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Healthcare professionals' knowledge, attitudes, and experiences of FGM in sub-Saharan Africa: A systematic scoping review

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A B S T R A C T

Background: Female Genital Mutilation (FGM) remains a challenge as evidence indicates that healthcare professionals (HCPs) who are required to play a role in the elimination of FGM, support the practice. The reasons some HCPs in Sub Saharan Africa still perpetuate FGM is unclear. Thus, this review aims to provide an overview of the existing evidence surrounding HCPs knowledge, attitudes, and experiences of FGM in order to determine the factors that may influence support for the continuation of FGM.

Methods: A search was conducted utilising six databases (CINHAL, PubMed, Embase, MEDLINE, PsycINFO and ASSIA) and using key terms such as female genital mutilation, FGM, knowledge, attitudes, experiences, practices, and healthcare professionals. At the end of the search, 12 studies were identified. The 12 studies were situated in sub-Saharan African countries (SSA) and they examined HCPs knowledge, attitudes, and experiences of FGM.

Findings: This review revealed three overarching themes: (1) Knowledge of FGM (2) attitudes towards the practice of FGM and (3) experiences of FGM. The review revealed that HCPs have limited knowledge of FGM and its health implications. Furthermore, some HCPs openly disapprove the practice of FGM, but may undermine abandonment messages and perform FGM in secret due to cultural affiliations and financial rewards. This is indicative of HCPs moving towards medicalising FGM by upholding cultural beliefs and practices rather than adhering to professional policies, codes of conduct and the legal position. This review identifies determinants for the preservation of FGM among some HCPs in SSA countries to include pervading cultural beliefs, poor design of professional trainings in the field of FGM and limited knowledge by HCPs

1. Background

Female genital mutilation (FGM) is a global challenge with estimated over two hundred million girls and women worldwide having undergone the procedure (United Nations Children's Fund (UNICEF), 2016) and another three million girls are at risk of being cut yearly (UNICEF, 2016) Statistical forecasts indicate that if more work is not directed towards eradicating the practice of FGM, the prevalence may increase to sixty-eight million by the year 2030 with a projection of nearly five million girls undergoing the procedure yearly (United Nations Population Funds (UNFPA), 2018). The practice of FGM is concentrated in Africa, Asia and the Middle East and it is characterised by the partial or total excision of the female external genitalia for non-therapeutic reasons (World Health Organization (WHO), 2020). FGM is associated with entrenched cultural practices that are not limited to a cultural belief as a rite of passage of girls into adulthood and an accepted part of marriage ceremonies in most communities living in Sub-Saharan African (SSA) countries (Ahmed, Kareem, Shabila, & Mzori, 2018; WHO, 2016).

FGM is mostly performed by traditional birth attendants (TBAs) whose role also includes attending to pregnant women and their delivery in a community setting (WHO, 2010). The FGM procedure is often carried out without anaesthetics on infants, young girls and women using razor blades, knives, scissors, and pieces of broken bottles (WHO, 2001). WHO (2020) typology of FGM includes type one, the removal of a portion or all of the clitoris and type two is the excision of part or all of the clitoris and labia minora, with or without the excision of the labia majora. The type three of FGM is also referred to as infibulation and it is described as the narrowing of the vagina orifice by making a seal that is formed by cutting and repositioning the labia (WHO, 2020). While the fourth type comprises of all other injurious procedures to the female external genitalia for non-medical purposes including burning, piercing, and pricking (WHO, 2020). FGM is detrimental regardless of the type and could lead to severe health consequences such as extreme pain, severe bleeding, infections, gynaecological, urogynaecological and psychological problems, and even death (WHO, 2018).

Over the years, different strategies have been developed and carried

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out in many parts of Africa, including SSA countries to eliminate the practice of FGM (Johansen, Diop, Laverack, & Leye, 2013; WHO, 2010, 2020). These strategies include providing wider information about health detriments of FGM for girls and women, and training healthcare professionals (HCPs) to become change agents. This includes building HCPs capabilities in educating, counselling, and providing direct care for women and girls affected by FGM (Johansen et al., 2013; WHO, 2010). The perceived outcome of these approaches is that practicing communities will reflect on the health dangers caused by FGM and subsequently abandon the practice (Berg & Denison, 2012; Johansen et al., 2013; Njue & Askew, 2004). However, discourses around the outcome of these strategies indicate that some communities began practicing type 1 or 2 of FGM, as seen in Somali and Sudan where there are reports of increased requests for HCPs to perform FGM procedures in order to reduce health risks associated with the practice (Berg & Denison, 2012; Johansen et al., 2013; Njue & Askew, 2004). Consequently, some HCPs capitalised on this demand and began to medicalise FGM with the erroneous belief that the risk for infections and long-term health complications will be reduced when FGM is performed by HCPs (WHO, 2010).

The medicalisation of FGM is condemned globally by all stakeholders including national agencies and the World Medical Association as it violates the rights of women and the basic ethical principle of 'do no harm' (WHO, 2010). Notwithstanding, the rate of medicalisation is alarming as a recent analysis of data from 25 countries in Africa and the Middle East revealed that 26% of girls and women with FGM were cut by HCPs which represents nearly 16million women (Shell-Duncan, Moore, & Njue, 2017). Despite the implementation of strategies to end FGM and training of HCPs to be change agents, some HCPs still support FGM and perform the procedure, while most HCPs continue to have poor knowledge of FGM and the health dangers associated with the practice (Kaplan, Hechavarría, Bernal, & Bonhoure, 2013; Kaplan Marcusan et al., 2016; Refaat, 2009).

Therefore, it is important to ascertain if the support for FGM and its medicalisation is due to poor knowledge of FGM among HCPs or the lack of technical capabilities to deal with FGM related issues. Hence this review aims to conduct an in-depth search of empirical literature on HCPs knowledge, attitudes, and experiences of FGM to determine the factors that may continue to influence the support for FGM in SSA countries.

