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## Female genital mutilation: Knowledge, attitude and practices of Flemish midwives

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## ABSTRACT

**Background:** health professionals in Belgium are confronted with female genital mutilation (FGM). To date, no survey to assess knowledge, attitudes and practices on FGM was conducted among midwives in the Northern region of Belgium.

**Objective:** the objective of this study was to assess the knowledge, attitude and practices of Flemish midwives regarding female genital mutilation (FGM).

**Design:** we used a quantitative design, using KAP study (semi-structured questionnaire).

**Setting:** labour wards, maternity wards and maternal intensive care units (MIC) in 56 hospitals in Flemish region of Belgium.

**Participants:** 820 midwives, actively working in labour wards, maternity wards and maternal intensive care units (MIC).

**Findings:** 820 valid questionnaires (40.9%) were returned. More than 15% of the respondents were recently confronted with FGM. They were mostly faced with the psychological and sexual complications caused by FGM. Few respondents were aware of existing guidelines regarding FGM in their hospitals (3.5%). The results also showed that only 20.2% was aware of the exact content of the law. The majority of midwives condemned the harmful traditional practice: FGM was experienced as a form of violence against women or a violation of human rights. Only 25.9% declared that FGM forms a part of their midwifery program. The vast majority of respondents (92.5%) indicated a need for more information on the subject.

**Key conclusions:** this study indicated that midwives in Flanders are confronted with FGM and its complications and highlighted the gaps in the knowledge of Flemish midwives regarding FGM. This may interfere with the provision of adequate care and prevention of FGM for the new-born daughter.

**Implications for practice:** there is an important need for appropriate training of (student)midwives concerning FGM as well as for the development and dissemination of clear guidelines in Flemish hospitals.

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### Introduction

Female genital mutilation (FGM), or female genital mutilation/cutting, consists of procedures, performed for non-medical reasons (i.e. cultural, religious or other reasons), where the external

female genitalia are partially or completely removed or injured (WHO, 2013). In 2008, the World Health Organization (WHO) reviewed the classification of the four types of FGM, which includes: Type 1 (clitoridectomy) involves partial or total removal of the clitoris, and in very rare cases, only the prepuce (the skin surrounding the clitoris); type 2 (excision) involves partial or total removal of the clitoris and the labia minora, with or without excision of the labia majora and type 3 or infibulation is the narrowing of the vaginal opening by removal and suturing of the small and/or labia majora, with or without removal of the clitoris.

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The fourth category involves all other harmful procedures performed on the external genitalia for non-medical reasons (such as cutting, pricking, piercing, scraping, cutting and burning) genital mutilation (WHO, 2008).

A recent study of UNICEF estimated that more than 125 million girls and women today have been mutilated in the 29 countries in Africa and the Middle East (i.e. Iraq and Yemen) where FGM is concentrated, and about 30 million are at risk in the next decade (UNICEF, 2013). The prevalence and type of FGM varies across countries and between ethnic groups within a country (WHO, 2008). FGM has also been documented in Colombia, Jordan, Oman, Saudi Arabia and parts of Indonesia and Malaysia (UNICEF, 2013). It is also practiced within some ethnic minorities in immigrant communities in Europe, Canada, USA, Australia and New Zealand (Abdulcadir et al., 2011). The most common forms of FGM are clitoridectomy and excision (respectively type 1 and 2) or genital trauma without tissue removal (type 4). In 90% of the reported cases, one of these types is mentioned. The most extreme form is infibulation (type 3), which occurs in about 10% of the cases (Yoder and Khan, 2008).

Due to the increased migration from women of countries where the harmful practice is embedded, FGM has become an issue in western countries too (Kaplan-Marcusán et al., 2010; Abdulcadir et al., 2011). A second prevalence study in Belgium has estimated that by the end of 2012, 48,092 women and girls originating from countries where FGM is practiced, live in Belgium. Probably 13,112 of these women have most likely undergone FGM and 4084 girls are at risk of FGM, with the majority of these 13,112 women living in Flanders (6761) (Dubourg and Richard, 2014). The first prevalence study showed that in 2008, these figures were less than half of those of 2012: 6260 women with FGM and 1975 girls at risk (Dubourg et al., 2011). Both studies also showed that approximately 600 live births of mothers with FGM were registered by the 'Child and Family services' (ONE and K&G) in 2008, while this number increased to 1203 children in 2014 (Dubourg and Richard, 2014). In 2012, ethnic minorities in Belgium that were mostly affected by FGM were Guinea, Somalia, Egypt, Ivory Coast, Senegal and Ethiopia (Dubourg and Richard, 2014).

