Factors promoting and hindering the practice of female genital mutilation/cutting (FGM/C)

Report from Kunnskapssenteret (Norwegian Knowledge Centre for the Health Services)
No 23–2010
Systematic review

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Norwegian Knowledge Centre for the Health Services

Background: In November 2008, the Norwegian Knowledge Centre for Violence and Traumatic Stress Studies (NKVTS) commissioned the Norwegian Knowledge Centre for the Health Services (NOKC) to conduct a systematic review about the factors promoting and hindering female genital mutilation/cutting (FGM/C), from the viewpoints of stakeholders residing in Western countries. The review would answer the question: What are the factors promoting and hindering the practice of FGM/C, as expressed by stakeholders residing in Western countries? **Methods:** We searched systematically for relevant literature in international scientific databases, in databases of international organisations that are engaged in aspects related to FGM/C, and in reference lists of relevant reviews and included studies. Additionally, we communicated with professionals working with FGM/C related issues. We selected studies according to pre-specified criteria, appraised the methodological quality using checklists, and summarized the study level results in tables before performing an integrative evidence synthesis. Our conclusions were summed in a conceptual model. **Results:** We inclu- *(continued)*

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We would like to thank Simon Lewin, Hilde Holte, Owolabi Bjälkander and Hilde Lidén for their expertise in this project. Norwegian Knowledge Centre for the Health Services assumes final responsibility for the content of this report.

Norwegian Knowledge Centre for the Health Services
Oslo, December 2010

List of abbreviations and terms

CASP	Critical Appraisal Skills Programme.
DHS	Demographic and Health Surveys.
EPPI	Evidence for Policy and Practice Information and Co-ordinating Centre.
EU	European Union.
FGM/C	Female Genital Mutilation/Cutting.
NKVTS	Norwegian Knowledge Centre for Violence and Traumatic Stress Studies / Nasjonalt kunnskapssenter om vold og traumatisk stress.
NOKC	Norwegian Knowledge Centre for the Health Services / Nasjonalt kunnskapssenter for helsetjenesten
PRB	Population Reference Bureau.
UNFPA	United Nations Population Fund.
UNICEF	United Nations Children's Fund.
WHO	World Health Organization.
Doxic /doxa	That which is taken for granted in any particular society, i.e., doxa is the experience by which the world appears self evident.
Intra-marriage	Marriage within a (ethnic or racial) community.
Meso	An intermediate level between micro and macro levels, including social context (e.g., norms).
Mono-methods	Adopting a single approach or data source to research, for example a quantitative approach, versus a mixed-methods approach.

Key messages

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Results: We included and summarized results from 25 studies, of which 16 were qualitative investigations, eight were quantitative studies, and one was a mixed-methods study. There were three stakeholders groups: exiled members from communities where FGM/C is practiced, health workers, and government officials. The results of these stakeholders' perceptions showed that the continuance of FGM/C is largely attributable to six factors: cultural tradition, the interconnected factors sexual morals and marriageability, religion, health benefits, and male sexual enjoyment. Factors perceived as hindering its continuance included health consequences, that it is not a religious requirement, that it is illegal, and that host society discourses reject FGM/C.

Conclusion: Our results show that an intricate web of cultural, social, religious, and medical pretexts for FGM/C exists. However, more research is needed to understand the totality and interconnectedness of factors promoting and hindering FGM/C among exiled members of practicing communities.

Executive summary

BACKGROUND

Female genital mutilation/cutting (FGM/C) is a traditional practice that involves "the partial or total removal of the female external genitalia or other injury to the female genital organs for cultural or other non-therapeutic reasons." The current WHO classification describes four types of FGM/C: Type I, *clitoridectomy*, involves partial or total removal of the clitoris and/or the prepuce. Type II, *excision*, involves partial or total removal of the clitoris and the labia minora, with or without excision of the labia majora. Type III, *infibulation*, involves narrowing of the vaginal orifice with creation of a covering seal by cutting and appositioning the labia minora and/or the labia majora, with or without excision of the clitoris. Type IV, *other*, involves all other harmful procedures to the female genitalia for non-medical purposes, for example: pricking, piercing, incising, scraping, and cauterization.

