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Evidence to inform education, training and supportive work environments for midwives involved in the care of women with Female Genital Mutilation: A review of global experience

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**Title:** Evidence to inform education, training and supportive work environments for midwives involved in the care of women with Female Genital Mutilation: A review of global experience

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**ABSTRACT**

Objective: to identify how midwives in low and middle income countries (LMIC) and high income countries (HIC) care for women with female genital mutilation (FGM), their perceived challenges and what professional development and workplace strategies might better support midwives to provide appropriate quality care.

Design: an integrative review involving a narrative synthesis of the literature was undertaken to include peer reviewed research literature published between 2004 and 2014.

Findings: ten papers were included in the review, two from LMIC and eight from HIC. A lack of technical knowledge and limited cultural competency was identified, as well as socio-cultural challenges in the abandonment process of the practice, particularly in LMIC settings. Training in the area of FGM was limited. One study reported the outcomes of an education initiative that was found to be beneficial.

Key conclusions: professional education and training, a working environment supported by guidelines and responsive policy and community education, are necessary to enable midwives to improve the care of women with FGM and advocate against the practice.

Implications for practice: Improved opportunities for midwives to learn about FGM and receive advice and support, alongside opportunities for collaborative practice in contexts that enable the effective reporting of FGM to authorities, may be beneficial and require further investigation.

Key Words: female genital mutilation, midwifery practice, midwifery education, supportive work environments

**BACKGROUND/INTRODUCTION:**

Female genital mutilation (FGM), also known as female cutting or female circumcision, is a practice that is carried out on young girls and women in 29 countries in Africa and the Middle East, as well as some Asian countries (WHO, 2008). Although the practice is more prevalent in African countries, changing patterns of migration have led to health professionals encountering women with FGM in high income countries (HIC) including, Sweden (Lundberg & Gerezgiher, 2008), Norway (Johansen, 2006), Belgium (Leye et al., 2008), Switzerland (Wuest et al., 2009), Greece (Vrachnis et al., 2012), Italy (Bonessio et al., 2001), Spain (Kaplan-Marcusan et al., 2010), the United States (Johnson-Agbakwu et al., 2013), the United Kingdom (Dorkenoo et al., 2008) and Australia (Moeed & Grover, 2012). It is estimated that 130 million girls and women have undergone FGM and that thirty million girls are at risk of undergoing some form of the procedure over the next decade (UNICEF, 2013; WHO, 2001e). In some countries (Kenya, Mali, and Tanzania), girls are being cut at a younger age, while in others the percentage of women and girls who have undergone FGM is slowly declining, indicating generational trends (UNICEF, 2013).

FGM is a deeply culturally entrenched social norm within certain communities with different meaning and importance attached to the practice. Families may feel that if they do not conform they may be socially excluded, or subject to criticism or stigma. Parents may also believe that non adherence could affect the ability of young women to find marriage partners which may have negative economic consequences (UNICEF, 2013). The practice is regarded by some communities as a rite of passage marking a girl's transition to womanhood, or it can be seen as maintaining girls' chastity, hygiene, beauty, preserving fertility, and enhancing sexual pleasure for men (WHO, 2001e).

FGM is illegal in many countries of the world (Rahman & Toubia, 2000; Rasheed et al., 2011). However, the highly entrenched sense of social obligation overrides any potentially positively modifying influence of legal and moral norms, thereby fuelling the continuation of this practice (UNICEF, 2013). The eradication of FGM has been prioritised as a key issue by the African Union (AU, 2011) and global community (UNFPA/UNICEF, 2011).

FGM involves procedures that comprise partial or complete removal of the external female genitalia or other injury to the female genital organs for non-therapeutic reasons (WHO, 1997). There are four different types of FGM. The most common type entails the excision of all or part of the clitoris and the labia minora and the most extreme form is known as type 3 or infibulation (removal of all or part of the external genitalia and the stitching of the two cut sides, closing the vagina to varying degrees). Infibulation involves leaving a small for the passage of urine and menstrual blood. De-infibulation or the opening of the scar to reverse the FGM procedure may be performed to allow intercourse, or in preparation for childbirth. Re-infibulation involves stitching the raw edges together again to create a small posterior opening. Type 4 includes unclassified procedures that include, but are not restricted to pricking, piercing or incision of clitoris and/or labia; stretching of clitoris and/or labia.

FGM procedures are associated with adverse obstetric outcomes (WHO, 2006), and serious immediate and long-term physical and psychosocial complications for girls and women (Magied & Musa, 2004; Vloeberghs et al., 2012) as well as men (Almroth et al., 2001). Although usually carried out by traditional practitioners in lower and middle income countries (LMIC), an increasing trend has been noted in the number of health professionals performing FGM in some countries, particularly Egypt and Kenya (UNICEF, 2013). In some countries such as Sudan and Kenya, midwives may perform the procedure (UNICEF, 2013).