In March 2001, a specific criminal law was adopted to condemn the practice of FGM in Belgium. According to article 409 of the Penal Code, all forms of FGM are prohibited. It explicitly states that not only the performance of FGM, but also the participation, the facilitation or the attempt to perform it are considered as a criminal offence (European Institute for Gender Equality, 2013). This legal provision does not apply to piercings and tattoos, and the law does not specifically mention reinfibulation, which might lead to uncertainties in medical practice on how to act when a woman requests to be reinfibulated (Leye et al., 2008).

As a result of lobbying of civil society organisations and members of the Parliament, the 'National Action Plan on Domestic Violence 2010–2014' included detailed measures to tackle the issue of FGM in Belgium (Instituut Gelijkheid Vrouwen en Mannen, 2010). Moreover, in 2011, a manual on female genital mutilation for relevant professional sectors was developed that aimed at sensitising and informing professionals in Belgium (health-care professionals, teachers, social workers and other fieldworkers) who are confronted with women with FGM and girls at risk of FGM. The guide provides information on basic elements of FGM (definition, typology, etc.), socio-cultural context, medical/psychological/sexual consequences, juridical aspects, as well as information on how to tackle FGM (during consultations, at school, during pregnancy and childbirth, reconstruction of clitoris, asylum, etc.) (FOD Volksgezondheid & GAMS België, 2011).

Health professionals in Belgium are confronted with FGM, as demonstrated by two surveys among gynaecologists and midwives in the Southern region of Belgium (Wallonia) (Mager and

Noriega, 2003; GGOLFB, 2009), a previous survey on knowledge, attitudes and practices (KAP) on FGM among gynaecologists in Flanders (Northern region of Belgium) (Leye et al., 2008) and the prevalence studies.

Surveys to assess knowledge, attitudes and practices of health professionals are a common tool to enhance, among others, 'the knowledge, attitude and practices around specific themes, to identify what is known and done about various subjects relating to health' (Médecin du Monde, 2011). Several other European countries have investigated the knowledge, attitude and practice on FGM among health professionals (UNICEF, 2005; Tamaddon et al., 2006; Zaidi et al., 2007; Kaplan-Marcusán et al., 2010; RCM, 2012), including a KAP survey among Flemish gynaecologists (Leye et al., 2008). However, to date, no KAP-survey on FGM was conducted among midwives in Flanders. Findings from KAP studies among health professionals provide an evidence base to better target policies and enhance care for women with FGM and prevention efforts towards girls at risk of FGM.

## Methods

### Study design and population

We conducted a quantitative research using a semi-structured self-administered questionnaire that investigated knowledge, attitudes and practices towards FGM among midwives in Flanders (Northern Belgium). The questionnaire used was based on a KAP-survey that was conducted among Flemish gynaecologists (Leye et al., 2008), and was adapted to the professional practice of Flemish midwives. The questionnaire was piloted among midwives who were not part of the study population (such as master students, lecturers, midwives working in surgical or paediatric units). Their feedback was integrated in the final version of the questionnaire.

### Setting and participants

The study was conducted between October 10, 2012 and March 4, 2013. The study population consisted of all midwives, working on labour, childbirth and maternity wards and maternal intensive care units (MIC) of Flemish hospitals ( $n=2304$ ). By sending a written invitation to the midwifery department heads, all 65 hospitals were asked to participate in the study. The non-responding midwifery department heads were contacted by telephone and invited to participate.

