2013). Similarly, Mackie and LeJeune (2009) suggest that FGM/C is held in place by a wide range of norms and associated meanings that concerns ethnic identity, adolescent rites of passage, religion, honour, modesty and sexual restraint, aesthetics, and hygiene. The girls who undergo FGM/C and their families receive social approval, respect, and honour. In contrast, uncut girls, their mothers, and the family are insulted, teased, socially rejected, and their prospects of being married are diminished (Gali, 1997; Shell-Duncan, Moreau et al., 2018), affecting their ultimate value (Nkrumah, 1999).

Related to social norms, other factors are suggested to drive the continued practise of FGM/C among the three communities consistent with documented evidence: culture and tradition (Bjalkander et al., 2012); the desire to uphold moral values by curbing women’s and girls’ libido,

and preventing premarital sex and early pregnancies (WHO, 2010). Among the Abagusii, FGM/C is also performed for identity purposes to distinguish them from neighbouring communities who do not cut girls (Mose, 2008). This is consistent with findings that FGM/C identifies a woman as belonging to a particular ethnicity (Bjalkander et al., 2012; Mackie and LeJeune, 2009).

Interestingly, although FGM/C is prohibited, the Kuria community practise FGM/C as a rite of passage in public mass circumcision ceremonies, similar to celebrations in other communities where cut girls are celebrated and publicly recognized (Ahmadu, 2000; Behrendt, 2005; Shell-Duncan, Moreau et al., 2018). In contrast, the Somalis and Abagusii practise individual cutting with no public ceremonies, a departure from previous practice as a result of the prohibition of FGM/C. Similar findings have been reported in Senegambia where FGM/C is also criminalised (Hernlund, 2003; Skramstad, 1990). The open practise of FGM/C among the Kuria may stem from the significant involvement of the council of elders, who are the custodians of the Kuria culture and who command a lot of authority and power. The council of elders reaps great economic benefits from FGM/C and wields immense authority and power in the community. The council oversees several FGM/C-related activities namely; ritualising the venue, selection of cutters, and performing curse rituals on violators. These differences and dynamics point to the need for different and context-specific approaches to promote the abandonment of FGM/C in diverse contexts.

Although FGM/C is prohibited under the Kenyan law, study findings suggest that the law has limited effect on the abandonment of FGM/C. FGM/C is often upheld by multiple interconnected norms that may vary and shift over time. For example, the secrecy surrounding the practice among the Somali and Abagusii communities underscores the conflict between social and legal norms. To resolve the conflict, members of the community weigh the repercussions for noncompliance. The secret practise of FGM/C allows people to comply with social norms because of the perceived or real sanctions exerted from the community on members for not complying (Shell-Duncan et al., 2013). The sanctions may include social exclusion, stigma, and discrimination. Similar evidence has been reported in Senegal, where the age at cutting went down and the practice went underground following the institution of a law against FGM/C. However, for some who were already questioning FGM/C, the law strengthened their stance/resolve not to cut. Surprisingly, sometimes even in a single extended family, there could be diverse reactions to the law (Shell-Duncan et al., 2013).

Conflicts between social and religious norms were also noted with some participants stating that pastors and religious leaders condemned the practise of FGM/C in public but cut their daughters in secret, particularly in rural areas. The Christian church proscribes FGM/C. Adherents may therefore practise FGM/C in secrecy to avoid religious sanctions. In contrast, according to some of the participants, Islamic teachings sanction the *Sunna* cut. Although many Muslims noted that FGM/C was a religious requirement, it is not founded on Quranic teachings (WHO, 2006; Wahlberg et al., 2017). FGM/C is not mentioned in the Quran, but a few Hadiths (recorded sayings and practices of the Prophet Mohammed) mention the practice. One commonly cited hadith roughly translates to 'If you cut, do not overdo it, because it [the clitoris] brings more radiance to the face, and it is more pleasant for the husband'. Although these Hadiths are judged as either unauthentic (weak) or unrelated to FGM/C, they are used by supporters to establish a link between FGM/C and religion (Rouzi, 2013; Wahlberg et al., 2017). This could explain why religion was strongly associated with the support for *Sunna* cutting in this study. The alleged sanctioning of the practice by Islam, is in concordance with the cultural/traditional practice of FGM/C among the Somalis but in conflict with the Kenyan law. The implication of the concordance is almost universal cutting (*Sunna*) evident among the Somali girls on the basis of religious norms. However, the hidden cutting among Somali girls could be associated with the conflict between the anti-FGM/C law and religious norms. The alleged link between Islam and FGM/C may have sustained the practice

because of open silence by the Islamic religious leaders in condemning the practice. However, the clarification on FGM/C not having been sanctioned by the Quran offers an opportunity for the religious leaders to delink Islam from *Sunna* to accelerate FGM/C abandonment.

The findings also suggest that the practice is a financial motivator to FGM/C practitioners who benefit economically (Njue and Askew, 2004). Those who benefit financially include the performers of FGM/C namely; the traditional cutters, and health care providers among the Somali and Abagusii communities as well as council of elders in the Kuria community. These factors seem to play a critical role in the current practice of FGM/C and underscore the need to target practitioners and the council of elders in abandonment efforts.

Although FGM/C is prevalent and persistent in the studied communities, three key changes (shifts) in the practice are observed—cutting at a younger age, less severe cutting, and medicalisation. These changes mirror shift in norms supporting the practice consistent with the proposal of fluidity of social norms and cultural values, and the contexts in which FGM/C becomes associated with meanings that can accrue, be lost, or altered, thereby influencing whether and how FGM/C is practiced (Shell-Duncan, Moreau et al., 2018). Indeed, social norms and associated meanings are dynamic, varied, and constantly changing through processes of cultural borrowing and innovation (Abdelshahid and Campbell, 2015). The changes in FGM/C are particularly common among the Abagusii and Somalis, while in the Kuria community minimal change is observed. The changes are consistent with evidence generated by Shell-Duncan and colleagues (Kimani and Shell-Duncan, 2018; Shell-Duncan, Njue et al., 2018). Additionally, the changes appear to be attributed to factors that are linked to social development factors such as; education, urbanisation, migration, modernisation, and the anti-FGM/C law.