Many communities understand the complications of FGM. Hence parents seek out health care professionals to perform the cutting to minimise the harm to their children. This is justified using the concept of harm reduction, which argues that carrying out FGM in controlled hygienic conditions will result in a reduction of infection and other adverse conditions (Shell-Duncan, 2001). As health care professionals are highly respected in communities, their performance of FGM signals endorsement of this practice and can serve to prolong and legitimize the practice (WHO, 2010, p. 9). The medicalisation of FGM has prompted the development of a global plan to stop health-care providers from performing FGM (WHO, 2010). Many United Nations (UN) human rights treaty monitoring bodies address FGM (CEDAW, 1990, 1992; UNOCHR, 1989) and have been active in condemning the practice and recommending measures to combat it.

*The need for professional education and supportive environments for midwives*

Midwives (ICM (2005) are often the first providers women will see for their maternal health needs and therefore play a critical role in providing quality care and preventing the practice. Midwives develop trust with women, carry out de-infibulation (a surgical procedure to open up the closed vagina after FGM type 3), and refer women to obstetricians and gynaecologists when needed. Midwives perform routine examinations of the newborn and, as such, document the genitalia of newborn girls. This initial assessment may provide grounds for legal proceedings if FGM is subsequently performed. In addition, midwives play a critical role in child protection and preventing FGM through the education and counselling of families from communities where the practice is known to occur (Ball, 2008).

Training on FGM is critical and has been shown to be successful in improving clinical practice and increasing advocacy efforts, as shown in Kenya (Population Council, 2008). Data from 88 agencies and five country assessments in Burkina Faso, Egypt, Ethiopia, Mali and Uganda found that training for health care professionals in treating physical and psychological FGM complications was poor (WHO, 2011). Eighteen percent of health professionals (including midwives) surveyed in Spain reported that they had no interest in learning about FGM. Less than half could correctly identify the different types despite approximately 30% of the population whom these professionals served, were immigrants from North African and nearly 14% from Sub-Saharan African countries where FGM is practiced (Kaplan-Marcusan et al., 2009). In Australia, a survey of health care practitioners revealed they had little knowledge or experience of the cultural and health issues relevant to FGM (Moeed & Grover, 2012). Significant gaps have also been identified in the provision of appropriate and safe antenatal care for women with FGM and their daughters (Zenner et al., 2013).

The World Health Organization (WHO) has declared FGM training of health workers a priority strategy (WHO, 2001d) and has produced a number of guidelines (WHO, 2001b) and curriculum for nurses and midwives (WHO, 2001a). Professional midwifery bodies in many HIC have developed education materials, including Australia (ACM, 2013) and the UK (RCN, 2006), while other materials are generic for all health care professionals (Ministry of Health Kenya, 2010; New Zealand Ministry of Health, 2009). There is a need in many countries for FGM education specific for midwives (Calleja, 2013; Nursing Times.net, 2012 ) and a supportive working environment to enable midwives to carry out counselling and feel empowered to refuse to undertake re-infibulation or re-closure of the vagina after a women has given birth (WHO, 2001c, p. 12). A supportive workplace can involve policies, guidelines, protocols and supervision that enable midwives to develop knowledge, skills and cultural competence to deliver appropriate clinical and psychosocial interventions, gather accurate data on FGM presentations, report suspected or actual instances of FGM and requests from women or families to carry out FGM or re-infibulations.

*Need for a narrative synthesis*

A first step in developing educational programs on FGM would be gathering knowledge of the needs of the health professionals, in this case, midwives. It seems that little is known about the knowledge,

experiences and needs of midwives with respect to FGM. Moreover there is no synthesis of current research to inform the design of midwifery education programs or supportive workplace practice in both LMIC and HIC settings. Reviews to date have focused on nursing care (Terry & Harris, 2013), health professional training in Africa (Berg & Denison, 2012; Berg & Denison, 2013), or have provided a broad discussion of peer reviewed and grey literature on health professional training (Johansen et al., 2013). To address the gap in the literature, we undertook a review of the peer reviewed literature to examine the experiences and needs of midwives in LMIC and HIC to endeavour to provide more insight for educators and policy makers. This review therefore sought to identify how midwives in LMIC and HIC care for women with FGM, their perceived challenges and what professional development and workplace strategies might better support midwives to provide appropriate quality care.

## **METHOD**

A narrative synthesis methodology was employed to analyse selected literature. This method was chosen due to the varied methodologies of the studies identified for the review, which did not allow for the synthesis of findings.

A Population, Interventions, Comparators, Outcomes, Study design (PICOS) question was developed to guide this review according to guidelines (CRD, 2009). The review objective was to identify midwives' perspective in LMIC and HIC with respect to FGM. Outcomes of interest include midwives' knowledge, attitudes and perceptions of FGM, midwives' experiences of caring for women with FGM, reported practices, experiences of training, training needs and outcomes. Observational studies, quasi-experimental and non-experimental descriptive studies, were considered appropriate for inclusion.