2. Methods

A scoping review was conducted to systematically search and evaluate available data with the aim of identifying all relevant literature irrespective of the study design (Arksey & O'Malley, 2005). This scoping review followed the methodological framework which is made up of five steps that provides a guide for an explicit, logical, and systematic presentation of findings (Arksey & O'Malley, 2005).

2.1. Step 1: Identifying the review question

The formulated question guiding this review is - what is known from existing literature regarding HCPs knowledge, attitudes, and experiences of FGM in SSA countries?

2.2. Step 2: Identifying relevant studies

An initial search was carried out on google scholar and CINHAL using key concepts such as "female genital mutilation" "FGM" "knowledge" "attitudes" "experiences" "practices" "healthcare professionals" "nurses" "doctors" and "midwives". This was followed by the reviewing of titles, abstracts, and citations to have an overview of the extent and depth of existing literature.

Then an extensive search was conducted using all the key concepts identified in the review question. The key concepts and their synonyms were entered individually into six databases (CINHAL, PubMed, Embase, MEDLINE, PsycINFO and ASSIA) and then linked together by Boolean operators "OR" and then with "AND". In addition, a hand and snowball search were conducted on reference list and grey papers in relevant organisation (WHO, UNICEF, UNFPA). The process of identifying relevant studies was undertaken by all three authors (AA, KH and JM).

2.2.1. Inclusion criteria

The review included studies conducted in SSA countries that explored HCPs knowledge, attitudes, and experiences of FGM. SSA countries in this context represents countries that lie south of the Sahara. The review is limited to SSA countries because the practice of FGM is most prevalent in some of these countries, for example- Somalia (98%), Sudan (87%), and Gambia (76%) (UNICEF, 2020) and there is no evidence suggesting that a review has been published using only studies conducted among HCPs in SSA countries. This review included empirical studies with qualitative or quantitative designs, published in English within any time frame.

2.2.2. Exclusion criteria

Studies that did not meet the inclusion criteria were excluded.

2.3. Stage 3: Study selection

The search yielded a total of 84 sources which were exported to EndNote version X9 reference management software and duplicates were removed leaving a total of 55 sources. After titles, abstracts, and citations were independently reviewed against the inclusion criteria by two authors (AA and KH) working as a team, a further 24 sources were excluded with the reasons stated *(see* Fig. 1). Then all three authors (AA, KH and JM) scrutinised the remaining 31 full-text sources for eligibility, after which a total of 12 studies which met the inclusion criteria were included in the review. (*see* Fig. 1).

2.4. Step 4: Charting the data

Data was synthesised from the 12 included studies and charted using the following format- author (year), country, aim of study, methodology, domains examined/ findings. (*see* Table 1)

2.5. Step 5: Findings, discussion, and conclusion

2.5.1. Findings

2.5.1.1. Characteristics of included studies. The search identified 12 studies to be included in this review. They were geographically split into four countries in SSA - Nigeria (n = 7), Gambia (n = 2), Sudan (n = 2) and Somaliland (n = 1). The studies examined a total of 3,213 HCPs including doctors (170), nurses (632), midwives (25), nurse/midwives (666), nursing/midwifery students (269), auxiliary nurses (6) but these participants were referred to as health workers in the study by Obianwu et al. (2018) because they were identified and percieved as health workers by community members. Similarly, the study by Ali (2012) examined (157) traditional birth attendants (TBAs) but described them as midwives in the study. Furthermore, the professional group of 1288 participants in one study was not clearly defined (Kaplan Marcusan et al., 2016).

The 12 included studies were conducted within tertiary, secondary and primary healthcare facilities, and covered urban and rural settings. Nine of the studies used a quantitative approach with a questionnaire as the instrument of data collection and three used qualitative method and collected data using face to face interviews and participants' observation *(see* Table 1*)*.