The cutting of girls at a younger age (mainly younger than 10 years) is suggested to be common practice among the Abagusii and Somali communities but not the Kuria who practise FGM/C as a rite of passage to adulthood and as a marker of one's readiness for marriage. Cutting girls at a younger age is believed to allow for faster healing, less resistance from the young girl, and less pain. To some Somalis, the age at cutting also corresponds with the appropriate age for the teaching of salah (prayer). This shift also appears to be a new societal practice to circumvent the law, since the girl is cut young and parents can easily disguise the cut as any other health problem. Similar patterns have been reported in other studies where girls are cut at a younger age than their mothers (Hernlund, 2000; Shell-Duncan et al., 2010). Similar reasons for the shift in the age at cutting have also been reported in other studies in Kenya and Somalia (Mose, 2008; Powell and Yussuf, 2018). The purported harm reduction associated with cutting at a younger age is, however, inconsistent with findings suggesting that girls who undergo FGM/C before ten years may be more vulnerable to serious complications than those who are older at the time of cutting (Bjalkander et al., 2012). In general, cutting at a younger age is a poorly understood and newly documented shift in FGM/C (Kimani and Shell-Duncan 2018; Shell-Duncan, Njue et al., 2018; UNICEF et al., 2013). This calls for more studies to understand this shift with a view to develop realistic programmes to address this dynamic.

The second type of change in FGM/C adopted by the three communities is less severe cutting. The Kuria and Abagusii were reported to historically practise clitoridectomy (type I) but nicking and pricking (type IV) are currently being practised. Similarly, among the Somali community, participants described a shift from pharaonic (type III) cutting to the reportedly less severe *Sunna* cut. Across the communities, the shift to less severe cutting was reportedly driven by community awareness of FGM/C-related health consequences. Similar findings have been described among Israeli Bedouins (Belmaker, 2012), where the practice of FGM/C changed towards less extensive or even symbolic forms, and among Somali immigrants in Norway and Somalia (Gele, 2013). From

a well-being point of view (health risk model), type IV and *Sunna* FGM/C are suggested to be 'healthier' for the girl. Indeed, some participants did not consider pricking to be a form of FGM/C, consistent with findings elsewhere (Njue and Askew, 2004; Wahlberg et al., 2017). For example, a study among Somali immigrants to Sweden found that participants believed that pricking was acceptable to their religion, not a violation of children's rights, and does not cause long-term health complications (Wahlberg et al., 2018).

Similar to other studies (Crawford and Ali, 2014; Gele, 2013; MOWDAFA, 2012), although the *Sunna* cut was described as being less severe than the pharaonic cut, the actual description varied. The lack of a uniformity regarding what constitutes the *Sunna* cut has been noted previously and there is clinical evidence suggesting that many women who claim to have *Sunna* FGM/C are actually infibulated (Johansen, 2017). Interestingly, increasing adoption of less severe cutting among the Somali community may lead to reduction in re-infibulation, which is practised in communities that perform type III FGM/C (Rushwan et al., 1983; Serour, 2013). However, the practice may be sustained by socio-cultural perceptions about the importance of women's virginity status and having a narrow vaginal opening for men's sexual pleasure.

The third shift demonstrated by our findings—medicalisation—is suggested to be common among the Abagusii and Somali communities. Medicalised FGM/C is preferred among the Abagusii living in Nairobi and Kisii counties, while it is also common among the Somalis living in Nairobi and urban Garissa. Consistent with documented evidence (Kimani and Shell-Duncan, 2018; Shell-Duncan, 2001; Shell-Duncan, Njue et al., 2018; UNICEF et al., 2013; WHO, 2010), medicalised FGM/C is reportedly driven by safety concerns because it is done in a sterile environment, confers fast healing, offers availability of interventions in case of complications, and facilitates hidden cutting and secrecy because FGM/C is illegal. Similar to other studies, the motivations for health care providers in performing medicalised FGM/C included financial gain (Doucet et al., 2017; Njue and Askew, 2004), reduction of health complications (Bedri, 2018; Dawson et al., 2015; Doucet et al., 2017; Modrek and Sieverding, 2016; WHO, 2010), and clients' demands for medicalised FGM/C (Moeed and Grover, 2012; Purchase et al., 2013; Sureshkumar et al., 2016; Tamaddon et al., 2006; Turkmani et al., 2017). These findings underscore the need to target health care providers in interventions aimed at preventing FGM/C and improving the management of women living with FGM/C.

The findings on variation in urban-rural medicalisation are inconsistent with reports among the Somalis of Somaliland where the practice is uniform in urban and rural areas (Powell and Yussuf, 2018). In other settings, the differences may be accounted for by the availability of health care providers, who are more common in urban areas. Although we did not assess the prevalence of medicalised FGM/C, the practice is gaining momentum in the Somali and Abagusii communities driven by both demand and supply factors. The findings are consistent with a recent overview of data from 26 countries that found rates of medicalisation among women aged 15-49 years to be highest in five countries: Sudan (67%), Egypt (42%), Guinea (15%), Kenya (15%), and Nigeria (13%) (Shell-Duncan, Njue et al., 2018, Kimani and Shell-Duncan, 2018).

Medicalised FGM/C was rarely mentioned by the Kuria participants. The community appears to be stable and resistant to the shift of medicalisation and cutting at a young age with only lesser severe cutting reported. The council of elders, who are custodians of the Kuria culture, play a central role in selecting cutters, which might explain why girls are primarily subjected to traditional circumcision. The minimal shifts in FGM/C among the Kuria underscore the need to develop focused interventions targeting and engaging the council of elders to achieve meaningful progress in the elimination of cutting. In addition, understanding emerging patterns and trends in FGM/C with a view to developing strategies to counteract possible transformation of the practice is critical.