A systematic search of the recent primary research literature published from 2004 to 2014 was undertaken. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines were used to report the review process (Moher et al., 2009) (see Fig 1.). A narrative synthesis approach was conducted according to guidelines outlined by Popay (2005) that allows for different types of data collected, using various methods to be examined to provide critical insights. The approach first involved identifying the focus on the review and mapping what literature is currently in the field through a scoping activity. This allowed the review question to be clearly defined enabling the development of specific selection criteria for the literature search. To be included in the review studies were assessed to see whether they met the required criteria. The quality of the selected studies were then appraised according to established tools and then data extracted from the findings sections to identify detailed data relating to the perceptions and experiences of midwives and associated interventions to support them. Finally the findings from the extraction were brought together to reveal patterns that were grouped into themes.

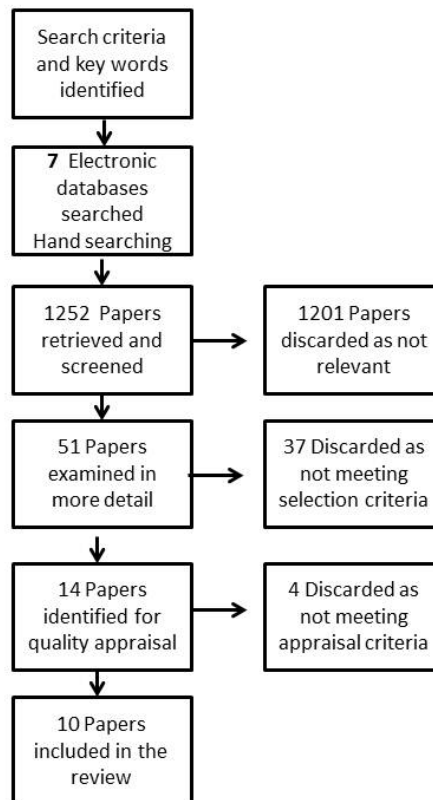
Seven bibliographic databases and the reference lists of relevant papers were searched to retrieve peer reviewed primary research literature. Electronic databases and the internet were searched using the key words "female circumcision" or "female genital mutilation", "midwifery" and "nurse

midwives" and "education" or "training". The types of databases searched and number of documents retrieved are outlined in table 1.

Table 1. Databases searched in the review and number of documents returned

Electronic Databases	
Medline	4
Pubmed	10
Web of Science	3
ProQuest Health and Medicine	9
ProQuest Nursing and Allied Health	3
Scopus	7
Science Direct	15
<b>Total</b>	<b>51</b>

Fig. 1 Literature review process



Retrieved records were first screened for their focus as per the PICOS question by the first author and duplicates removed. Discursive papers, those older than 10 years or whose focus was outside of the aim, were removed. The focus of the search was on midwives or nurse-midwives. If other health professionals were included in the study, the results were examined and the study included only if midwives or nurse-midwives experiences could be clearly separated from other data. Of the 51 papers 37 were discarded. These included papers that were not focused on midwives but traditional

birth attendants (TBAs) (Ali, 2012), or nurses (Onuh et al., 2006). Papers that were not based on primary data such as study protocol papers (Kaplan-Marcusan, et al., 2010) were removed and grey literature reports (USAID, 2003) and reviews (Abdulcadir et al., 2011) were also discarded.

Fourteen papers were appraised using the Critical Appraisal Skills Programme (CASP) tool for qualitative research (NHS, 2006) and the McMaster University Quality Assessment Tool for Quantitative Studies (NCCMT, 2008). The results sections of each of the 10 papers were analysed to identify midwives experiences and needs. Four papers were removed (Kaplan et al., 2013; Magied et al., 2003; Onuh, et al., 2006; Zenner, et al., 2013) because it was not clear what data had been collected from midwives and what data from other professions including nursing and medical providers. A thematic analysis was conducted by the first author using tables that were used to assist in the data extraction process and discussed with other authors. The relationships within and between studies were explored and coded. The themes identified from the coded data from the findings sections of the papers were well aligned with the aims of this paper enabling appropriate evidence to be synthesised.

## FINDINGS

Of the 10 papers included in the review, there were four that employed qualitative methods (Berggren et al., 2004; Isman et al., 2013; Lazar et al., 2013; Leval et al., 2004), five used a quantitative survey design (Jacoby & Smith, 2013; Korfker et al., 2012; Tamaddon et al., 2006; Widmark et al., 2002; Zaidi et al., 2007) and one used a survey design that also collected qualitative data. Eight papers were from HIC and two provided data about midwives in LMIC (Berggren, et al., 2004; Isman, et al., 2013).

The analysis identified three main themes. These are (1) the influence of knowledge and attitudes, (2), midwifery practice and (3) the training experiences and needs. Table 2 indicates the themes by paper.