The included studies examined different domains relating to this

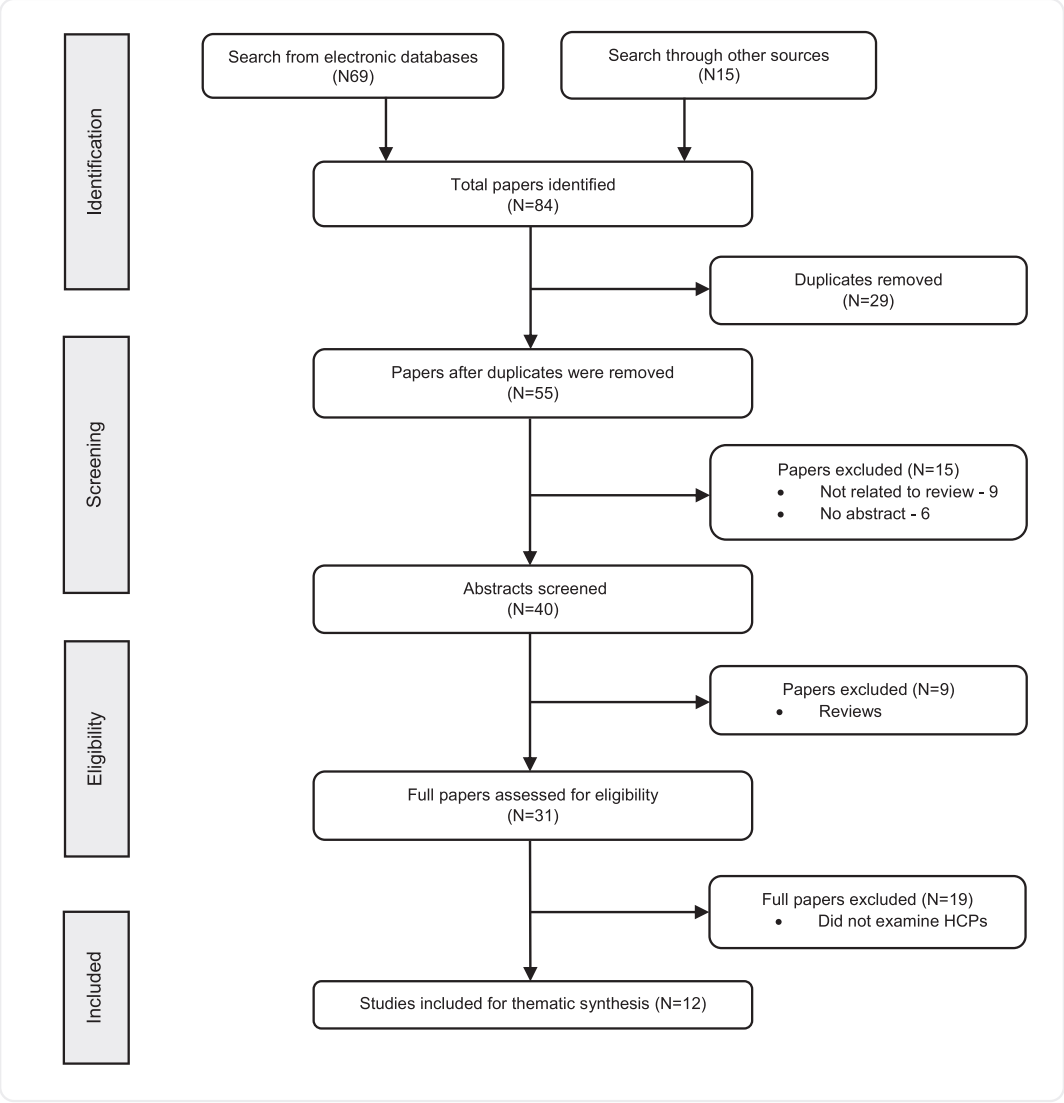

Fig. 1. A PRISMA chart of selected studies.

review. Ten studies examined HCPs knowledge of FGM, this involved exploring their understanding of the classification of FGM, reasons for practicing FGM and health implications of FGM. The attitudes of HCPs towards FGM was explored by nine studies and this was to determine their opinions towards FGM while HCPs experiences of FGM was examined by nine studies *(see* Table 1*)*. The findings from this review will be presented based on the themes that were identified from the 12 studies. The review themes are: *(1) Knowledge of FGM (2) Attitudes towards the practice of FGM and (3) experiences of FGM.* The themes and subthemes are shown below.

Review themes	Subthemes
Knowledge of FGM	Knowledge of the types of FGM Reasons for practicing FGM Health consequences of FGM
Attitudes towards the practice of FGM	
Experiences of FGM	Clinical care of FGM patients Practice of FGM

2.5.2. *Knowledge of FGM*

HCPs knowledge of FGM was examined by ten studies, seven of the studies were conducted in Nigeria, two in Gambia and one in Sudan. Findings from the knowledge of FGM will be presented under three sub themes – *knowledge of the types of FGM, reasons for practicing FGM and health consequences of FGM.*

2.5.2.1. Knowledge of the types of FGM. Only four of the studies from Nigeria and one from Sudan examined HCPs knowledge of the types of FGM. In a survey of 182 nurses in Nigeria, findings show that only a few (6.6%) of the nurses could correctly identify the four types of FGM and less than half (38%) were able to identify types 1 and 2, which are the commonly referred to procedure for FGM (Onuh et al., 2006). Other studies in Nigeria (Umar & Oche, 2014), reported that only 34 out of 100 nurses had knowledge about the types of FGM, while Ashimi et al. (2014) reported that 41% of the 350 nurses surveyed declared knowing nothing about the types of FGM. Likewise, the findings from the Nigerian studies (Ashimi et al., 2014; Onuh et al., 2006; Umar & Oche, 2014) were similar to those reported in a Sudanese study of 157 (TBAs) midwives, where a very small number (7%) of the respondents could correctly identify all types of FGM (Ali, 2012). There is a similarity across all these studies, regardless of the country that indicates knowledge of the different types of FGM amongst nurses and midwives is clearly limited despite that these front-line staff are those most likely to be required to assist and support women who present as FGM patients at different times throughout their life course.

Table 1
Thematic table of synthesised data.

S/N	Author (Year)	Country	Aim of study	Methodology	Domains examined/Findings		
					Knowledge	Attitudes	Experiences
1	Obianwu et al. (2018)	Nigeria	To inform the design and implementation of abandonment interventions through enhanced understanding of the factors of medicalised FGM in Nigeria	A community-based, cross-sectional qualitative study in Delta, Ekiti, Imo and Kaduna states of Nigeria Participants – 6 health workers (auxiliary nurses) and community members Data collection - In depth interviews	General awareness of FGM Limited knowledge about the types and complications of FGM	FGM is a minor procedure with health benefits	Performed FGM because of cultural beliefs Some were taught how to perform FGM procedures by other health workers who practice FGM FGM is not a concealed practice among HWs in these settings FGM is performed within hospital facilities FGM is sometimes performed for free Claim to have abandoned FGM but still practice it One participant declared to still practice FGM
2	Kaplan Marcusan et al. (2016)	Gambia	To explore, measure and assess changes in knowledge, attitude and practices regarding FGM among health care professionals (HCPs) in The Gambia	A cross-sectional descriptive study Participants – 1,288 HCPs in 6 regions of The Gambia Data collection - Self-administered questionnaire	Good knowledge of FGM 96.5% stated that FGM is practiced for cultural reasons 41.3% says for ritual passage of girls into womanhood 78.5% FGM can lead to transmission of infectious diseases 33% FGM cause lack of sexual libido	76.4% think FGM should be stopped 24.4% subject their daughters to FGM 25.4% support FGM 10.5% claim that girls who have not undergone FGM should be discriminated against 77.9% believes FGM is a violation of the human rights of women 72% FGM is harmful	10.5% have performed FGM 71.5% belong to families that practice FGM 28.7% support medicalisation of FGM 93.7% think HCPs have a role to play in eliminating FGM
3	Ashimi, Aliyu, Shittu, and Amole (2014)	Nigeria	To determine the knowledge and attitudes of nurses in northern Nigeria concerning FGM	A cross-sectional study Participants – 350 nurses working in 3 tertiary institutions in northern Nigeria Data collection - Self-administered questionnaire	General awareness about FGM (91%) 41% know no type of FGM, 49% could mention one type of FGM 53% FGM prevent promiscuity 10% FGM is a religious requirement 28% preserves virginity 3% people practice FGM out of ignorance Majority mentioned haemorrhage (77%), risk of HIV and tetanus (73%), painful coitus (63%), and difficult labour (54%) as complications of FGM	4% support FGM, would perform FGM, and allow their daughters to be cut 8% FGM has medical benefits 17% do not know if FGM has benefits	
4	Umar and Oche (2014)	Nigeria	To identify the predictors of professional care workers (PHWs) practicing FGM in Sokoto, Nigeria	A descriptive cross-sectional study Participants – 100 female nurses in a teaching hospital in Sokoto, Nigeria Data collection - Questionnaire	75% had general awareness about FGM and the health consequences 34% had knowledge about the types of FGM	14% support the continuation of FGM 86% FGM is violence against women	7% have participated in the decision-making process of FGM and have performed FGM FGM is performed outside hospital environment Ethnicity and positive attitudes were the main reasons for supporting FGM
5	Ibrahim, Oyeyemi, and Ekine (2013)	Nigeria	To determine the knowledge, attitude, and practice of FGM among doctors and nurse/midwives practicing in secondary and tertiary hospitals in Bayelsa state, Nigeria.	A cross-sectional study Participants (118) - doctors (66) and nurse/midwives (52) in secondary (2) and tertiary (2) hospitals in Bayelsa state, Nigeria. Data collection - structured questionnaire.	All are aware of FGM Almost all could mention some health complications of FGM- HIV (69.5%), haemorrhage (82.2%), keloid (67.8%) difficult delivery (52.5%), perineal tear (28%) 9.7% FGM is not harmful	4.2% support FGM 5.1% will encourage the practice 2.6% will cut daughters 68% government is not doing enough to eradicate FGM	Only 1 participant admitted to performing FGM 20% have seen type 1 of FGM 25% treated women with FGM complications