### Data collection

Every questionnaire was accompanied with an informative letter, explaining the context and the aim of the study. The questionnaire was anonymous and included questions regarding the knowledge of FGM and the legal context in Belgium in particular. Questions about the attitude and practices, when confronted with women with (a risk of) FGM, were also incorporated. Finally, difficulties in the provision of care for women with FGM were queried. Questionnaires were sent in October 2012. In January 2013, a reminder was sent to the midwifery department heads of hospitals that had not yet returned completed questionnaires. In March 2013, the survey was closed.

### Statistical analysis

The data were analysed using SPSS statistics 21.0 software. The focus of this study lies on the descriptive statistics. The closed-ended questions with fixed answer options were coded in a

variable with one or more categories. To analyse differences in categorical variables  $\chi^2$  tests were applied and Student *t*-tests were used to compare means of two samples. Open-ended questions were analysed by listing the answers of the participants and grouping them on the base of their content.

To evaluate the knowledge of respondents, a sum score was calculated in order to investigate the correlation with the variable age. The sum score was calculated by counting the correct answers of the knowledge questions. An equal weight was assigned to each answer.

Results with  $p < 0.05$  were considered as statistically significant.

### Ethical clearance

The study was approved by the Ethical Committee of Ghent University Hospital (EC/2012/600). By completing the questionnaire, the participant automatically agreed to the terms of the study.

## Findings

### Characteristics of the participants

When closing the study, 56 out of 65 Flemish hospitals agreed to participate (86%). Nine hundred and twenty two questionnaires were completed and returned. Of these, a total of 820 valid questionnaires were used for the final analysis, which gave a response rate of 40.9%. Hundred and two questionnaires that were not completely filled in, or that were completed by persons who were not part of the study sample (students, nurses, etc.) were excluded. Almost all participating midwives were female (99.6%). The majority of the respondents had less than 15 years of work experience (58.7%) and was older than 30 (62.0%). Most respondents were working in a general hospital or non-university hospital at the moment of the data collection (89.8%). Characteristics of the study population are summarised in [Table 1](#).

### Knowledge and attitude

[Table 2](#) shows an overview of the findings related to knowledge and attitudes of midwives regarding FGM. The majority of the respondents (68.8%) were not informed about FGM during midwifery education. FGM was more often a part of the midwifery education of younger respondents (less than < 30 years), than among respondents of 30 years or older ( $\chi^2 = 173,101$ ;  $p < 0.001$ ).

**Table 1**  
Characteristics of the participants.

Characteristics of participants	N	%
<b>Sex (n = 820)</b>		
Female	817	99.6
Male	3	0.4
<b>Age (years) (n = 819)</b>		
< 30	311	38.0
> 30	508	62.0
<b>Ward (n = 813*)</b>		
Maternity	719	88.4
Labour ward	646	79.5
N*/NICU	220	27.1
MIC	94	11.6
<b>Type of hospital (n = 820)</b>		
Non-university	736	89.8
University	84	10.2
<b>Work experience (n = 814)</b>		
< 15	478	58.7
> 15	336	41.2*

\* Non-intensive/intensive neonatal care unit.

Nearly one in five respondents (18.7%) assumed that FGM is a procedure performed in the female genitalia for medical reasons. Midwives mentioned the following obstetric complications due to FGM: episiotomies (80.7%), increased risk for caesarean section (73.2%), increased risk for prolonged hospital stay for the mother (56.5%), perinatal mortality (50.2%), higher risk for resuscitation of the new-born (39.5%) and postpartum haemorrhage (37.4%).

The majority of the midwives indicated that no protocol regarding FGM was available or that they did not know of any such protocol in the hospital where they are currently working (96.5%). More than half of the midwives (62.9%) were not aware of any existing guidelines concerning FGM in Belgium. Three in four midwives (75.2%) knew that FGM is illegal in Belgium. Of those respondents, almost one in three (20.2%) knew the specific content of the criminal law (i.e. all forms of FGM are forbidden except for tattoos and piercings).

The largest group of respondents (39.3%) had no idea how to react when faced with a risk of FGM. Only 16.7% of the midwives believed that in Belgium there is a right to report, but no duty. Forty-four percent of the respondents held a different view: they believe that a midwife in Belgium has a duty to report cases (33.9%) or that the professional secrecy has to be respected (10.1%).