Table 2 Themes represented in each paper in the review

Reference	Knowledge and attitudes	Midwifery practice	Training experiences and needs
(Berggren, et al., 2004)	✓	✓	✓
(Hess, 2010)	✓	✓	
(Isman, et al., 2013)	✓	✓	✓
(Jacoby & Smith, 2013)			✓
(Korfker, et al., 2012)		✓	
(Lazar, et al., 2013)		✓	✓
(Leval, et al., 2004)	✓		
(Tamaddon, et al., 2006)	✓	✓	✓
(Widmark, et al., 2002)	✓	✓	✓
(Zaidi, et al., 2007)	✓		



**Midwives knowledge, perceptions and attitudes towards FGM**

All 10 papers provided insight into the knowledge of midwives and attitudes towards FGM. The two papers from LMIC included midwives who themselves had been subjected to FGM and whose daughters had also been cut (Berggren, et al., 2004; Isman, et al., 2013). Sudanese midwives in the study by Berggren and others (2004) demonstrated extensive knowledge of various types of FGM and de-infibulation procedures at birth. Some midwives expressed dislike for the re-infibulation due to the suffering it caused women. They felt that if they did not perform it, somebody else would and perhaps not as well as they would. By performing re-infibulation, the midwives believed they were satisfying the demands of the community, men's need for sexual pleasure and enhancing a woman's well-being, beauty and value. As a result of undertaking this procedure, midwives felt valued by the community. Sudanese midwives in this study also indicated that the additional income or gifts received from carrying out the practice was beneficial as their salary from the hospital was deemed low (Berggren, et al., 2004).

The midwives in the Berggren et al. (2004) study were aware of adverse effects of FGM, including pain, infection and infertility. They also recognised that not all men were happy with the procedure as it affected their ability to have sex. Midwives said that they sometimes felt pressure to perform re-infibulation which was regarded as normal and promoted by senior midwives. Midwives stated that sometimes they suggested re-infibulation to women after giving birth to their child but it was rarely carried out in response to a demand from a woman.

In another African study from Somaliland (Isman et al. 2013) midwives reported that it was often a women's mother-in-law who requested the procedure. The participants in this study were midwives who had received training in the provision of FGM care and counselling by a network of anti FGM Non-Government Organisations (NGO). These midwives perceived FGM as harmful, painful and having no benefits but still performed FGM to satisfy the community. They said that women hid health issues associated with FGM and as a result delayed seeking care. These midwives regarded their work as honorable, beneficial to women and felt supported by community to do their work. However, midwives reported challenges trying to convince families not to perform infibulation. Sustainable solutions were suggested, including alternative employment for traditional practitioners and the need for community education and health promotion.

The midwives in both African studies recognised the illegality of the practice. In the Berggren et al. (2004) research, most of the midwives said they had no fear of punishment and were unlikely to be prosecuted. Midwives in the Isman et al. study (2013) suggested that a special police unit be established to pursue offenders and advise the public to report those who perform FGM.

There were five papers from HIC that reported various levels of midwives' knowledge of FGM. A study of 243 American certified nurse midwives by Hess et al (2010) revealed that they had better technical knowledge on FGM types and complication than knowledge of cultural and legal issues. A lack of cultural knowledge was also reported by midwives in another US study by Lazar et al. (2013).

Less than 30% of the Swedish midwives in Tamaddon et al. (2006) study believed that they had adequate knowledge of FGM. Swedish midwives in another study also felt that their knowledge of FGM was lacking and that it was a marginalised issue on the ward (Widmark, et al., 2002). A third study from Sweden (Leval, et al., 2004) found that midwives had limited knowledge of the sexuality of women with FGM in their care and were unsure if women could derive pleasure if their clitoris had been removed. The excision of female genitalia was regarded with horror and related to the loss of female sexuality. These feelings were also expressed by Swedish midwives in the research by Widmark et al. (2002). In both studies (Leval, et al., 2004; Widmark, et al., 2002) midwives expressed strong emotions including disbelief that the practice had occurred, sorrow for the women and anger towards cultures practicing FGM, particularly men who they regarded as exerting power over women's sexuality.

Midwives in Leval et al. (2004) research said that men were caring towards their partners and not all were in favor of the practice. However midwives felt men were powerless to prevent FGM as it was an ingrained social practice. Despite wanting to learn more about circumcised women, these midwives did not feel that it was possible, as the topic was too sensitive. The sensitivity of the topic was also reported by Swedish midwives (Widmark, et al., 2002). Participants described language and cultural differences that resulted in communication issues and stressful interaction between midwives, women and their families including during the delivery when requests for re-infibulation were made.

In the UK, a survey of health professionals including 15 midwives (Zaidi, et al., 2007) found that only 20% of the midwives were aware of FGM and none were able to classify FGM correctly. The findings indicate that midwives had better knowledge on the diagnosis and management of infibulation in labour and during birth but less than 50% were able to give correct answers in these areas.