(*continued on next page*)

Table 1 (*continued*)

S/N	Author (Year)	Country	Aim of study	Methodology	Domains examined/Findings		
					Knowledge	Attitudes	Experiences
					96.6% FGM is a cultural practice 12.7% FGM is a religious requirement 6% FGM makes the external genitalia attractive 11% FGM reduces promiscuity		
6	Isman, Mahmoud Warsame, Johansson, Fried, and Berggren (2013)	Somaliland	To elucidate midwives' experiences in providing care and counselling to women with FGM related problems	A qualitative inductive study Participants – 8 midwives living in Somaliland. Data collection - Semi-structured interview			All have been trained to provide direct care and counselling for women with FGM problems All 8 midwives have undergone FGM Midwives faced cultural and superstitious beliefs and religious challenges when providing care for women with FGM Most midwives would perform mild FGM on their daughters Most of the midwives still perform FGM despite being against the practice Reasons for performing FGM includes, to meet family demands, pressure from young female relatives who want to undergo FGM procedures and difficulty in having to abruptly stop performing FGM
7	Kaplan et al. (2013	Gambia	To examine the knowledge, attitude and practices regarding FGM among health care professionals (HCPs) working in a rural setting in The Gambia	A cross-sectional descriptive study Participants – 468 nurses/midwives in health facilities in rural areas of The Gambia. Data collection - Questionnaire	General awareness of FGM Complications of FGM -transmission of infectious diseases (59.1%), bleeding (53.4%), difficult delivery (46.3%), reduced libido (25.2%) 2.1% FGM has no health complications. 58.8% FGM is practiced for religion reasons 48.2% FGM is a cultural practice	42.5% support the continuation of FGM, 47.2% will cut their daughters 12.5% uncut girls should be discriminated against 54.8% FGM cannot eradicated in Gambia 57.5% think the practice should stop	40.9% have seen women and girls with FGM complications 68.6% belong to families who practice FGM 7.6% have performed FGM 42.9% FGM should be medicalised 40.6% medicalisation should be stopped 73% HCPs have a role to play in the elimination of FGM
8	Ali (2012)	Sudan	To assess knowledge and attitude of midwives towards FGM	A quantitative study Participants – 154 midwives (Traditional Birth Attendants) in kassala state, Eastern Sudan Data collection - Opened questionnaire	Poor awareness of FGM among midwives Only 7% could identify the four types of FGM 76.4% some types of FGM are not harmful 64.3% FGM decreases the sexual pleasure 53.5% FGM does not increase the risk of HIV transmission 4.5% no type of FGM is harmful	66.2% will continue the practice of FGM, for cultural reasons (51.2%), religious reasons (26%) and financial benefits (22.8%)	80.9% have performed FGM
9	Dike, Ojiyi, Chukwulebe, and Egwuatu (2012	Nigeria	To determine the awareness and attitudes of female nursing/midwifery students towards FGM	A quantitative study Participants – 269 students at school of nursing and midwifery, Afikpo Ebonyi state, Nigeria. Data collection - Semi structured questionnaire	High awareness of FGM Almost all mentioned bleeding (86.6%), HIV (84.3%), painful coitus (75.8%), and difficult delivery (26.7%) as complications of FGM. 51.2% FGM prevents promiscuity 26.7% FGM is a traditional practice	49.3% of those that have undergone FGM are happy with their status All participants will not cut their daughters	More than half have undergone FGM (146)

(*continued on next page*)

Table 1 (*continued*)