FGM/C is practised in more than 28 countries in Africa and in some countries in the Middle East and Asia. Countries with very high prevalence, over 70%, include Egypt, Ethiopia, Mali, Sierra Leone, and Somalia. However, there is great variation in prevalence across countries, reflecting ethnicity, tradition, and sociodemographic factors. The limited data available suggest that FGM/C is occasionally practised by immigrant communities in a number of Western countries, such as Norway, Sweden, Switzerland, and the United Kingdom.

FGM/C is associated with several health risks such as severe pain, bleeding, shock, infections, and difficulty in passing urine and faeces. Caesarean section, blood loss, and increased perinatal mortality are associated birth risks. Women who have been subjected to FGM/C are also more likely to experience increased pain during intercourse, reduction in sexual satisfaction and reduction in sexual desire compared to women who have not been subjected to FGM/C.

FGM/C is recognized as a harmful practice which abrogates human rights. It is prohibited by law in several African and Western countries. As Western governments have become more aware of FGM/C among immigrant communities, legislation has generally been used as the main intervention tool. However, some countries have given priority to prevention strategies, such as awareness raising and education.

We asked the following question: What are the factors promoting and hindering the practice of FGM/C, as expressed by stakeholders residing in Western countries?

METHODS

We searched systematically for literature in the following scientific databases: African Index Medicus, Anthropology Plus, British Nursing Index and Archive, The Cochrane Library (CENTRAL, Cochrane Database of Systematic Reviews, Database of Abstracts of Reviews of Effects), EMBASE, EPOC, MEDLINE, PILOTS, POPLINE, PsychINFO, Social Services Abstracts, Sociological Abstracts, and WHOLIS. We also searched in databases of international organisations that are engaged in research concerning FGM/C, manually in reference lists of relevant reviews and studies included in this systematic review, and communicated with experts engaged in FGM/C related work. We searched for studies that used the following study designs: systematic reviews, cohort studies, case-control studies, cross-sectional studies, and qualitative studies.

Two of the authors independently assessed studies for inclusion according to prespecified criteria and considered the methodological quality of the studies using checklists. We summarized the study level results in tables. We utilized an integrative evidence approach by which we first performed a synthesis within study types and then a synthesis between study types. Results from the quantitative data set served as our point of departure and the synthesis was aggregative, i.e. we summarized data by pooling conceptually similar data from the two sets of studies. Our conclusions were summed in a conceptual model.

RESULTS

We identified 5,998 publications and included 25 studies presented in 29 publications that fulfilled the inclusion criteria. This included 16 qualitative investigations, eight were quantitative studies, and one was a mixed-methods study. We failed to obtain full text copies of two potentially relevant records, despite extensive retrieval efforts.

We rated the study quality of 12 of the 24 mono-methods studies as low, eight as moderate, and the remaining four studies as having high study quality. We evaluated the qualitative and quantitative components of the mixed-methods study separately, and these were judged as high and moderate, respectively.

Among the 2,440 study participants there were three stakeholders groups: immigrants from communities where FGM/C is practiced, health workers, and government officials. With respect to members of communities practicing FGM/C (n= 1,709), about 80% of the participants were women and about 20% men. These participants were mostly from northern Africa and the horn of Africa, and the most typical current residency was Scandinavia or Canada.

The results showed that there were six key factors perceived as promoting and four key factors perceived as hindering the practice of FGM/C. We found that the continuance of FGM/C was largely attributable to culturaltradition, the interconnected factors sexual morals and marriageability, religion, health benefits, and male sexual enjoyment. The belief that FGM/C was an important cultural tradition was the most influential factor. The practice was seen as deeply rooted in the communities' social systems and the compulsory nature of FGM/C was reflected in community mechanisms enforcing it. Further, FGM/C was perceived as a cornerstone of moral standards, the maintenance of which helped to ensure the marriageability of women. As a fourth important factor influencing the continuation of FGM/C, the practice was commonly expressed as a duty according to the religion of Islam. Health benefits and male sexual enjoyment (the latter was a perception among women only and refuted by men) were less influential factors reported in the included studies.

Key factors perceived as hindering the continuance of FGM/C included its health consequences, that it is not a religious requirement, that it is illegal, and that the host society discourses reject FGM/C. With regards to the first factor, both male and female participants were conscious of the consequences following FGM/C. Further, most members of practicing communities knew and appreciated the illegal status of FGM/C in their Western host countries. Many participants stated that FGM/C was not an Islamic duty and put this forth as an important reason why they would not continue the practice. Lastly, the host society discourses' rejection of FGM/C was seen among both exiled members and government officials as a factor hindering the practice.