Interestingly, even traditional cutters appear to have adopted less severe cutting and may use health supplies to mitigate health complications associated with FGM/C (pseudo-medicalisation). Indeed, reports indicate the existence of medicalised situations in which health care providers administer painkillers or anaesthetics, while cutting is performed by traditional cutters. FGM/C may also be performed by employees who have no formal medical training or clinical knowledge, such as apprentices or community health extension workers (Doucet et al., 2017; Kimani and Shell-Duncan, 2018; Obianwu et al., 2018). This pseudo-medicalisation can involve the use of surgical tools, pain killers, and antiseptics, and thus may appear to clients to be provided by trained health care providers. Hence, self-reported survey data on medicalised cutting may conflate these two very different groups. Pseudo-medicalisation appears to occur in both the Kisii and Somali communities and may occur as traditional practitioners try to cope with increasing demand for “safe” cutting. The findings are consistent with the fact that medicalised FGM/C is adopted because of harm reduction with the erroneous justification that it has no complications (WHO, 2010). This notion needs to be countered through strategies that can raise awareness of the public on the impacts of FGM/C, including medicalisation.

Although the narratives suggest that medicalised FGM/C is increasing, the preferred venue for performing FGM/C is the girls’ home and, occasionally, private health facilities (clinicalisation) (Obiora, 1997). Performing FGM/C at home enables families to maintain secrecy because FGM/C is illegal. Efforts to curb FGM/C medicalisation in contexts where it is predominately carried out at home may therefore face considerable challenges. These challenges might explain why in 1994 Egyptian authorities permitted FGM/C to be performed on girls in designated facilities at fixed times and prices to mitigate complications and eventually end the practice (El-Gibaly et al., 2002; Refaat, 2009; Shell-Duncan, 2001). However, subsequent pressure from international agencies, as well as the reported deaths of girls who were cut in hospitals, instigated a renewed ban on the practice in public hospitals (UNICEF, 2005). These findings call for all-inclusive consultation, taking into consideration existing policies and best practices to clarify information on FGM/C, including medicalisation, among stakeholders to facilitate the issuance of well-reasoned guidelines. In addition, that medicalisation is performed in private clinics offers the health system an opportunity to act through the introduction of a system to monitor, report, and track FGM/C activities in all health facilities.

Related to medicalisation, re-infibulation was also reported among some Somali women following child birth, those seeking re-marriage, and those who have had pre-marital sex and planned to get married. These views are consistent with findings that re-infibulation is common in communities where type III FGM/C is prevalent (Rushwan et al., 1983; Serour, 2013) and that it is performed in hospitals mainly for reconstruction following de-infibulation of a woman to deliver (Jaldesa et al., 2005). Re-infibulation is also performed to enable women regain “virginity” (Rushwan, 2000) through additional tightening to mimic the narrow introitus of a virgin (Dareer, 1982; Khaled and Vause, 1996; Sami, 1986). Re-infibulation is therefore believed to help women maintain their marriages or to get marriage partners because they are considered ‘virgins’. Similar to other studies, some women were reported to undergo multiple re-infibulations (Magied et al., 2000; Rushwan et al., 1983). Re-infibulation was performed primarily by health care providers because women believed they are educated, knowledgeable, skilled, and can stitch “nicely” in a hygienic environment and keep the procedure secretive. Consistent with previous studies, financial incentives and desire to respect the patient’s choice are suggested as reasons why health care providers offer re-infibulation services (Serour, 2013). Given the increased preference for *Sunna* FGM/C and medicalisation, the practice may become less common.

There were divergent views regarding the role of medicalisation in abandonment of FGM/C. Some viewed medicalisation as modernisation of FGM/C and believed it would normalise it thus making

it difficult to end FGM/C. Some scholars have argued that medicalisation creates a tacit approval for FGM/C thus promoting its continuation and making the process of complete abandonment more difficult (Askew et al., 2016; Serour, 2013). Others note that it creates the impression that FGM/C can be performed safely and is condoned by respected health care providers, thus reducing motivation of families to abandon the practice (Doucet et al., 2017; Modrek and Sieverding, 2016; WHO, 2010). This suggestion is consistent with data that show increasing rates of medicalisation in some contexts where the prevalence of FGM/C is declining (Shell-Duncan, Njue et al., 2018). The changes observed in this study reflect the dynamism in the practice of FGM/C.

On the other hand, some participants in this study noted that the shifts in the practice would lead to FGM/C abandonment because they represented transitional steps. This is consistent with reports that have speculated that medicalisation or less severe cutting can be an interim step toward abandonment (Gele, 2013; Obiora, 1997; Valderrama, 2002). Accordingly, medicalisation is seen to present an opportunity for health care providers to create awareness on the impacts of FGM/C in line with the desire to reduce the chance of complications and draw attention to the practice (Njue and Askew, 2004; Orubuloye et al., 2000), which can eventually lead to the total eradication of the practice. The divergent views on the role of medicalisation in the abandonment of FGM/C shifts focus on the health sector to take a strategic decision to lead from the front in confronting this practice that has far reaching ramifications in the campaign against FGM/C.

Taken together, these findings highlight important shifts in the practice of FGM/C in communities where FGM/C is still widespread. The shifts appear to be in response to awareness of the health impacts of FGM/C and the criminalisation of the practice. Study findings underscore the need for more nuanced approaches to promote the abandonment of FGM/C and highlight important groups that should be targeted in anti-FGM/C programmes.

Limitations

The study has some limitations; first it was difficult to obtain information on health care providers' experience with medicalised FGM/C because of the sensitivity of the issue; thus, the validity of the information they gave cannot be ascertained. A courtesy bias may have been introduced although we tried to minimise it by reassuring the participants to be as open and honest as possible. The study involved only three communities that were qualitatively investigated. Findings may therefore not be generalisable, however, they provide a strong foundation for understanding shifts and dynamics in FGM/C among three distinct communities that practise a spectrum of FGM/C across rural-urban settings.