S/N	Author (Year)	Country	Aim of study	Methodology	Domains examined/Findings		
					Knowledge	Attitudes	Experiences
					17% make external genitalia neat		
10	Adekanle, Isawumi, and Adeyemi (2011)	Nigeria	To assess the knowledge and experience of health workers in obstetrics and gynaecology, paediatrics, and private facilities in Nigeria	A descriptive cross-sectional study Participants – 250 health workers (146 nurse midwives and 104 doctors) practicing in health institutions in Osun, Oyo and Ogun states, Nigeria. Data collection - Questionnaire	80% have good knowledge about FGM		66.6% have seen FGM type 1 64.4% have treated one form of FGM complication 90.4% have seen labial agglutination 5.2% had seen clitoroidal cysts 4.4% with virginal bleeding More nurses/midwives (69%) than doctors (52.9%) have treated FGM complications. 48.4% (121) have been requested to perform FGM Nurses/midwives (57.3%) were mostly asked to perform FGM procedures compared with doctors (37.7%)
11	Onuh et al. (2006)	Nigeria	To determine the knowledge, attitude, and practice of FGM among nurses	A cross-sectional study Participants – 182 nurses working in central hospital Benin city, Edo state Nigeria Data collection – Structured questionnaire	General awareness of FGM Only 6.6% correctly identified the four types of FGM 38% identified type 1 and 2 of FGM 9.9% FGM beautifies the vagina 72% all forms of FGM are harmful	FGM is bad (85.7%) 2.8% FGM is good 57.7% will perform FGM in future 92.2% will not cut their daughters 4.4% will have their daughters undergo FGM	6.6% practice FGM 14.3% have performed FGM in the past Reason for performing FGM- cultural (83.3%), financial gain (50%), discourage clients from patronizing traditional cutters (25%)
12	Berggren, Abdel Salam, Bergstrom, Johansson, and Edberg (2004)	Sudan	To explore Sudanese midwives' motives for and perceptions and experiences of re-infibulation after birth	An ethnographic study Participants – 17 midwives working Khartoum/ Omdurman, Sudan. Data collection - Participants observation and in-depth interviews			16 midwives have undergone FGM type 3 (infibulation) 9 of them were re-infibulated 11 have subjected their daughters to either type 1 or 3 of FGM Midwives claim they do not perform re-infibulation within the hospital setting Midwives perform re-infibulation to satisfy the demand from community and for financial benefits Re-infibulation after birth is illegal Participants sometimes perform re- infibulation without the consent of the woman

2.5.2.2. Reasons for practicing FGM. Exploring HCPs knowledge of the reasons FGM is practiced, Kaplan Marcusan et al. (2016) surveyed 1288 HCPs in Gambia and found that 96.5% of the respondents mentioned that FGM is practiced for cultural reasons and around 40% stated FGM is performed to initiate young girls into womanhood. Whilst a study of nurses in Nigeria showed that over 50% of participants mentioned that FGM is practiced to prevent promiscuity and 28% stating it preserves virginity, only 3% of the nurses believe that people practice FGM because of ignorance (Ashimi et al., 2014). This latter study reported findings that are similar to those reported by Dike et al. (2012) where over half of their participants reported that FGM prevents promiscuity and 17.4% indicated that it makes the external genitalia look neat. Another study in Nigeria (Onuh et al., 2006) reports that only a small faction (9.9%) of the nurses surveyed believed that FGM makes the female genitalia more attractive.

There were other factors for the practice of FGM, including a Gambian study of 468 nurse/midwives that showed that 58.8% of the participants stating that FGM is practiced for religious reasons (Kaplan et al., 2013). These findings demonstrate that some HCPs appear to have the understanding that FGM is a practice that is embedded in cultural beliefs but most still believe in the myths and religious beliefs associated with the practice. It appears that some HCPs still have limited knowledge about the reasons why people practice FGM because most perceive FGM as a religious requirement, though there is no mention of FGM in any religious references (WHO, 2008).

2.5.2.3. Health consequences of FGM. Knowledge about health consequences of FGM vary among the HCPs that were included in this review.

Four studies carried out in Nigeria (Adekanle et al., 2011; Ashimi et al., 2014; Dike et al., 2012; Ibrahim et al., 2013) reported that participants demonstrated a good knowledge of the health problems associated with FGM, and almost all participants in these studies could identify risk for HIV, tetanus, haemorrhage, painful coitus, perineal laceration, formation of scar tissue and clitoral cyst as complications of FGM. Similarly, studies conducted in Gambia (Kaplan et al., 2013; Kaplan Marcusan et al., 2016) report that HCPs cited reduced sexual libido, transmission of infectious diseases and difficult labour and delivery as harmful effects of FGM, although a very small percentage of participants believe that FGM has no health consequences. Conversely, a study of midwives (TBAs) in Sudan reported that 76.4% of respondents claimed that some types of FGM are harmless while only a few (4.5%) declared no type of FGM is harmful (Ali, 2012). In addition, a recent community based qualitative study (Obianwu et al., 2018), was conducted with the aim to inform the design and implementation of FGM abandonment interventions by understanding the factors of medicalised FGM within Nigeria. This study incorporated interviews with only six auxiliary nurses who are not registered nurses but are often involved in the care of patients who are seeking FGM. Whilst they are not HCPs in the context that this review is considering, the study findings do highlight that these participants lacked knowledge about the types of FGM and the wider health implications (Obianwu et al., 2018). In general, though most HCPs were able to correctly mention some of the consequences of FGM, there were still reports of poor knowledge of the health implications of FGM among the HCPs examined in the included study.

2.5.3. Attitudes towards the practice of FGM

The attitude of HCPs towards FGM was examined by nine studies, six of the studies were conducted in Nigeria two in Gambia and one from Sudan. Findings from studies conducted in Nigeria show that HCPs have different views regarding the practice of FGM and there is a small percentage of HCPs that support the continuation of the practice. All the nursing/midwifery students (n = 269) in a Nigerian study, stated that they would not subject their daughters to FGM (Dike et al., 2012). Another survey of nurses in Nigeria revealed that 85.7% of the nurses reported FGM is bad and only 4.4% declared that they would allow FGM on their daughters whilst over 57% claimed that they will perform FGM in future if requested (Onuh et al., 2006). The work by Ibrahim et al. (2013) in Nigeria found that across their study very few (5.1%) would encourage FGM practice. Similarly, Ashimi et al. (2014) reported that only 8% of the participants declared that FGM is beneficial while 17% do not know if FGM has benefits or not and 4% reported that they will consent for their daughters to be cut and the same 4% claim they support the practice of FGM and are willing to perform FGM procedures. Despite the declaration that FGM is a violent act against women a large percentage (14%) were reported as still supporting the continuation of FGM in Nigeria (Umar & Oche, 2014). Likewise, a qualitative study (Obianwu et al., 2018) found all participants claimed that FGM is a minor procedure with perceived benefits, this is despite that in Nigeria the practice is illegal.