Significant differences were found between the knowledge of the midwives and their age ( $t = 3625$ ;  $p < 0.001$ ). It appears that the younger midwives (< 30 years) had a better knowledge about FGM.

Most midwives (93.6%) considered FGM as a form of violence against women. Three in four (75%) considered the practice as a violation of human rights. Only a small minority believed that it is related to religious practices (4.3%), surgical procedures (4.0%) or cultural tradition (2.2%). The majority of midwives (62.8%) believed that they could play a key role in counselling women with FGM, but those who felt incompetent to take up this role (37.2%), believed they lack sufficient knowledge (84.5%) or they did not counsel out of respect for other cultures (2.1%).

A significant association was found between age and the fact that midwives consider themselves as key figures in counselling women with FGM ( $\chi^2 = 18,641$ ;  $p < 0.001$ ). Midwives who are younger than 30 years (72.2%) were more convinced about their role as counsellor (57.1%).

### Practices

One hundred and eight respondents (13.4%) had already heard that FGM had been performed in Belgium. A total of 126 respondents (15.4%) were confronted with FGM during the past 12 months. A significant relationship has been found between the age and a recent confrontation with FGM ( $p < 0.005$ ). Midwives who are younger than 30 years were more frequently confronted with mutilated women (18.6%) than older midwives (13.5%).

[Table 3](#) summarises the characteristics of the women with FGM with whom the midwives are confronted. More than half of the midwives reported one or more complications (51.6%). The most common complications mentioned by midwives were psychological problems (63.1%), chronic pain (32.3%), sexual problems (30.8%), recurrent urinary tract infections or incontinence (24.6%), fistula formation (13.8%) and bleeding (9.2%). Midwives mainly encountered type 2 (47.6%), type 3 (39.5%) and type 1 (16.9%). Ten respondents (8.1%) indicated not being able to identify the type of mutilation, or indicated other types (clitoris piercings) (3.2%). The majority of respondents (43.1%) indicated that one or more women were originally from Somalia, 17.1% met women from Ethiopia and 4.1% met a woman from Mali. Nearly 36% of the respondents stated that the country of origin was unknown.

Only 3% of the respondents took action in the past to prevent FGM in cases of a female baby. Of this small percentage, the actions taken included reporting to the attending physician, Child and Family

**Table 2**  
Overview knowledge and attitude regarding FGM.

Question/statement	Knowledge and attitude					
	Yes		No		I don't know	
	N	%	N	%	N	%
Believed that FGM is performed for non-medical reasons (n=800)	650	81.3	150	18.7	-	-
Stated the following obstetric complications are caused by FGM (n=802)						
Episiotomy	647	80.7	155	19.3	-	-
Caesarean section	587	73.2	215	26.8		
Prolonged hospital stay for mother	453	56.5	349	43.5		
Perinatal mortality	403	50.2	399	49.8		
Neonatal resuscitation	317	39.5	485	60.5		
Postpartum haemorrhage	300	37.4	502	62.6		
Believed that performing FGM is illegal in Belgium (n=815)	613	75.2	25	3.1	177	21.7
Believed that FGM is a (n=815)						
Form of violence against women	763	93.6	52	6.4	-	-
Violation of human rights	611	75.0	204	25.0		
Religious practice	35	4.3	780	95.7		
Surgical procedure	33	4.0	782	96.0		
Respectful cultural tradition	18	2.2	797	97.8		
Knew that midwives have a right to report when confronted with a risk for FGM (n=802)	134	16.7	353	44.0	315	39.3
Were informed about FGM during midwifery education (n=812)	210	25.9	559	68.8	43	5.3
Indicated that there is a protocol regarding FGM available in their hospital (n=811)	28	3.5	550	67.8	233	28.7
Were aware that there is a guideline regarding FGM in Belgium (n=812)	290	5.7	11	1.4	511	62.9
Believed a midwife can play a key role in counselling victims of FGM (n=802)	504	62.8	298	37.2	-	-

**Table 3**  
Profile of women with FGM, encountered by participants.

Characteristics of women	Number of participants	
	n	%
<b>Country of origin (n=123*)</b>		
Somalia	53	43.1
Unknown	44	35.8
Ethiopia	21	17.1
Other countries	14	11.4
Mali	5	4.1
<b>Type FGM (n=124*)</b>		
Type 2	59	47.6
Type 3	49	39.5
Type 1	21	16.9
Unknown	10	8.1
Other: piercings	4	3.2
<b>Complications caused by FGM (n=65*)</b>		
Psychological problems	41	63.1
Chronic pain	21	32.3
Sexual problems	20	30.8
Recurrent urinary infections or incontinence	16	24.6
Fistula	9	13.8
Bleeding	6	9.2

Note: % = valid percent.