The conceptual model showed that some factors coexisted, simultaneously promoting and hindering FGM/C, suggesting that FGM/C among exiled communities is a tradition in transition.

CONCLUSION

Our results show that an intricate web of cultural, social, religious, and medical pretexts for FGM/C exists. However, more research is needed to understand the totality and interconnectedness of factors promoting and hindering FGM/C among exiled members of practicing communities.

The Norwegian Knowledge Centre for the Health Services summarizes and disseminates evidence concerning the effect of treatments, methods, and interventions in health services, in addition to monitoring health service quality. Our goal is to support good decision making in order to provide patients in Norway with the best possible care. The Centre is organized under The Directorate of Health, but is scientifically and professionally independent. The Centre has no authority to develop health policy or responsibility to implement policies.

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Hovedfunn

Bakgrunn: Kjønnslemlestelse innebærer at hele eller deler av de eksterne kvinnelige kjønnsorganene fjernes eller skades av ikke-terapeutiske grunner. Kjønnslemlestelse praktiseres i mer enn 28 land i Afrika og i noen land i Midtøsten og Asia. Det ser ut til at kjønnslemlestelse noen ganger forekommer i immigrantsamfunn i vestlige land, som Norge, Storbritannia, Sveits og Sverige. Kjønnslemlestelse fører ofte til helseplager som alvorlige smerter, blødninger, sjokk, infeksjoner og vanskeligheter ved urinering og avføring. Kjønnslemleste er anerkjent som en praksis som krenker menneskerettigheter.

Oppdrag: Nasjonalt kunnskapssenter for helsetjenesten har gått systematisk gjennom forskning om faktorer som fremmer og forhindrer kjønnslemlestelse, i følge interessegrupper bosatt i vestlige land. Interessegruppene var immigranter som opprinnelig kom fra et land hvor kjønnslemlestelse praktiseres, helsepersonell og ansatte i offentlig virksomhet.

Hovedfunn: Resultater av interessegruppenes synspunkter viste at det hovedsakelig var seks faktorer som fremmet og fire faktorer som forhindret kjønnslemlestelse:

- Faktorer som fremmet kjønnslemlestelse var kulturell tradisjon, seksuell moral, gifteverdi, religion, helsegevinst og seksuell nytelse for menn
- Faktorer som forhindret kjønnslemlestelse var helsefarer, at kjønnslemlestelse ikke er et religiøst krav, at det er lovstridig og at diskusjonen om kjønnslemlestelse i vestlige land er negativ overfor denne praksisen

Det er behov for ytterligere forskning for å forstå helheten og hvordan faktorer som underbygger hverandre er innbyrdes forbundet

Sammendrag (norsk)

BAKGRUNN

Kjønnslemlestelse er en tradisjonell praksis som innebærer at hele eller deler av de eksterne kvinnelige kjønnsorganene fjernes eller skades av ikke-terapeutiske grunner. Kjønnslemlestelse klassifiseres i fire kategorier: Type I, *klitoridektomi*, delvis eller total fjerning av klitoris og/eller forhuden; Type II, *eksisjon*, delvis eller total fjerning av klitoris og de små kjønnsleppene; Type III: *infibulasjon*, delvis eller fullstendig fjerning av ytre kjønnslepper og gjensying slik at urinrørsåpningen dekkes av et hudseil og skjedeåpningen forsnevres til ca. 1 cm i diameter; Type IV: *alle andre former*, inklusive prikking og stikking i klitoris, strekking av klitoris og/eller kjønnslepper, etsning eller brenning av klitoris og omliggende vev, og innføring av etsende stoffer i skjeden for å minske hulrommets størrelse.

Kjønnslemlestelse praktiseres i mer enn 28 land i Afrika og i noen land i Midtøsten og Asia. Land med meget høy forekomst, over 70 %, er for eksempel Egypt, Etiopia, Mali, Sierra Leone og Somalia. Forekomsten av kjønnslemlestelse i Afrika varierer sterkt, avhengig av kulturelle, etniske, sosiale og demografiske forhold. Lite dokumentasjon fins, men det ser ut til at kjønnslemlestelse noen ganger forekommer i immigrantsamfunn i vestlige land, som for eksempel Norge, Storbritannia, Sveits og Sverige.