Most HCPs in the studies conducted in Gambia reported similar views with those in the empirical studies conducted in Nigeria. For example, a study (Kaplan et al., 2013) in Gambia reported that just over 40% of participants still support the practice of FGM, with nearly half stating their intention to allow FGM on their own daughters. The same study also reported that nearly half (42.9%) of the participants think allowing medicalisation of FGM enables control of the practice and makes it safer in the long term (Kaplan et al., 2013).

Within the Gambian studies (Kaplan et al., 2013; Kaplan Marcusan et al., 2016), there was also evidence that some of the HCPs examined (12.8% and 10.5% respectively) indicated that females who have not undergone FGM procedures should be discriminated against, although they did not state in what way. This underlying belief granted from the two studies is worrying since these are practicing HCPs who can influence the next generation of the workforce. The recent study by Kaplan Marcusan et al. (2016) however does reveal that overall, the percentage of HCPs who support FGM appears to be reducing in the Gambia, as 76.4% of the 1,288 HCPs examined believe that the practice of FGM should discontinue with 77.9% declaring FGM to be a violation of the human rights of girls and women. This finding appears to be a step change from previous work conducted in the country by Kaplan et al. (2013) where 57.5% indicated that the practice of FGM should be stopped. The negative attitude of the surveyed HCPs in the recent study by Kaplan Marcusan et al. (2016) may be due to the criminalisation of FGM in Gambia by the Women's (Amendment) Act 2015, which introduced Sections 32A and 32B into the Women's Act of 2010 (Kaplan Marcusan et al., 2016). Despite the existence of FGM law in Gambia, respondents still described FGM as a good practice, with over a quarter (25.4%) still supporting the continuation of FGM practices (Kaplan Marcusan et al., 2016). These overall findings show that some HCPs still have attitudes that positively promote and could encourage FGM practices, irrespective of the legal position within the respected country, national and international awareness campaigns, and the acceptance as a violation of the rights of women and girls.

2.5.4. Experiences of FGM

Findings from studies that examined HCPs experiences of FGM will be presented under two sub themes- *clinical care of FGM patients and practices of FGM.*

2.5.4.1. Clinical care of FGM patients. A qualitative study by Isman et al. (2013) with eight midwives in Somaliland, explored participants experiences in providing care and counselling to women suffering from the effects of FGM. The study reported that the midwives had received training in order to provide direct care and counselling for girls and women who had undergone FGM. Despite the positive messages from these midwives, it was evident that there was still ongoing education and skills development required as the study also reported that there was a strong inclination towards superstitious, cultural, and religious beliefs as to some of the challenges that the midwives faced during their clinical encounters with women and their families (Isman et al., 2013). The nurses and midwives in the study by Kaplan et al. (2013), stated that they had attended to women and girls with health problems arising from FGM which led 40.6% of them to declare that stopping the medicalisation of FGM was the next step while 73% believe that there was clear role for them to assist in eliminating FGM practices in the Gambia. This response concurs with that of the study undertaken by Kaplan Marcusan et al. (2016) whereby some 93.7% of respondents also stated that HCPs have a crucial and important role for the eradication of illegal and detrimental FGM practices.

The findings from studies conducted in Nigeria are similar to those reported in Gambia and Somaliland. The study by Ibrahim et al. (2013) in Nigeria highlights the continuing number of cases where medical health care interventions are required as a direct result of FGM practices. A previous study (Adekanle et al., 2011) that recruited a large sample of 104 doctors and 146 nurse/midwives in Nigeria also showed the extent of FGM complication that they witnessed. The study reports that 90.4% of the participants have seen women with labial agglutination, 5.2% had seen clitoroidal cysts and 4.4% have encountered women with virginal bleeding (Adekanle et al., 2011). In the same study, it was noted that both nurse/midwives and doctors declared that they have been approached to perform FGM (Adekanle et al., 2011).

These findings are indicative that some of the HCPs examined have received training and gained experience in providing FGM related care (Isman et al., 2013; Kaplan et al., 2013; Ibrahim et al., 2013; Kaplan Marcusan et al., 2016). However, despite professional training and claims to be against the practice of FGM, some HCPs declared that they do perform FGM (Isman et al., 2013; Kaplan Marcusan et al., 2016). The reasons cited for this ranged from difficulty in having to abruptly stop FGM, to experiencing pressure from young female family members who

would like to be infibulated like their peers (Isman et al., 2013).

2.5.4.2. Practices of FGM. An ethnographic study of 17 midwives in Sudan reported that most of the midwives had themselves undergone infibulation and some had been re-infibulated. They also reported that 11 of the 17 midwives had subjected their own daughters to type 1 or 3 of FGM (Berggren et al., 2004). Like other types of FGM, re-infibulation after childbirth is not permitted in Sudan but remains a common practice among the Sudanese population (Berggren et al., 2004). Midwives sometimes perform re-infibulation with or without the consent from the women or their husbands because it is believed that they are doing the women a favour by helping them preserve the beauty of their genitals and maintain their marriages (Berggren et al., 2004).

The midwives in the study by Berggren et al. (2004) are similar to other studies included in this review (for example Ali (2012); Isman et al. (2013); Obianwu et al. (2018)), whereby the HCPs are performing FGM, for financial gain and to satisfy the demands from communities and families, including performing in their own private facilities (Berggren et al., 2004). The findings from this ethnographic study concurs with work in Sudan with a larger sample size of 157 midwives by Ali (2012). This recent work by Ali (2012) reports that over 80% of midwives claimed to have performed FGM with more than half (66.2%) stating that they will continue to perform FGM for cultural, religious reasons and for financial gain; this is despite the legal position of FGM within some Sudanese states (Gedaref, South Darfur, South Kordofan and Red Sea).