\* Not mutually exclusive.

service or social services (44%) or discussed FGM with the parents (36%). The majority of the respondents did not take any action (97%). Some of these respondents (10.8%) explained why no prevention actions were taken and mentioned the following reasons: it is not their responsibility, they experienced too many communication problems, parents themselves have already indicated that they did not want FGM, they did not counsel out of respect for the cultural or religious tradition, they thought the delivery room is not an appropriate place for prevention work, a lack of knowledge, or they stated that FGM does not occur in Belgium.

#### Barriers and perspectives

As indicated in Table 4, more than one in 10 midwives (13.2%) indicated barriers in the provision of care for women with FGM.

The majority mentioned a lack of experience and knowledge related to the care of these women (45.7%). Moreover, nearly 22% encountered practical problems such as bladder probing, vaginal examination or complications during childbirth. They also mentioned poor wound healing and the problem of very anxious women, which interfere with the examinations (17.1%). In addition to communication difficulties (18.1%) due to language barriers and the sensitiveness of the issue, the personal opinion of the woman (tradition should be maintained) and her environment (pressure of partner) were considered as problematic (7.6%).

The majority (92.5%) indicated that they would like to receive more information about FGM, in particular on clinical management (86.4%), legal aspects of FGM in Belgium (79.5%), and conduct codes regarding ethical and legal issues, in particular on reinfibulation, medicalisation and symbolic incisions (72.1%). The majority of the midwives (86.2%) indicate the need for a multi-disciplinary team, specialised in FGM, to which they can refer women.

#### Discussion

##### Current knowledge on FGM

Only one in four respondents indicates that the issue of FGM was part of the curriculum in the midwifery education. Our results show that FGM was discussed more often in the training of younger midwives and also point out that the younger generation is more aware of the issue of FGM. Consequently, the knowledge of younger midwives was more accurate than among their older colleagues. One explanation could be that due to their recent graduation, they recall the content of their midwifery education in more detail. More probably, this is due to the fact that with increasing migration, increasing attention is given to FGM and FGM is more often discussed among midwives, and/or during their education.

In general, knowledge of Flemish midwives that participated in this study was fairly accurate when it comes to identifying some of the obstetric complications of FGM, in particular episiotomies, caesarean sections and prolonged hospital stay for mothers.

**Table 4**  
Barriers and perspectives.

Question/statement	Barriers and perspectives				
	Yes		No		I don't know N (%)
	N	%	N	%	
Had encountered barriers in the provision of care to women with FGM (n=795)	105	13.2	690	86.8	–
Wished to receive more information about FGM (n=817)	756	92.5	61	7.5	–
Indicated the need for a multidisciplinary team, specialised in FGM (n=805)	694	86.2	111	13.8	

Note: % =valid percent; \*Not mutually exclusive.

Midwives did assess correctly that FGM is a violation of human rights and that it is illegal in Belgium, as three in four midwives believed that FGM is prohibited by law in Belgium. However, few knew the details of the specific criminal law with regard to the types of FGM that are prohibited. Midwives consider re-influbation as a criminal offence, although the specific criminal law does not deal with this aspect of FGM (Leye et al., 2008).

Knowledge seems to be inadequate regarding the other obstetric complications, including perinatal mortality (nearly half of the respondents did not see this as a complication of FGM), the increased risk for neonatal resuscitation (60.5% disregarded this risk) and postpartum haemorrhage (only 37.4% acknowledged this risk). Complications during childbirth among women with FGM have been documented in a multicountry prospective study in six African countries, and included all of the above mentioned obstetric complications in women with FGM (Banks et al., 2006).