### **Midwifery practice**

Various clinical practices with respect to FGM were reported in the studies reviewed. The Sudanese midwives (Berggren, et al., 2004) were proud of their suturing skills to repair the vaginal orifice or re-infibulate women after birth, before marriage or after divorce. According to these midwives, the practice was performed in the homes of the midwives or the women and in hospitals. The midwives acknowledged that they benefited financially from performing re-infibulation. All Somaliland midwives in Isman et al. (2013) felt confident giving counselling related to FGM, as they had experienced the procedure themselves and felt women could relate to them. However, as noted above, despite being personally against the practice, these midwives did carry out FGM in response to pressure from the community.

Midwives from the United States had a varied practice experience of FGM. In Hess et al. study 40% of participants said they had provided care to women with FGM. In these interactions, midwives had encountered FGM related complications, and been involved in pain management, de-infibulation, episiotomy and caesarean birth. Only 1% of certified nurse-midwives (CNM) indicated that they had 'sometimes' been asked to circumcise female children, while 6% said that this had occurred 'rarely'. Nearly 13% of study participants indicated they were always asked to perform re-infibulation after birth, 15.4% often and 15.4% sometimes. An American midwife participant in one study (Lazar, et al.,

2013) mentioned that they had considered adopting a protocol to address requests for re-infibulation but it was never taken forward. Midwives in this study reported communication issues and cultural differences that affected the provision of care and one said that they had encountered resistance from women who they believed to be afraid of caesarean sections.

The practice experience of midwives varied across the studies. For example, the survey of Dutch midwives reported that in 2008 they cared for 470 women with FGM from a total 1,188 women from countries where FGM is practiced. This resulted in an estimated FGM prevalence rate of 40% in women from countries where FGM is prevalent (Korfker, et al., 2012). In Tamaddon et al. (2006) study it was found that 79% of Swedish midwife participants had met a woman presenting with FGM. These midwives reported that 50% of these patients had health problems relating to FGM. Fifteen percent of the midwives said that they had been asked to perform a re-infibulation, while 5% were asked by migrant women about the possibility of performing FGM in Sweden. Midwives in another Swedish study (Widmark, et al., 2002) stated they lacked experience and found it difficult to interpret a women's anatomy once she had undergone FGM. One midwife reported that a third degree perineal tear occurred because she was not sure if she should cut the perineal area during the birth. Other practice concerns included how much anaesthesia to give, or where to infiltrate a woman with local anaesthetic prior to any perineal incision.

### **Training experiences and needs**

Sudanese midwives stated that during their midwifery training, FGM was only mentioned briefly, as all forms are forbidden (Berggren, et al., 2004). However, as noted above, despite a lack of formal knowledge, midwives reported practising FGM. All eight midwives interviewed in Somaliland had been trained in giving care and counselling to women with problems related to FGM but expressed a need for further training (Isman, et al., 2013).

A number of American nurse-midwife participants in Lazar et al. study (2013) said that they had never received any type of formal training on the care of women who had undergone FGM and they had learnt 'on-the-job'. Some providers requested for more formal training, while others felt it was unnecessary because they had become competent without training. None of the clinical sites, where study participants worked, had formal protocols on the care of women who had undergone FGM.

Swedish midwives in one study (Widmark, et al., 2002) also said that they had not been taught anything about FGM in their basic education and had learned from other midwives with experience or from those who had worked overseas. Some had attended special in-service training session but all stated the need for more in-depth training. They stated that there was not only a lack in training but it was "frightening" to experience FGM for the first time with no knowledge. Midwives also noted the lack of guidelines to direct the proper care for women with FGM. Other Swedish midwives echoed the need for better skills and clinical guidelines to care for women with FGM (Tamaddon, et al., 2006).

One study examined a particular educational program. The study by Jacoby et al. (2013) involved the development and evaluation of an FGM education program for American midwives that included the opportunity to practice de-infibulation and repair using simulated pelvic models. On completion of the program, midwives reported increased confidence in their ability to provide culturally

competent care to women with infibulation. The post survey demonstrated an increase in midwives' knowledge of the types of FGM and historical, cultural, legal, and ethical considerations. Midwives also felt that their counselling skills had improved.

## **DISCUSSION**

This integrative literature review of the experiences and needs of midwives with respect to FGM in LMIC and HIC has identified a lack of technical knowledge, limited cultural competency and socio-cultural challenges to abandonment of the practice. Midwives called for professional education and training, a working environment supported by guidelines, responsive policy and community education.

Midwives are frontline service providers to many women with FGM and this study indicates a paucity of research focusing on the practice and needs of midwives. In particular, there is a shortage of knowledge concerning the perspectives of midwives from countries where FGM is traditionally practiced. Few intervention studies could be located providing little insight into what strategies might work best for midwives and in what setting, be it HIC or LMIC, tertiary or primary health care facilities. Only one study examined education interventions for midwives and no studies could be found that were concerned with issues such as policy initiatives, preceptorship, or health promotion. In addition, no recent research was found on FGM in humanitarian crisis settings that could update work undertaken by Bell (1998) more than 15 years ago.