In the Kaplan et al. (2013) study, over 60% of participants stated that they belong to families that routinely practice FGM but only a small percentage (7.6%) declared to have actually performed FGM despite these family and community pressures (Kaplan et al., 2013). It is useful to note that a follow up study by the same authors found a higher percentage (71.5%) of HCPs reporting they belong to FGM practicing families with a steady increase (10.5%) in those advocating to offer FGM (Kaplan Marcusan et al., 2016).

The Umar and Oche (2014) study found that 7% of the nurses have been involved in the decision-making process of FGM and had performed FGM but none of the FGM procedures was performed within the past one year to the time the study was conducted. The nurses who had practiced FGM claimed that the procedure was performed outside the hospital setting (Umar & Oche, 2014). However, in a recent study of auxiliary nurses by Obianwu et al. (2018), participants stated that FGM was performed in the clinics where they worked and the hospital management and other HCPs working within same clinics are aware of the act as the practice of FGM is not concealed in these settings. These HCPs who practice FGM openly within healthcare facilities could be doing so because they live and work in rural communities within the states (Delta, Ekiti, Imo and Kaduna) where this study was conducted. These states happen to have high prevalence of FGM in Nigeria Ekiti (72.3%), Imo (68%), (Delta (40.3%) and Kaduna (25.1%) and the medicalisation rate is, Imo (61%), Delta (28.9%), Ekiti, (26.2%) and Kaduna (22.4%) and the people practiced FGM for mostly cultural reasons (Obianwu et al., 2018). Thus, the practice may be generally accepted and not seen as bad and illegal even with the availability of state and national laws prohibiting FGM in these settings. It is worthy to note that the educational qualification of the participants in this study was not verified, therefore is it unclear if the HCPs interviewed in this study represent HCPs who possess a licence to practice from a professional body (Obianwu et al., 2018).

Within the Obianwu et al. (2018) study, participants declared that they learnt FGM procedures from other colleagues who perform FGM. The study reports that HCPs mostly provide FGM services due to shared cultural beliefs and community networks. This was also the case in Kaplan Marcusan et al. (2016) study where HCPs stated they carried out FGM during their medical care praxis and upheld the practice by either performing the procedure themselves or consenting their daughters to be cut. This may explain the reasons why some HCPs perform FGM for free (Isman et al., 2013; Obianwu et al., 2018). In the work by Obianwu et al. (2018) some auxiliary nurses declared they perform FGM because they want to learn the procedure while others mentioned that if they refuse to perform FGM, parents and members of the community will think they are professionally incompetent and instead patronise traditional birth attendants (Obianwu et al., 2018). In addition, most participants in this study stated to have abandoned the practice however some who claim to be against FGM, still perform the procedure in secret (Obianwu et al., 2018). The participants may have declared they were against FGM but still practice it in secret because of a fear of being prosecuted. In Nigeria, performing FGM is illegal under the Violence Against Persons Prohibition (VAPP) Act (2015) and at the time of the study the Act was already in law (Federal Government of Nigeria, 2015).

Importantly, the covert support for FGM appears to be a common practice among HCPs across the SSA countries identified in this review, whilst accepting that not all SSA countries have produced empirical studies to be included in this review and indeed may present a different representation of the issues in these countries. Some included studies from the Gambia (Kaplan Marcusan et al., 2016), Nigeria (Obianwu et al., 2018) Somaliland (Isman et al., 2013) and Sudan (Berggren et al., 2004) clearly report that whilst some HCPs publicly disapprove of FGM they are still offering and performing FGM procedures in secret due to pressure from family members and the community, and in some cases for financial gain. This could mean that some HCPs may be struggling with balancing their cultural affiliations with their professional obligations.

2.5.5. Discussion

The aim of this review was to explore empirical literature on HCPs knowledge, attitudes, and experiences of FGM to determine the factors that may influence the continued support for FGM practices in SSA countries.

This review indicates that irrespective of the country, most HCPs have general awareness of FGM but lack an in-depth understanding about the types, reasons for the practice and health complications associated with FGM. This is not surprising as studies conducted in other parts of Africa (Egypt) for example, reports that some HCPs are unable to correctly identify types of FGM and the related health implications (Mostafa, El Zeiny, Tayel, & Moubarak, 2006; Refaat, 2009). HCPs in Gambia who had some understanding about FGM attributed this to training programmes that were designed to strengthen their capabilities in providing quality healthcare services for girls and women with FGM (Kaplan Marcusan et al., 2016). While in Nigeria, some HCPs associated the knowledge of FGM to increased awareness campaigns that were carried out in the country (Dike et al., 2012; Ibrahim et al., 2013), and years of practice as healthcare providers (Umar & Oche, 2014). However, in the same setting (Nigeria), other sources reported poor knowledge of FGM among HCPs who have also been exposed to nationwide awareness campaigns against FGM (Ashimi et al., 2014; Obianwu et al., 2018; Onuh et al., 2006). It is unclear if the knowledge demonstrated by some HCPs in Nigeria was obtained from other sources other than awareness campaigns and years of practice as HCPs and this review was unable to ascertain this aspect.

Overall, HCPs poor knowledge of FGM indicates a potential gap in their capabilities in not only correctly detecting the type of FGM performed but likewise providing the most appropriate care for women who are seeking medical attention. Within the context of midwifery provision, especially during the onset of labour this lack of knowledge for identifying the types of FGM they witness could lead to HCPs inability to recognise women at risk of FGM complications such as prolonged labour, multiple lacerations and even neonatal deaths from asphyxiation (Banks et al., 2006).