Conclusion

FGM/C is still common in the studied communities. The practice appears to be sustained through two models; first through changes (shifts) in FGM/C, notably cutting at a younger age, lesser cutting, and medicalisation as depicted among the Abagusii and Somali communities. Second, through consistency, stability, and change resistance observed among the Kuria community. The two diverse models appear to be sustained through similar underlying reasons for which specific communities have, for years, practised FGM/C.

The shifts are an adaptation to the dynamics surrounding FGM/C practice, notably awareness of health complications and the legal banning of the practice. The shifts are also driven by determinants of social development, health and legal risks, cultural and traditional norms, religious reasons, as well as supply-side factors such as a desire by health care providers to reduce health

risks and respond to clients' requests. Medicalisation is not always perceived to be a transitional step toward abandonment but rather a way of sustaining the practice, especially considering social determinants, which appear to normalise the "modernised" practice of FGM/C in urban settings and a few pockets in the rural areas. Thus, FGM/C interventions should account for these dynamics.

Context-specific strategies should be developed to address FGM/C and its shifts for successful abandonment to be achieved. These should include strategies targeting law enforcement, health care providers, custodians of culture in the community, religious leaders, women and girls as well as men in prevention programmes, and cross border initiatives.

Study Implications

The study findings highlight several possible avenues for leveraging positive change:

Training of health care providers

The adoption of medicalised FGM/C underscores the need to target health care providers in abandonment efforts. Health care providers should be trained on FGM/C-related complications, legal and human rights issues, and their role in the prevention of the practice. They should also be trained and supported to offer management interventions for women and girls who have FGM/C-related complications, including psychosocial support. To effectively train health care providers, FGM/C should be incorporated in the pre-service training curriculum and continuous professional development programmes. This will ensure that health care providers are reached during pre-service training as well as through in-service training, using the most appropriate approach.

Training of religious leaders

Adoption of the *Sunna* cut by the Somali community is linked to perceived religious obligations to undergo FGM/C. Among Christians, on the other hand, despite religious proscriptions against FGM/C, some religious leaders may continue to secretly practise FGM/C to conform with social norms. Religious leaders should, therefore, be targeted in abandonment efforts. Programmes that increase their understanding of FGM/C-related complications, legal and human rights issues of FGM/C, as well as outline their role in the prevention of the practice are warranted.

Awareness creation on FGM/C-related complications

Raising awareness of FGM/C-related complications may deter severe cutting but not promote the abandonment of the cut. Awareness-raising programmes should clarify that cutting at a younger age, mild cutting, and medicalisation are detrimental to health. To ensure wide reach, programmes should use multiple communication channels and should be escalated during school holidays when most FGM/C takes place.

Improved health system monitoring and surveillance system

The findings showed that medicalised FGM/C is primarily conducted in private health facilities, which may be poorly monitored. Improved surveillance and regular supervision to monitor and track the activities of these clinics and practitioners may lower the provision of medicalised FGM/C. In addition, FGM/C complications, incidences, and activities should be monitored at the health service points that interface with women and girls who have been exposed to FGM/C

Anchoring FGM/C abandonment efforts to the *Nyumba Kumi* (ten houses) initiative

The Nyumba Kumi initiative—a community policing or neighbourhood watch strategy—has been used with some success to fight crime and improve security in Kenya. The strategy is premised on community vigilance and monitoring and could be effective in empowering community members to contribute to FGM/C abandonment efforts by identifying girls who have been cut or who are at risk.

Regional integration of FGM/C prevention policies

To prevent cross border FGM/C (notably Kurias of Kenya crossing to Tanzania and Somalis of Kenya crossing to Somalia for cutting), there is need for regional integration of FGM/C prevention and control policies as well as involvement of local leaders from communities in neighbouring countries to develop a working strategy.

Need for further research

Further research is needed to better understand the shifts in the practice of FGM/C and to identify the most appropriate interventions to curb the shifts and improve the health care system's capacity to respond to the management and prevention of FGM/C. In addition, despite the existence of a law prohibiting FGM/C, the practice remains common in some communities. Further research is therefore warranted to understand how anti-FGM/C law enforcement can be strengthened.