Kjønnslemlestelse settes i sammenheng med flere helsefarer som for eksempel alvorlige smerter, blødninger, sjokk, vanskeligheter ved urinering og avføring, samt infeksjoner. Keisersnitt, blodtap og økt perinatal dødelighet er risikofaktorer i sammenheng med fødsel. Det fins lite forskning om andre konsekvenser av kjønnslemlestelse, men en systematisk oversikt viste at kvinner med kjønnslemlestelse er mer utsatt for smerte under samleie, opplever mindre seksuell tilfredshet og lystfølelse.

Kjønnslemlestelse er anerkjent som en skadelig praksis som krenker menneskerettigheter og er uttrykkelig forbudt i mange afrikanske og vestlige land. Etter hvert som vestlige land er blitt oppmerksomme på kjønnslemlestelse i immigrantsamfunn er lover og rettslige tiltak blitt innført, samtidlig som noen land prioriterer forebyggende tiltak slik som økt bevissthet om praksisen og undervisning.

Vi stilte følgende spørsmål: Hva er faktorer som fremmer og forhindrer kjønnslemlestelse, ifølge interessegrupper bosatt i vestlige land?

METODE

Vi søkte systematisk etter relevant litteratur i følgende 13 internasjonale databaser: African Index Medicus, Anthropology Plus, British Nursing Index and Archive, The Cochrane Library (CENTRAL, Cochrane Database of Systematic Reviews, Database of Abstracts of Reviews of Effects), EMBASE, EPOC, MEDLINE, PILOTS, POPLINE, PsychINFO, Social Services Abstracts, Sociological Abstracts og WHOLIS. Vi søkte også i databaser til internasjonale organisasjoner som driver prosjekter om kjønnslemlestelse, i referanselistene til relevante kunnskapsoversikter og de inkluderte studiene, og kommuniserte med eksperter som arbeider med kjønnslemlestelse. Vi søkte etter litteratur med følgende studiedesign: systematiske oversikter, kohortestudier, kasuskontrollstudier, tverrsnittstudier og kvalitative studier.

Vi valgte ut studier som oppfylte våre predefinerte inklusjonskriterier. Deretter brukte vi sjekklister for å vurdere den metodiske kvaliteten til studiene. Vi oppsummerte resultater på studienivå i tabeller. I analysen brukte vi en integrert evidenstilnærming hvor vi først foretok en syntese innenfor studiedesign og deretter mellom studiedesign (kvantitativ og kvalitativ). Resultatene fra de kvantitative studiene var førende og syntesen var aggregerende, dvs., vi summerte resultater på studienivå ved å sammenstille resultater som var begrepsmessig likeartet. Vi oppsummerte våre resultater i en konseptuell modell.

RESULTAT

Vi identifiserte 5998 publikasjoner og etter å ha vurdert titler, sammendrag og artikler i fulltekst fant vi 25 studier, presentert i 29 publikasjoner, som oppfylte inklusjonskriteriene. Vi inkluderte 16 kvalitative studier, åtte kvantitative studier og én mixed-metode studie. To mulig relevante publikasjoner fikk vi ikke tak i, på tross av omfattende forsøk

Av de 24 rene kvalitative- og kvantitative studiene ble 12 vurdert til å ha lav metodologisk kvalitet, åtte hadde moderat kvalitet og de siste fire hadde høy metodologisk kvalitet. Vi vurderte de kvalitative og kvantitative delene av mixed-metode studien separat og disse ble vurdert til å ha henholdsvis høy og moderat metodologisk kvalitet.

Blant de 2440 deltakerne i studiene var det tre interessegrupper: immigranter (mennesker i vestlige land som opprinnelig var fra et samfunn hvor kjønnslemlestelse praktiseres), helsepersonell og ansatte i offentlig virksomhet. Når det gjelder immigranter (n= 1709) så var ca 80 % kvinner og ca 20 % menn. Immigrantene var hovedsakelig fra land i Nord-Afrika (inkludert Afrikas horn), og de fleste var bosatt i Skandinavia eller i Canada da de deltok i studiene.