Gaps in knowledge also seem to exist on how to act when confronted with FGM. Midwives are not clear about the right or a duty to report cases of FGM and about issues related to professional secrecy, and hence, was not sure how to react when faced with a risk of FGM, in particular when a mother indicates that she wishes her new-born daughter to be excised. Although risk assessment is a complex issue, these uncertainties need to be addressed in order to provide proper protection for girls and women at risk of FGM. Few midwives are aware of protocols or guidelines regarding FGM in the hospitals where they work. Although we did not include questions on the existence of protocols in a hospital, it is very likely that such protocols do not exist in most hospitals in Flanders. Despite the existence of the 'Guide for professionals on FGM', published in 2010, the majority of the midwives was not aware of available guidelines or manuals in Belgium. This suggests that more efforts are needed to promote this manual among professionals. Improving the co-ordination between the sectors involved (health care, education, justice, legislation, etc.) might also contribute to sharing knowledge and expertise, a priority also acknowledged in the National Action Plan Violence against Women 2010–2014, that contains a specific chapter on FGM (Instituut Gelijkheid Vrouwen en Mannen, 2010).

#### Consequences of FGM encountered by Flemish midwives

The most commonly reported health consequences by more than half of the midwives who were recently confronted with FGM, include psychological problems, chronic pain, sexual problems and recurrent urinary tract infections or incontinence. This is in line with the KAP-survey among Flemish gynaecologists (Leye et al., 2008), who equally reported recurrent urinary tract infections/incontinence and chronic pain, in addition to sexual problems as the most common health problems in women with FGM. It is noteworthy that the bulk of the problems are psycho-sexual in nature, midwives indicating consequences of FGM, mentioned that these were either psychological (63.1%) or sexual (30.8%). Although the number of studies on psycho-sexual consequences

related to FGM is limited compared to the number of studies on e.g. obstetric problems, some studies showed that psychological problems should not be minimised as women with FGM can face extreme fears during the birth process (Lundbergh and Gerezgiher, 2008) or have vivid memories of the traumatic experience of FGM (Rashid and Rashid, 2007; Vloeberghs et al., 2011). Women's fear also increases when they feel that the midwife is uncertain or does not feel competent to care (Widmark et al., 2002; Lundbergh and Gerezgiher, 2008). A systematic review on psychological, sexual and social consequences of FGM, showed that sexual problems in women with FGM include pain during intercourse, a reduced sexual satisfaction and a reduced sexual desire (Berg et al., 2010). A study in Sweden among women from countries where FGM is common practice, demonstrated that the most frequently mentioned experienced late complication was sexual problems (Litorp et al., 2008). A recent systematic mapping of FGM in all EU Member States, showed a lack of services providing psychological care, psycho-sexual supports and counselling by professionals skilled in post-traumatic stress disorder, sexual trauma and sexual violence (EIGE, 2013). This illustrates the need for competent midwives to support women with FGM during their birth process, as well as a need for multidisciplinary teams that can also provide psycho-sexual counselling. It is an opportunity to explore whether this counselling role can be provided by midwives, including counselling on psycho-sexual consequences. Moreover, as both KAP studies showed that sexual problems are among the most commonly met problems by gynaecologists and midwives, there is an urgent need for specialised psycho-sexual counselling as part of the care for women with FGM. Our study showed a keen interest by midwives to take up this counselling role, especially among the younger generations.

#### Prevention of FGM and provision of care for women with FGM by Flemish midwives

Preventative actions taken by midwives are still not very common in Flanders, as indicated by the 3% of respondents that indicated to engage with such preventative actions. A wide range of reasons is mentioned ranging from personal attitudes (respect for other cultures), and lack of knowledge to experiencing communication problems. The KAP survey among Flemish gynaecologists indicated that they also did not engage sufficiently in discouraging women from having their daughters excised, due to communication barriers. A study on the quality of obstetric and midwifery care for pregnant women with FGM in a London hospital, equally identified significant gaps in protecting newborns from FGM (Zenner et al., 2013), while another study from Birmingham demonstrates that a service for FGM is underperforming in relation to child protection from FGM (Paliwal et al., 2013). As girls born to a mother with FGM are still at risk of undergoing the practice, it is important for midwives and gynaecologists to acknowledge their crucial role in safeguarding a new-born girl from FGM. Midwives are in a good position for