### **Cultural competencies for midwives**

A number of studies in the review from HIC noted that midwives had a poor understanding of the culture of the women they were caring for (Hess, 2010; Lazar, et al., 2013; Leval, et al., 2004; Widmark, et al., 2002). Culturally competent midwives and nurses are critical to the provision of quality maternal and child health care (Callister, 2005), which involves midwives working effectively within the cultural context of the women and their families. This not only requires appropriate communication and attitudes but behaviour that is supported by a health system that values diversity, enabling midwives to work within cross cultural situations (Cross et al., 1989) to ensure the cultural safety of women or the provision of culturally appropriate care that centres on a woman's cultural requirements (Phiri et al., 2010). The findings of this review highlight the need for cultural competency education, training and support and concurs with other literature where nurses have identified similar needs, such as in Australia (Cioffi, 2005). In order to teach midwives to incorporate cultural sensitivity into their practice, several authors have argued that education that focuses on structural factors that affect health status such as social position rather than on individual behaviours, is more effective (Manderson & Allotey, 2003; Williamson & Harrison, 2010).

A report from the UK suggests that health professional training, including that of midwives, includes anonymised stories to illustrate women's experiences (Norman et al., 2009). This would enable midwives to learn from authentic scenarios relevant to their own work. Other studies have indicated the importance of interpreters for health providers in HIC to support the care of migrant women

(Knight et al., 1999). Access to interpreters for midwives in health facilities is clearly important for effective communication and requires resourcing.

Although not noted in the literature, the migration of women with FGM to other countries suggests that this would also include the migration of midwives from the same countries to HIC, such as the UK and Australia. These migrant midwives may be well placed as cultural interlocurs in the care of women with FGM from similar cultural backgrounds. However, they may require an acculturation process themselves in order to become familiar with the approaches taken to FGM in their new country of residence (Cowan & Norman, 2006).

### **Improving technical, reporting and legal knowledge**

Midwives in the studies included in this review reported a lack of knowledge, information and practice guidelines on FGM (Lazar, et al., 2013; Zaidi, et al., 2007). This concurs with other findings in this area. A report describing the results of an unpublished Royal College of Midwifery (RCM) survey of midwives in the UK found that they were not sure where to access evidence on FGM. Some reported that they practiced without guidelines and were uncertain where to refer women to specialist services. Participants expressed a desire for training (Stockdale & Fyle, 2012). A number of resources have been developed, including in the UK and Australia, that might serve as models for other countries (ACM, 2013; RCN, 2006).

This review found that protocols on documentation and reporting were not clear and this was implicated in the underreporting of FGM in the Netherlands (Korfker, et al., 2012). The RCM survey of midwives in the UK found that 24% reported that their National Health Service Trust did not collect data on FGM and 48% said they did not know if their Trust collected data (Stockdale & Fyle, 2012). In response, recommendations for identifying, recording and reporting have been developed by a number of professional bodies in the UK including the Royal College of Midwives, the Royal College of Nurses and the Royal College of Obstetricians and Gynaecologists (RCM, 2013).

Knowledge of the legal aspect of FGM were noted in studies in this review (Hess, 2010). The RCM survey of UK midwives also found a number of gaps in this area with 71% of midwives surveyed reporting knowledge of the UK law with respect to FGM. However, only 21% stated that it was illegal for midwives or doctors in the UK to re-suture following birth (Stockdale & Fyle, 2012). This lack of legal knowledge could be addressed through education and training and awareness raising strategies involving media, such as posters in health facilities. The papers in this review outlining research with midwives working in LMIC (Berggren, et al., 2004; Isman, et al., 2013) indicated that midwives are aware that the practice is illegal but that prosecution is rarely enforced. An anonymous reporting system with clear protocols may be required for midwives if they wish to report FGM. This would need to be delivered alongside multiple interventions, including community health promotion and advocacy efforts and supported by hospital staff, opinion leaders and police. This highlights the need for well-co-ordinated action against FGM requiring governments, NGOs and donors to work together across sectors.

### **A supportive working environment**

An enabling environment is critical to the practice of all midwives. The lack of equipment and drugs, adequate remuneration and professional development opportunities alongside poor management practices, policies and detrimental workplace cultures affect the quality of midwifery care (Ith et al., 2012). As already noted there is a need for policies, guidelines and standardised protocols for reporting and formal in-service training for midwives, particularly for those practicing in communities where there is a high or increasing prevalence of FGM. While midwives should be sensitive to the issues of ethnicity, culture, gender, religion and sexuality; and should avoid stigmatising not only the girl or woman affected, but the practising community the complexity of the context must be acknowledged.