Resultatene av interessegruppenes synspunkter viste at det var hovedsakelig seks faktorer som fremmet kjønnslemlestelse og fire faktorer som forhindret kjønnslem-

lestelse. Vi fant at faktorene som fremmet kjønnslemlestelse inkluderte kulturell tradisjon, de var knyttet til seksuell moral og gifteverdi, religion, helsegevinst og seksuell nytelse for menn. Den mest fremtredende faktoren var oppfatningen at kjønnslemlestelse representerte en viktig kulturell tradisjon. Praksisen ble sett som dypt forankret i de praktiserende samfunnenes sosiale systemer og dens viktighet reflektert gjennom ulike forsterkningsmekanismer. Kjønnslemlestelse var videre sett som viktig relatert til seksuell moral, noe som ivaretok muligheten for fremtidlig giftemål. En fjerde faktor som fremmet kjønnslemlestelse var at mange betraktet kjønnslemlestelse som en plikt i henhold til islam. Helsegevinster og seksuell nytelse for menn (sistnevnte faktor ble bare nevnt av kvinner og benektet av menn) var to faktorer som var mindre fremtredende.

De fire faktorene som forhindret kjønnslemlestelse var helsefarer, at kjønnslemlestelse ikke er et religiøst krav, at det er lovstridig og at debatt om kjønnslemlestelse i vestlige land er negativ overfor praksisen. Både menn og kvinner fra samfunn hvor kjønnslemlestelse praktiseres hadde kjennskap til de helsefarlige konsekvensene av kjønnslemlestelse. Videre var de fleste immigrantene klar over og verdsatte forbudene mot kjønnslemlestelse i de vestlige landene hvor de bodde. Mange mente at kjønnslemlestelse ikke var et islamsk krav og fremsatte dette som en viktig grunn til hvorfor de ikke kom til å videreføre praksisen. Den forhindrende faktoren at diskusjonen om kjønnslemlestelse i vestlige land er negativ overfor praksisen var observert blant både immigranter og ansatte i offentlig virksomhet.

Den konseptuelle modellen viste at noen faktorer sameksisterte; de fantes som faktorer som både fremmet og forhindret kjønnslemlestelse. Dette kan tyde på at kjønnslemlestelse blant immigranter fra samfunn som praktiserer dette, er en tradisjon under endring.

KONKLUSJON

Resultatene fra denne studien viser at det fins et intrikat nett av kulturelle, sosiale, religiøse og medisinske grunner for og i mot kjønnslemlestelse. Det er likevel behov for ytterligere forskning for å forstå helheten og hvordan faktorer som underbygger kjønnslemlestelse er innbyrdes forbundet.

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Preface

In November 2008, the Norwegian Knowledge Centre for Violence and Traumatic Stress Studies (NKVTS) contacted the Norwegian Knowledge Centre for the Health Services (NOKC) with a request for assistance in establishing a competence centre on the topic of female genital mutilation/cutting (FGM/C). Specifically, the NKVTS commissioned the NOKC to conduct a series of systematic reviews about FGM/C, one of which was to assess the factors promoting and hindering FGM/C from the viewpoints of stakeholders residing in Western countries. Two systematic reviews have been published: the effectiveness of interventions designed to reduce the prevalence of FGM/C (1) and the psychological, social, and sexual consequences of FGM/C (2). The fourth systematic review, delineating extant guidelines regarding FGM/C, will be completed in spring of 2011.

The project team was composed of:

- Researcher, Rigmor C Berg, NOKC
- Project coordinator, researcher, Eva Denison, NOKC
- Research director, Atle Fretheim, NOKC

The literature search was conducted by NOKC research librarian Sari Ormstad.

We are grateful for peer review by two internal and two external reviewers:

- Hilde H. Holte, researcher, NOKC
- Simon Lewin, researcher, NOKC
- Owolabi Bjälkander, PhD candidate, Karolinska Institute, Sweden
- Hilde Lidén, research director, Institute for social research, Oslo

The aim of this report is to support well-informed decisions in health promotion that inform the work to reduce the prevalence of FGM/C and improve quality of services related to FGM/C. The evidence should be considered together with other relevant issues, such as clinical experience and patient preferences.

Anne Karin Lindahl	Atle Fretheim	Rigmor C Berg
Director	*Research Director*	*Researcher*

Objective

The present systematic review summarizes available literature about factors promoting and hindering the practice of female genital mutilation/cutting (FGM/C), as expressed by stakeholders residing in Western countries.