References

- 28 Too Many. (2013). Country profile: FGM in Ethiopia (pp. 80). Retrieved from [https://www.28toomany.org/static/media/uploads/Country%20Research%20and%20Resources/Ethiopia/ethiopia_country_profile_v1_\(october_2013\).pdf](https://www.28toomany.org/static/media/uploads/Country%20Research%20and%20Resources/Ethiopia/ethiopia_country_profile_v1_(october_2013).pdf)
- Abdelshahid, A., and Campbell, C. (2015) 'Should I circumcise my daughter?' Exploring diversity and ambivalence in Egyptian parents' social representations of female circumcision. *Journal of Community & Applied Social Psychology*, 25: 49–65.
- Abdi, M., and Askew, I. (2009). A religious oriented approach to addressing female genital mutilation/cutting among the Somali community of Wajir Kenya. Revised version. New York: Population Council, *Frontiers in Reproductive Health*.
https://pdf.usaid.gov/pdf_docs/Pnado630.pdf
- Abdulcadir, J., Margairaz, C., Boulvain, M., and Irion, O. (2011). Care of women with female genital mutilation/cutting. *Swiss Medical Weekly*, 140(8), w13137.
- Ahmadu, F. (2000). Rites and wrongs: An insider/outsider reflects on power and excision. In B. Shell-Duncan and Y. Hernlund (Eds.), *Female "circumcision" in Africa: culture, controversy, and change* (Vol. Directions in applied anthropology, pp. 283-312). London: Lynne Rienner Publishers.
- Almroth, L., Almroth-Berggren, V., Hassanein, O. M., Al-Said, S. S. E., Hasan, S. S. A., Lithell, U.-B., and Bergström, S. (2001). Male complications of female genital mutilation. *Social Science and Medicine*, 53(11), 1455-1460.
- Almroth, L., and Elmusharaf, S. (2007). Genital mutilation of girls. *Women's Health*, 3(4), 475-485.
- Askew, I., Chaiban, T., Kalasa, B., and Sen, P. (2016). A repeat call for complete abandonment of FGM. *Journal of Medical Ethics*, doi: 10.1136/medethics-2016-103553
- Bazeley, P. (2007). *Qualitative data analysis with NVivo*: SAGE Publications.
- Bedri, N. (2018). Medicalization of FGM/C in Sudan: health care provider and families' perspectives. Population Council. Nairobi.
- Behrendt, A. (2005). The practice of excision in Moyamba and Bombali districts of Sierra Leone: perceptions, attitudes and practices. Dakar: Plan West Africa Regional Office.
- Belmaker, R. (2012). Successful cultural change: the example of female circumcision among Israeli Bedouins and Israeli Jews from Ethiopia. *The Israel Journal of Psychiatry and Related Sciences*, 49(3):178–83
- Berg, R. C., and Denison, E. (2012). Interventions to reduce the prevalence of female genital mutilation/cutting in African countries (1891-1803). *Campbell Systematic Reviews* doi: 10.4073/csr.2012.9
- Berg, R. C., and Denison, E. M. (2013). A realist synthesis of controlled studies to determine the effectiveness of interventions to prevent genital cutting of girls. *Paediatrics and International Child Health*, 33(4), 322-333.
- Berggren, V., Abdel, S., Bergstrom, S., Johansson, E., and Edberg, A. (2004). An explorative study of Sudanese midwives' motives, perceptions and experiences of re-infibulation after birth. *Midwifery*, 20. doi:10.1016/j.midw.2004.05.001

- Berggren, V., Musa, S., Hernlund, Y., Johansson, E., Habbani, B., and Edberg, A. (2006). Victims or beneficiaries? Perspectives on female genital cutting and reinfibulation in Sudan. *African Journal of Reproductive Health*, 10(2):24-36.
- Bjalkander, O., Leigh, B., Harman, G., Bergstrom, S., and Almroth, L. (2012). Female genital mutilation in Sierra Leone: who are the decision makers? *African Journal of Reproductive Health*, 16(4), 119-131.
- Campo, S., Cameron, K. A., Brossard, D., and Frazer, M. S. (2004). Social norms and expectancy violation theories: assessing the effectiveness of health communication campaigns. *Communication Monographs*, 71(4), 448-470.
- Crawford, S., and Ali, S. (2014). Situational analysis of FGM/C stakeholders and interventions in Somalia. Retrieved from <http://orchidproject.org/wp-content/uploads/2015/02/Situational-Analysis-of-FGMC-Stakeholders-and-Interventions-in-Somalia1.pdf>
- Dalal, K., Kalmatayeva, Z., Mandal, S., Ussatayeva, G., Lee, M. S., and Biswas, A. (2018). Adolescent girls' attitudes toward female genital mutilation: a study in seven African countries. *F1000Res*,7:343. doi: 10.12688/f1000research.14142.1
- Dawson, A., Turkmani, S., Varol, N., Nanayakkara, S., Sullivan, E., and Homer, C. (2015). Midwives' experiences of caring for women with female genital mutilation: insights and ways forward for practice in Australia. *Women and Birth*, 28(3), 207-214.
- Doucet, M.-H., Pallitto, C., and Groleau, D. (2017). Understanding the motivations of health-care providers in performing female genital mutilation: an integrative review of the literature. *Reproductive Health*, 14(1), 46.
- El-Damanhoury, I. (2013). The Jewish and Christian view on female genital mutilation. *African Journal of Urology*, 19(3), 127-129.
- Elgaali, M., Strevens, H., and Mårdh, P.-A. (2005). Female genital mutilation – an exported medical hazard. *The European Journal of Contraception & Reproductive Health Care*, 10(2), 93-97. doi:10.1080/13625180400020945
- El-Gibaly, O., Ibrahim, B., Mensch, B. S., and Clark, W. H. (2002). The decline of female circumcision in Egypt: evidence and interpretation. *Social Science and Medicine*, 54(2), 205-220.
- European Parliament. (2004). Combating violence against women. European Parliament resolution on the current situation in combating violence against women and any future action (2004/2220(INI)). Retrieved from <http://www.europarl.europa.eu/sides/getDoc.do?pubRef = -//EP//TEXT+TA+P6-TA-2006-0038+0+=DOC+XML+V0//EN>
- Gage, A.J., and Van Rossem, R. (2006) Attitudes toward the discontinuation of female genital cutting among men and women in Guinea. *International Journal of Gynaecology and Obstetrics*, . 92(1):92–96.
- Gale, N. K., Heath, G., Cameron, E., Rashid, S., and Redwood, S. (2013). Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Medical Research Methodology*, 13(1), 117.
- Gali, M. (1997). Female circumcision: A transcultural study of attitudes, identity and reproductive health of East African immigrants. (Ph.D. dissertation Ph.D. dissertation), University of Michigan.