Support for midwives to not perform or condone FGM in countries where FGM is a traditional practice is necessary. Midwives in Berggren et al. (2004) noted that carrying out FGM supplemented their low salaries. Those in Isman et al. study (2013) recommended that police enforce the law more effectively. Improving salaries has been suggested as a way forward to reduce unnecessary interventions performed by midwives (Ith, et al., 2012). Raising awareness through education alongside legislation may be more appropriate than relying on the law alone (Onuh, et al., 2006). Anonymous reporting options may be required where midwives face cultural obstacles to informing authorities when FGM has occurred or if they are placed under pressure to perform the practice. Engaging traditional practitioners including traditional birth attendants (TBA) in strategies to address FGM was recommended by midwives in the study by Isman and colleagues (2013). Poor TBA knowledge of the health risks of FGM has been reported by other authors (Ali, 2012; Magied, et al., 2003). A number of organisations have been involved in training TBAs and engaging them in advocacy efforts in order to abandon the practice (ATBAWA, 2012; International, 2012; UNICEF, 2011). Scaling up these activities as part of an integrated package of interventions may be an effective way forward as has been suggested in the case of TBA training to reduce peri-neonatal mortality (Sibley et al., 2012).

Collaborative partnerships across sectors can contribute to positive intermediate changes in health knowledge, attitudes, behaviour, and in the environment through new policies, practices and services (Adeleye et al. (2010)). However, the role of midwives and other professionals needs to be clearly articulated. A number of guidelines exist that cross health, social and legal professions. In the UK the Intercollegiate recommendations for identifying, recording and reporting (RCM, 2013) and the interagency guidelines (HM Government, 2011) have been developed. They emphasise the need to increase the role of midwives to routinely raise the subject of FGM with women from communities where it is known to take place. In Bristol, UK, the National Health Service has teamed with the police force and city council to develop multi-agency guidance on dealing with FGM (BSBC, 2011). Spain has also taken steps in this area (Generalitat de Catalunya, 2007). A national approach to service coordination in Australia has been developed to support health and community service providers in all states and territories (Jordan, 2013). These collaborative endeavours are new and research is required to understand what aspects are useful and assess the impact on quality of care and the prevention of FGM.

Little evidence is available concerning the emotional support of midwives in the context of FGM. In this review two Swedish studies noted midwife anger (Leval, et al., 2004; Widmark, et al., 2002) concerning the effects of FGM on women and towards men who they perceived to be involved. These feelings have been noted by midwives in other countries, particularly when mothers are present at their daughter's birth, witnessing her pain that is often the direct cause of FGM that the mother herself arranged (Vincent, 2005). In addition to this anger, midwives in another study in the review mention the shock of witnessing extreme forms of FGM (Widmark, et al., 2002). This necessitates midwife support and there is little guidance how this should be provided. One exception are the clinical guidelines from Leeds Hospital in the UK that emphasise the need for peer support for midwives caring for women with FGM (Leeds Teaching Hospital, 2008).

### **The role of midwives in prevention and advocacy**

One study in this review suggested that the education of midwives should not be the only focus. It is also important to increase community awareness and advocacy efforts against FGM (Isman, et al., 2013). The midwife's role incorporates that of the advocate (Hopkins, 1999) to act on behalf of women and to support them to express their needs (Schwartz, 2002). Midwives are in a key position to liaise with community, religious, traditional and women's organizations to educate and advocate against FGM using integrated behavioural change frameworks and participatory methods (Brown et al., 2013). A report from the Netherlands has suggested training of midwives as FGM advisors (Exterkate, 2013) to improve the medical and psychosocial care of women.

### **Conclusion and recommendations**

Despite few studies examining the experiences and need of midwives to improve the care of women with FGM, particularly in LMIC, this review has noted a need for education, training and supportive policy, guidelines and protocols for midwives to deliver care to women with FGM. However, there is little evidence-based guidance available to countries to design such interventions for the complex situations that midwives must navigate. Research, especially in LMIC where FGM is prevalent, is necessary to develop strategies to enable midwives to abandon the practice and advocate against it. This requires a multi-disciplinary and integrated program involving midwives and their professional associations and other sectors, including justice, education, religion, media, policy makers, as well as community members.