safeguarding a girl, as they accompany these women intensively and almost continuously during labour and parturition, and they might be better placed to tackle the issue of FGM than gynaecologists. This is supported by the fact that the International Confederation of Midwives (ICM) considers a good knowledge about FGM as one of the basic competencies of midwives (ICM, 2011). In order to perform this preventive role, knowledge about the practice in general, the clinical management, communication techniques and the legal status of FGM in Belgium are paramount. In Belgium, the 'Guide for Professionals' provides useful insights on these topics, and currently, midwives in 10 hospitals in Flanders, are being trained on the subject of FGM. However, including FGM in the education of midwives and other health professionals is necessary, to systematise the dissemination of knowledge on FGM. The use of professional interpreters to ease communication between women with FGM and care providers offers a solution to overcome language barriers (Rashid and Rashid, 2007; Amy and Richard, 2009) but family or community members should be avoided as interpreters, given the sensitivity of the subject.

Issues in service delivery that hamper an adequate care for women with FGM, have been documented in other studies. These barriers in care include a lack of knowledge, communication problems, personal emotions and feelings of health professionals and the lack of technical guidance on clinical management (Nienhuis and Haaijer, 1995; Chalmers and Hashi, 2000; Widmark et al., 2002; Powell et al., 2004; Thierfelder et al., 2005; Leye et al., 2006; Wuest et al., 2009; Paliwal et al., 2013; Zenner et al., 2013). Our study showed that the provision of care in Flanders, by midwives, is hampered by a lack of knowledge on FGM, language barriers and difficulties in discussing this sensitive and complex issue with the women and her environment. Flemish midwives indicated that they are in need of more information on FGM. Hence, it seems that a roll out of the training that is currently done in 10 hospitals to more hospitals in Flanders might be a recommended point of action for the near future, especially since the prevalence data have doubled in Belgium. Two multidisciplinary centres for the care of women with FGM have been initiated in two cities in Belgium.

#### Limitations of the study

For methodological and logistic reasons, our study was limited to intramural health-care settings. In this setting the majority of antenatal consultations are provided by gynaecologists. Hence our study cannot reflect views of midwives working outside of hospitals that provide antenatal care.

The moderate response rate (40.9%) in this study may be due to the combination of several factors such as the high workload of midwives, the complexity and sensitivity of the subject as well as the low prevalence in Flanders. It is likely that midwives who have not yet been confronted with FGM, were less motivated to respond. It cannot be ruled out that other midwives might hold a different view on the issue. The results of this study can therefore not be generalised to the entire population of midwives in Flanders, especially because only midwives currently working on labour and labour wards, maternity wards and maternal intensive care units were included in the study. Although 15% of the midwives had met women with FGM in the last year, it can be assumed that many cases are missed and that this percentage is an underestimation. We therefore believe that this study provides useful insights for enhancing care of women with FGM and the protection of girls at risk by midwives.

#### Conclusion and practical implications

The present study shows that midwives in Flanders are confronted with FGM and its negative consequences on health and quality of life. The study indicates that Flemish midwives lack important knowledge on FGM, in particular on obstetric complications, content of the law and protecting girls at risk of FGM. These deficiencies in knowledge constitute a significant barrier in providing adequate care for women with FGM. More attention should be paid to sensitisation and education of midwives. Psycho-sexual problems of women with FGM need full attention, as well as the safeguarding role of midwives.

The topic FGM should systematically be covered in the education of student midwives and other health-care professionals, and a specific procedure on how to refer in case a woman or girl at risk for FGM needs to be developed. It is recommended to train all Flemish midwives on FGM with specific attention to the legal situation in Belgium and to provide communication tools in order to empower midwives in the prevention of FGM. For example, an e-learning module in which the knowledge of the professionals can be tested and improved, might serve as a useful tool.

#### Conflicts of interest

The authors do not state any conflicts of interest.

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