- Garissa County Government. (2018). About Us. Retrieved from <http://garissa.go.ke/about-garissa-county/>
- Gele, A. (2013). Female circumcision in home and away: attitudes toward the practice among Somali immigrants in Oslo, Norway and their corresponding group in Hargeisa and Galka'ayo Somalia. Oslo: University of Oslo.
- Hernlund, Y. (2000) Cutting without ritual and ritual without cutting: female "circumcision" and the re-ritualization of initiation in the Gambia. In: Shell-Duncan, B, and Hernlund Y. (Eds.), Female "circumcision" in Africa: culture, controversy, and change (pp. 235–252). Boulder, Co: Lynne Rienner Publishers.
- Hernlund, Y. (2003). Winnowing culture: negotiating female "circumcision" in the Gambia. Doctoral dissertation, University of Washington: Seattle
- Islam, M. M., and Uddin, M. M. (2001). Female circumcision in Sudan: future prospects and strategies for eradication. *International Family Planning Perspectives*, 71-76.
- Isman, E., Ekéus, C., and Berggren, V. (2013). Perceptions and experiences of female genital mutilation after immigration to Sweden: an explorative study. *Sexual & Reproductive Healthcare*. 4(3):93–98.
- Jaldesa, G. W., Askew, I., Njue, C., and Wanjiru, M. (2005). Female genital cutting among the Somali of Kenya and management of its complications. Retrieved from <http://eldis.org/vfile/upload/1/document/0708/DOC19141.pdf>
- Johansen, R. E. B. (2017). Virility, pleasure and female genital mutilation/cutting. A qualitative study of perceptions and experiences of medicalized defibulation among Somali and Sudanese migrants in Norway. *Reproductive Health*, 14(1), 25. doi:10.1186/s12978-017-0287-4
- Johnson-Agbakwu, C. E., Helm, T., Killawi, A., and Padela, A. I. (2014). Perceptions of obstetrical interventions and female genital cutting: insights of men in a Somali refugee community. *Ethnicity & Health*, 19(4), 440-457. doi:10.1080/13557858.2013.828829
- Kaplan, A., Hechavarría, S., Martín, M., and Bonhoure, I. (2011). Health consequences of female genital mutilation/cutting in the Gambia, evidence into action. *Reproductive Health*, 8. <https://doi.org/10.1186/1742-4755-8-26>
- Kenya National Bureau of Statistics (KNBS), and ICF Macro. (2015). Kenya Demographic and Health Survey 2014. Calverton, Maryland: KNBS and ICF Macro.
- Kenya National Bureau of Statistics. (2010). Kenya 2009 Population and Housing Census Highlights. Available at <http://www.knbs.or.ke/Census%20Results/KNBS%20Brochure.pdf> Accessed on 14 June 2013.
- Kenya National Bureau of Statistics and ICF Macro. (2010). Kenya Demographic and Health Survey 2008-09. Calverton, Maryland: KNBS and ICF Macro.
- Kenya National Bureau of Statistics. (2010). The 2009 Kenya Population and Housing Census. Nairobi, Kenya: Kenya National Bureau of Statistics.
- Kimani, S., and Shell-Duncan, B. (2018). Medicalized female genital mutilation/cutting: contentious practices and persistent debates. *Current Sexual Health Reports*. doi:10.1007/s11930-018-0140-y

- Kimani, S., Muteshi, J., and Njue, C. (2016). A synthesis of the evidence: Health impacts of FGM/C. Evidence to End FGM/C Programme: Research to Help Girls and Women Thrive. New York: Population Council.
- Koski, A., and Heymann, J. (2017). Thirty-year trends in the prevalence and severity of female genital mutilation: a comparison of 22 countries. *BMJ Global Health*, 2(4). doi:10.1136/bmjgh-2017-000467
- Leininger, M. (1997). Overview of the theory of culture care with the ethnonursing research method. *Journal of Transcultural Nursing*, 8(2), 32-52.
- Leye, E., and Sabbe, A. (2009). Responding to female genital mutilation in Europe. Striking the right balance between prosecution and prevention. Ghent, Belgium: International Centre for Reproductive Health.
- Leye, E., Ysebaert, I., Deblonde, J., Claeys, P., Vermeulen, G., and Jacquemyn, Y. (2008). Female genital mutilation: knowledge, attitudes and practices of Flemish gynaecologists. *The European Journal of Contraception & Reproductive Health Care*, 13. doi:10.1080/13625180701780957
- Litorp, H., Franck, M., and Almroth, L. (2008). Female genital mutilation among antenatal care and contraceptive advice attendees in Sweden. *Acta Obstetrica et Gynecologica Scandinavica*, 87(7), 716-722.
- Mackie, G. (2000) Female genital cutting: The beginning of the end, in *Female "Circumcision" in Shell-Duncan, B., and Hernlund, Y. (Eds.), Africa: Culture, Controversy, and Change.* (pp. 253–283). Boulder, CO: Lynne Rienner Publishers.
- Mackie, G., and LeJeune, J. (2009). Social dynamics of abandonment of harmful practices: a new look at the theory: UNICEF.
- Mackie, G., Moneti, F., and Shakya, H. (2015). What are social norms? How are they measured? Retrieved from https://www.unicef.org/protection/files/4_09_30_Whole_What_are_Social_Norms.pdf
- Masho S.W., and Matthews, L. (2009). Factors determining whether Ethiopian women support continuation of female genital mutilation. *International Journal of Gynaecology and Obstetrics*. 107(3),232–235.
- Modrek, S., and Sieverding, M. (2016). Mother, daughter and doctor: Medical professionals and mothers' decision-making about FGM/C in Egypt. *International Perspectives on Sexual and Reproductive Health*, 42(2), 81-92.
- Moeed, S. M., and Grover, S. R. (2012). Female genital mutilation/cutting (FGM/C): survey of RANZCOG fellows, diplomates and trainees and FGM/C prevention and education program workers in Australia and New Zealand. *The Australian & New Zealand Journal of Obstetrics & Gynaecology*, 52(6), 523-527. doi:10.1111/j.1479-828X.2012.01476.x
- Morison, L. A., Dirir, A., Elmi, S., Warsame, J., and Dirir, S. (2004). How experiences and attitudes relating to female circumcision vary according to age on arrival in Britain: a study among young Somalis in London. *Ethnicity and Health*, 9(1), 75-100.
- Morison, L., Scherf, C., Ekpo, G., Paine, K., West, B., Coleman, R., and Walraven, G. (2001). The long-term reproductive health consequences of female genital cutting in rural Gambia: a community-based survey. *Tropical Medicine & International Health*, 6(8), 643-653.