Table 3 Summary of literature included in the review

References	Context	Method	Sample	Aim	Findings
(Berggren, et al., 2004)	Sudan	Ethnography: observation, field notes and interviews.	17 midwives	To explore Sudanese midwives' motives for and perceptions and experiences of re-infibulation after birth and to elucidate its context and determinants.	Midwives are among the major stakeholders in the performance of primary female genital cutting (FGC) as well as re-infibulation. The practice of re-infibulation (El Adel) represented a considerable source of income for the midwives. The midwives integrated the practice of re-infibulation into a greater whole of doing well for the woman, through an endeavour to increase her value by helping her to maintain her marriage as well as striving for beautification and completion.
(Hess, 2010)	USA	Survey design with open and closed questions, descriptive statistical analysis and thematic analysis.	600 members of the ACNM	To assess certified nurse-midwives' knowledge of FGC and to explore their experiences caring for African immigrant women with a history of FGM	The respondents exhibited more correct medical knowledge about FGC than knowledge of cultural and legal issues. Differences in correct or incorrect knowledge were statistically significant based on provider experience. Discussions between CNMs and clients who were circumcised regarding FGC-related concerns and complications were minimal. Women with a history of FGM want female providers. Re-infibulation poses an ethical dilemma for some CNMs.
(Isman, et al., 2013)	Somaliand: Hargeisa	Qualitative study with semi structured interviews.	8 midwives	To elucidate midwives experiences in providing care and counselling to women with FGM related problems	There is a contradiction between the professional actions of performing FGM despite a personal belief against FGM. Midwives as a professional group could be important agents of change and further research is needed about the midwives role in this process.
(Jacoby & Smith, 2013)	United States	Descriptive quantitative survey design using pre and post survey tool	Eleven certified nurse-midwives	An education program was developed that included didactic information, case studies, a cultural roundtable, and a hands-on skills laboratory of de-infibulation and repair.	Participants reported increased confidence in their ability to provide culturally competent care to immigrant women with infibulation when comparisons of re-education and post education survey confidence logs were completed.
(Korfker, et al., 2012)	Netherlands	Retrospective quantitative survey design	513 midwifery practices	To determine the prevalence of female genital mutilation (FGM) in women giving birth in 2008 in the Netherlands.	470 circumcised women in 2008 (0.32%). The expected prevalence in the Netherlands based on the estimated prevalence of FGM in the country of birth was 0.7%. It is likely that there was underreporting in midwifery practices since midwives do not always enquire about the subject



(Lazar, et al., 2013)	Columbus, Ohio.US	Qualitative- individual semi-structured interviews	14 obstetricians/ gynaecologists and nurse midwives	To obtain information about providers' experiences, training, practices and attitudes surrounding the prenatal care, delivery, and management of women with FGM	and may not notice the milder types of FGM. Midwives who checked their records before answering our questionnaire reported a prevalence of 0.8% While providers did not perceive FGC as a significant barrier in itself, they noted considerable challenges in communicating with their Somali patients and the lack of formal training or protocols guiding the management of circumcised women. Providers expressed Frustration with what they perceived as Somali patients' resistance to obstetrical interventions and disappointment with a perception of mistrust from patients and their families. Increased understanding of cultural epistemology is needed to ensure quality care.
(Leval, et al., 2004)	Sweden	Qualitative & Focus group discussions, 3 interviews	26 midwives	To investigate how the midwives reflected on sexuality when discussing the obstetrical care of circumcised women	Sixty percent (n = 458) of those responding to the survey had encountered patients with FGC Some health care providers expressed the need for clinical guidelines and more education of FGC issues and, a few cited local lectures, seminars, or special day-long meetings devoted to FGC that were led by professionals with experience in dealing with these questions. Our findings indicate the tendency of a majority of health care providers (especially paediatricians and school nurses), however, to self-report that they do not have sufficient knowledge about the motives behind FGC or its prevention
(Tamaddon, et al., 2006)	Sweden	Quantitative Survey design	769 Health professionals Gynaecologists (n = 134), Midwives (n = 313), Paediatricians (n = 103), School nurses (n = 126) School physicians (n = 24) Unspecified(n = 69)	To evaluate the experiences and knowledge of health care providers in Sweden regarding female genital cutting (FGC) as a health issue.	The data indicate communication problems on different levels between midwives and the women and their families. There appear to be few or no guidelines in the units on how to provide good care for infibulated women and little or no co-ordination between antenatal care and the maternity wards.
(Widmark, et al., 2002)	Sweden: Three labour wards and two antenatal clinics situated in two towns in central Sweden	Quantitative survey design with multi-stage sampling	26 midwives	To investigate midwives' perceptions and attitudes towards infibulation and in infibulated women, midwives' experiences of providing care for them and the training the midwives describe having received to enable them to care for and deliver infibulated women.	Only 40% were familiar with the regulations in the FGM Act of 2003; 58% were unable to list the different categories of FGM; 47% incorrectly thought that caesarean section is the best way of managing FGM if vaginal examination is not
(Zaidi, et al., 2007)	UK, University Teaching Hospital	Quantitative survey design	45 included 15 midwives working in the labour ward, antenatal clinics	To assess levels of knowledge of FGM among relevant health professionals to assess these professionals' and adherence to the RCOG Guidelines on FGM.	

				and community midwives, 10 obstetric Senior House Officers (SHOs), 14 Specialist Registrars (SpRs) and 6 Consultants.)		possible in the first stage of labour and 54% chose anterior episiotomy as the treatment of choice during the second stage. Our study found that there were significant gaps both in theoretical knowledge and practice.
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