Positive attitudes towards promoting FGM practices is linked to HCPs perceived cultural benefits of FGM and limited awareness about the detriments of FGM. It could be argued that understanding the practice of FGM seems to play a significant role in HCPs attitudes and

support for FGM and its medicalisation. This is evident in studies where HCPs who had high knowledge of FGM showed a more negative attitude towards FGM (Adekanle et al., 2011; Dike et al., 2012; Kaplan Marcusan et al., 2016). Whereas positive attitudes towards the practice of FGM is higher in studies where there was limited knowledge of FGM (Ashimi et al., 2014; Kaplan et al., 2013; Obianwu et al., 2018; Onuh et al., 2006; Umar & Oche, 2014). Furthermore, ethnic affiliation and cultural beliefs of some HCPs appears to be a determinant for the positive attitude towards FGM, as some HCPs perceive FGM as a cultural requirement and a beneficial practice (Berggren et al., 2004; Kaplan et al., 2013; Kaplan Marcusan et al., 2016; Obianwu et al., 2018). This is indicative that there is a relationship between knowledge of FGM, ethnic affiliations and positive attitudes towards the practice, as poor knowledge of FGM among HCPs and cultural beliefs about FGM could lead to bias towards the practice and hinder the dissemination of correct information about FGM to the public. As a result, the community will be deprived of access to accurate information that will enable them to make informed decision about FGM and efforts to eradicate the practice. This positive attitude towards the support for FGM and its medicalisation is not limited to HCPs in SSA countries alone as studies conducted in Egypt among 193 doctors (Refaat, 2009) and 330 medical students (Mostafa et al., 2006) revealed that 19% and 73.2% (respectively) had encouraging attitudes towards the practice of FGM and its medicalisation.

There is a range of experiences about FGM amongst the HCPs examined in this review. Notwithstanding the country in which the study was conducted, some HCPs have undergone FGM themselves, most HCPs especially nurses and midwives have been requested to perform FGM and others had carried out FGM procedure on their daughters, relatives and other young girls and women within the community mainly to uphold the practice and for financial benefits (Ali, 2012; Berggren et al., 2004; Isman et al., 2013; Kaplan et al., 2013; Obianwu et al., 2018). Similar reports have also been seen in studies conducted in other parts of Africa where practicing HCPs performed FGM because it was a good source of income (Njue & Askew, 2004; Refaat, 2009). HCPs who perform FGM for financial gain could be doing so as a means to an end due to the low salary income received by HCPs in these settings and the poor healthcare systems which are underdeveloped and lack appropriate guidelines, monitoring and evaluation (Obianwu, Adetunji, & Dirisi, 2018). These aforementioned inadequacies within the health sector could also be linked to the reason some HCPs openly perform FGM procedures within clinical facilities (Ali, 2012; Berggren et al., 2004; Obianwu et al., 2018), as it seems there is no perceived fear of any consequences for their actions since some of the hospital management condone FGM practices (Obianwu et al., 2018).

Furthermore, continual professional training may not have a significant link to the discontinuation and lack of support for medicalisation because in countries where HCPs have had adequate training to provide direct care and counselling to women with FGM complications, HCPs still practice FGM openly (Ali, 2012; Berggren et al., 2004; Isman et al., 2013; Kaplan et al., 2013; Kaplan Marcusan et al., 2016). This could be because awareness raising amongst HCPs, through professional training, may have increased their confidence and capabilities in performing FGM rather than deterring them from performing FGM or the training perhaps was poorly structured and designed.

Generally, HCPs have a poor knowledge of FGM though some hold a negative attitude towards the practice, however the ones who support the practice do so mostly due to ignorance and cultural reasons (Ali, 2012; Berggren et al., 2004; Isman et al., 2013; Obianwu et al., 2018). These cultural beliefs can be shown to influence HCPs at individual, family, and community levels as they fear social exclusion and ostracism if they refuse to adhere to the cultural beliefs, norms, and practices of the community (Johansen, Diop, Laverack, & Leye, 2013; Obianwu et al., 2018). Thus, HCPs knowledge, attitudes, and experiences of FGM are mainly influenced by ethnic and cultural bonds, and poor knowledge of FGM and these are the key determinants for the support for medicalisation and continuation of FGM in SSA countries.

2.5.6. Conclusion

This review is the first on HCPs knowledge, attitudes, and experiences of FGM in Sub-Saharan countries and only 12 studies were identified from an extensive literature search, and this suggests that this aspect of FGM is understudied in this region. This review highlights key findings which shows that cultural affiliation and lack of ongoing professional training has led to the perpetual knowledge deficit, positive attitudes and lack of skills to deal with request to practice FGM amongst HCPs across the four SSA countries that have produced evidence included in this review.

Arguably, cultural affiliation is a key determinant for positive attitudes towards FGM, thus the education of HCPs to increase their knowledge of FGM to strengthen their capabilities, on its own is not enough to change HCPs positive attitudes and support for medicalisation and continuation of the practice of FGM. It is important that the practice of FGM be seen not only as a violation of the rights of women but also a deeply rooted practice that is embedded in cultural beliefs. This is because HCPs who perform FGM are largely from the same communities where FGM is most prevalent and where FGM is still largely practiced for cultural reasons. This cultural identity places HCPs in a juxtaposition between their professional position and their role in the local community, which could cause bias in knowledge, attitudes, and the care that is given to women with FGM who seek healthcare services.

Additionally, there seems to be a conflict of interest amongst HCPs as some are devoted to upholding cultural beliefs and practices, rather than adhering to policies and professional ethics as seen in studies conducted in Nigeria by Obianwu et al. (2018), in Somaliland by Isman et al. (2013) and in Sudan by Ali (2012) and Berggren et al. (2004). Since the studies included in this review did not examine the availability of FGM policies and clinical guidelines, it is difficult to ascertain if such protocols exist in these settings and what the implications for lack of adherence are, considering that HCPs still perform FGM despite the provision of trainings in some of these settings and indeed further work should be considered in this area.

HCPs need to receive appropriate training about FGM so they can make informed decisions and choices to refuse requests to perform FGM and support women and girls with FGM related issues. Any form of continual professional development on FGM appears to be lacking within the healthcare systems in the settings reviewed. There appears to be a shortage of community programmes that could be delivered by HCPs to change attitudes towards FGM, and to create awareness about FGM amongst communities that currently have high prevalence of FGM. Professional body training could target standardised training and set competence levels for HCPs with the aim to improve overall knowledge of FGM, attitudes and skills to repudiate involvement in the practice of FGM and offer counselling services that could be implemented. These proposed initiatives need to be supported by national and local Governments, and Health ministries, alongside the legal powers that the SSA countries have in existence.

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