- Mose, G. B. (2008). *Thinking the Gusii Way: Insider Perspectives on Female Genital Mutilation(FGM)/Cutting and Strategies for Change*: VDM Verlag.
- MOWDAFA. (2012). *Female genital mutilation/cutting policy*. Puntland: Government of Puntland Somalia.
- Njue, C., and Askew, I. (2004). *Medicalisation of female genital cutting among the Abagusii in Nyanza Province, Kenya*. *Frontiers in Reproductive Health*. New York: Population Council.
- Nkrumah, J. (1999). *Unuttered screams: the psychological effects of female genital mutilation*. In B. Ferguson and E. Pittaway (Eds.), *Nobody wants to talk about it: refugee women's mental health*, (pp. 54–73). Sydney: Transcultural Mental Health Centre.
- Obianwu, O., Adetunji, A., and Dirisu, O. (2018). *Understanding medicalization of female genital mutilation/cutting: a qualitative study of parents and health workers in Nigeria*. *Evidence to End FGM/C Programme: Research to Help Girls and Women Thrive*. New York: Population Council.
- Obiora, L. A. (1997). *Bridges and barricades: rethinking polemics and intransigence in the campaign against female circumcision*. *Case Western Reserve Law Review*, 47(2), 275.
- Oloo, H., Wanjiru, M., Newell-Jones, K., and Minds, F. t. (2011). *Female genital mutilation practices in Kenya: the role of alternative rites of passage. A case study of Kisii and Kuria Districts*. London: Feed the Minds.
- Orubuloye, I. O., Caldwell, P., and Caldwell, J. (2000). *Female "Circumcision" Among the Yoruba of Southwest Nigeria: The Beginning of Change*. In B. Shell-Duncan and Y. Hernlund (Eds.), *Female circumcision in Africa: culture, controversy, and change* (pp. 73 - 94): Lynne Rienner Publishers, Inc.: Boulder, CO.
- Pearce, A. J., and Bewley, S. (2013). *Medicalization of female genital mutilation. Harm reduction or unethical*. *Obstet Gyneacol Reprod Med*, 24. doi:10.1016/j.ogrm.2013.11.003
- Powell, R., and Yussuf, M. (2018). *Changes in FGM/C in Somaliland: medical narrative driving shifts in types of cutting*. Retrieved from New York:
- PRB. (2013). *Ending Female Genital Mutilation/Cutting: Lessons from a decade of progress*. Retrieved from Washington, DC: <http://www.prb.org/pdf14/progress-ending-fgm.pdf>
- Purchase, T. C., Lamoudi, M., Colman, S., Allen, S., Latthe, P., and Jolly, K. (2013). *A survey on knowledge of female genital mutilation guidelines*. *Acta Obstetricia et Gynecologica Scandinavica*, 92 (7), 858-861. doi:10.1111/aogs.12144
- Rah, J. H., Hasler, C. M., Painter, J. E., and Chapman-Novakofski, K. M. (2004). *Applying the theory of planned behavior to women's behavioral attitudes on and consumption of soy products*. *Journal of Nutrition Education and Behavior*, 36(5), 238-244.
- Refaat, A. (2009). *Medicalization of female genital cutting in Egypt*. *Eastern Mediterranean Health Journal*, 15(6) 1379-88.
- Reig Alcaraz, M., Siles González, J., and Solano Ruiz, C. (2014) *Attitudes towards female genital mutilation: an integrative review*. *International Nursing Review*. 61(1), 25-34.
- Reza, A., Mercy, J. A., and Krug, E. (2001). *Epidemiology of violent deaths in the world*. *Injury Prevention*, 7(2), 104-111.

- Ritchie, J., Lewis, J., Nicholls, C. M. N., and Ormston, R. (2013). *Qualitative research practice: a guide for social science students and researchers*. London: SAGE Publications.
- Rouzi, A. A. (2013). Facts and controversies on female genital mutilation and Islam. *The European Journal of Contraception & Reproductive Health Care*; 18(1), 10-4.
- Rushwan, H., al-Ṭibb, J. a.-K. K., and Medicine, U. o. K. F. o. (1983). *Female Circumcision in the Sudan: Prevalence, Complications, Attitudes, and Change : a Report of a Study Conducted by the Faculty of Medicine, University of Khartoum, Sudan, 1977-1982: The Faculty*.
- Rymer, J. (2003). Female genital mutilation. *Current Obstetrics and Gynaecology*, 13(3), 185-190. doi:[http://dx.doi.org/10.1016/S0957-5847\(03\)00004-0](http://dx.doi.org/10.1016/S0957-5847(03)00004-0)
- Scholly, K., Katz, A. R., Gascoigne, J., and Holck, P. S. (2005). Using social norms theory to explain perceptions and sexual health behaviors of undergraduate college students: an exploratory study. *Journal of American College Health*, 53(4), 159-166.
- Serour, G. (2010). The issue of reinfibulation. *International Journal of Gynaecology and Obstetrics*, 109(2), 93-96.
- Serour, G. (2013). Medicalization of female genital mutilation/cutting. *African Journal of Urology*, 19(3), 145-149. doi:10.1016/j.afju.2013.02.004
- Shell-Duncan B, Hernlund Y, Wander K, and Moreau A. (2010). Contingency and change in the practice of female genital cutting: dynamics of decision making in Senegambia. Summary Report. <http://csde.washington.edu/bsd>.
- Shell-Duncan B, Moreau A, Wander K, Smith S (2018). The role of older women in contesting norms associated with female genital mutilation/cutting in Senegambia: A factorial focus group analysis. *PLoS ONE* 13(7): e0199217
- Shell-Duncan B, Wander K, Hernlund Y, Moreau A. (2011). Dynamics of change in the practice of female genital cutting in Senegambia: testing predictions of social convention theory. *Social Science and Medicine*, 73: 1275–1283.
- Shell-Duncan, B. (2001). The medicalization of female “circumcision”: harm reduction or promotion of a dangerous practice? *Social Science and Medicine*, 52(7), 1013-1028.
- Shell-Duncan, B., Njue, C., and Moore, Z. (2018). The medicalization of female genital mutilation /cutting: what do the data reveal? October 2018 (Update). Evidence to End FGM/C: Research to Help Women Thrive. Retrieved from https://www.popcouncil.org/uploads/pdfs/2018RH_MedicalizationFGMC_update.pdf
- Shell-Duncan, B., Wander, K., Hernlund, Y., and Moreau, A. (2013). Legislating change? Responses to criminalizing female genital cutting in Senegal. *Law and Society Review*, 47(4), 803-835.
- Skramstad H. *The fluid meanings of female circumcision in a multiethnic context in Gambia: distribution of knowledge and linkages to sexuality*. 1990, Christian Michelson Institute: Bergen, Norway.
- Sureshkumar, P., Zurynski, Y., Moloney, S., Raman, S., Varol, N., and Elliott, E. J. (2016). Female genital mutilation: survey of paediatricians’ knowledge, attitudes and practice. *Child Abuse and Neglect*, 55, 1-9.

- Tamaddon, L., Johnsdotter, S., Liljestrand, J., and Essen, B. (2006). Swedish health care providers' experience and knowledge of female genital cutting. *Health Care for Women International*, 27(8):709-22 doi:10.1080/07399330600817741
- Thierfelder, C., Tanner, M., and Bodiang, C. M. K. (2005). Female genital mutilation in the context of migration: experience of African women with the Swiss health care system. *European Journal of Public Health*, 15(1), 86-90.
- Turkmani, S., Homer, C., Varol, N., and Dawson, A. (2017). A survey of Australian midwives' knowledge, experience, and training needs in relation to female genital mutilation. *Women and Birth*. doi:<https://doi.org/10.1016/j.wombi.2017.06.009>
- UNFPA. (2015). Demographic perspectives on female genital mutilation. Retrieved from http://www.unfpa.org/sites/default/files/pub-pdf/1027123_UN_Demographics_v3%20%281%29.pdf
- UNICEF, WHO, World Bank, and UN-DESA Population Division. (2013). Levels and Trends in Child Mortality Report Retrieved from http://www.who.int/entity/maternal_child_adolescent/documents/levels_trends_child_mortality_2013.pdf?ua=1
- UNICEF. (2005). Changing a harmful social convention: female genital mutilation/cutting. Retrieved from https://www.unicef-irc.org/publications/pdf/fgm_eng.pdf
- UNICEF. (2013). Female genital mutilation/cutting: a statistical overview and exploration of the dynamics of change. New York: UNICEF.
- UNICEF. (2014). Female Genital Mutilation/Cutting: What might the future hold? (pp. 6). Retrieved from http://data.unicef.org/corecode/uploads/document6/uploaded_pdfs/corecode/FGM-C-Brochure-7_15-Final-LR_167.pdf
- UNICEF. (2016). Female genital mutilation/cutting: a global concern. Retrieved from http://www.unicef.org/media/files/FGMC_2016_brochure_final_UNICEF_SPREAD.pdf
- Valderrama, J. (2002). Female genital mutilation: why are we so radical? *The Lancet*, 359(9305), 529-530.
- Varol, N., Fraser, I. S., Ng, C. H., Jaldesa, G., and Hall, J. (2014). Female genital mutilation/cutting—towards abandonment of a harmful cultural practice. *The Australian & New Zealand Journal of Obstetrics & Gynaecology*, 54(5), 400-405. doi:10.1111/ajo.12206
- Vissandjée, P., Bilkis, Kantiébo, M., Levine, A., and N'Dejuru, M., Radegonde. (2003). The cultural context of gender, identity: female genital, excision and infibulation. *Health Care for Women International*, 24(2), 115-124.
- Vloeberghs, E., van der Kwaak, A., Knipscheer, J., and van den Muijsenbergh, M. (2012). Coping and chronic psychosocial consequences of female genital mutilation in the Netherlands. *Ethnicity & Health*, 17(6), 677-695.
- Wahlberg A, Johnsdotter S, Selling K , Källestål C, Essén B. (2017). Factors associated with the support of pricking (female genital cutting type IV) among Somali immigrants – a cross-sectional study in Sweden; *Reproductive Health*; 14:92.
- WHO. (1997). Female Genital Mutilation. A Joint WHO/UNICEF/UNFPA Statement Retrieved from <http://apps.who.int/iris/bitstream/10665/41903/1/9241561866.pdf>

- WHO. (1999). Female genital mutilation programmes to date: what works and what doesn't : a review. Geneva: World Health Organisation.
- WHO. (2000). A systematic review of the health complications of female genital mutilation including sequelae in childbirth. Geneva: World Health Organisation.
- WHO. (2006). Female genital mutilation and obstetric outcome: WHO collaborative prospective study in six African countries. *The Lancet*, 367(9525), 1835-1841. doi:10.1016/s0140-6736(06)68805-3
- WHO. (2008). Eliminating female genital mutilation: An interagency statement. Retrieved from http://www.unfpa.org/sites/default/files/pub-pdf/eliminating_fgm.pdf
- WHO. (2010). Global strategy to stop health-care providers from performing female genital mutilation. Geneva: World Health Organisation.
- WHO. (2016). WHO guidelines on the management of health complications from female genital mutilation Retrieved from http://apps.who.int/iris/bitstream/10665/206437/1/9789241549646_eng.pdf?ua=1
- World Population Review. (2018). Population of Cities in Kenya (2018). Retrieved from <http://worldpopulationreview.com/countries/kenya-population/cities/>
- Yoder, P. S., Wang, S., and Johansen, E. (2013). Estimates of female genital mutilation/cutting in 27 African countries and Yemen. *Studies in Family Planning*, 44(2), 189-204.