The Norwegian Knowledge Centre for Violence and Traumatic Stress Studies commissioned the Norwegian Knowledge Centre for the Health Services to conduct a systematic review to support the organization's health promotion work concerning FGM/C among women subjected to and at risk for the practice in Norway, but the systematic review is of relevance in all countries where FGM/C may occur. The overall aim of the systematic review is to support well-informed decisions in health promotion that inform work to reduce the prevalence of FGM/C and to improve the quality of services related to FGM/C.

The main research question was:

- What are the factors promoting and hindering the practice of FGM/C, as expressed by stakeholders residing in Western countries?

Background

The terminology used for the cutting of external female genital tissues varies. It has been referred to as "female circumcision", "female genital mutilation", "female genital cutting" and "female genital mutilation/cutting" (3). We have adopted the official terminology used by UNICEF and UNFPA – "female genital mutilation/cutting" (FGM/C) – throughout this report, but we have retained the terms for the procedure used in the primary studies when quoting directly from these. FGM/C is a traditional practice that involves "the partial or total removal of the female external genitalia or other injury to the female genital organs for cultural or other non-therapeutic reasons" (4). It is widely recognized that the practice violates a series of human rights principles, norms, and standards, including the Universal Declaration of Human Rights (1948), the Convention on the Elimination of all Forms of Discrimination against Women (1979), the Convention on the Rights of the Child (1989) (3), the African Charter on the Rights of Women, and the African Charter on the Rights and Welfare of the Child (5).

CLASSIFICATIONS

To clarify understanding of the prevalence and consequences of FGM/C, WHO has classified the procedure into four categories: Type I, *clitoridectomy*, involves partial or total removal of the clitoris and/or the prepuce. Type II, *excision*, involves partial or total removal of the clitoris and the labia minora, with or without excision of the labia majora. Type III, *infibulation*, involves narrowing of the vaginal orifice with creation of a covering seal by cutting and appositioning the labia minora and/or the labia majora, with or without excision of the clitoris. Infibulation is considered the most invasive type of FGM/C. Defibulation, opening of the covering seal, is often necessary prior to childbirth. Reinfibulation refers to the recreation of an infibulation after defibulation. Type IV, *other*, involves all other harmful procedures to the female genitalia for non-medical purposes, for example: pricking, piercing, incising, scraping, and cauterizing (3). In type IV, no genital tissue is excised.

Within these classifications there is a wide range of variation, not yet systematically studied or documented. For example, the technical variation of cutting differs within the same practitioner over time and with the instrumentation used, resulting in variation in degrees of FGM/C (3;6). Common to all operations, except type IV pro-

cedures, is some degree of excision of the external genitalia, from excision of minor skin parts around the clitoris to clitoridectomy and removal of the labia. Each community uses the cutting of their own choice for their own reasons and beliefs. Similarly, various instruments are used to perform the procedure, including razor blades, glass, knives, and scissors (7).

PREVALENCE

While FGM/C transcends geography, it is primarily practised among various ethnic groups in more than 28 countries in Africa, usually on girls under the age of 15 years. The practise is also found in some countries in the Middle East and Asia (8;9), for example among some Bedouin tribes in the western part of Saudi Arabia (10). Recent national figures for African countries show a prevalence of FGM/C of more than 70% in Burkina Faso, Djibouti, Egypt, Eritrea, Ethiopia, Guinea, Mali, Mauritania, Northern Sudan, Sierra Leone, and Somalia (11). However, national rates do not reveal the magnitude of FGM/C among certain ethnic groups; there is great variation in prevalence between and within countries, reflecting ethnicity and tradition (8). Globally, it has been proposed that FGM/C type II is the most frequently practiced form, representing an estimated 80% of all procedures of FGM/C (12). While type III is thought to represent about 10% of FGM/C in Africa, it is probably the most frequently used type of FGM/C in some countries, including Djibouti, Somalia, and northern Sudan (11).

Although limited data exist, it is speculated that FGM/C is practised by immigrant communities in a number of Western countries, including Australia, Canada, France, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, and the United States (9). It is further believed that the majority of girls living in Western countries who are subjected to FGM/C do not undergo the procedure in these countries. Instead, they are sometimes sent to their country of origin, usually in Africa, in order to be subjected to the practice (13-15). In a study of FGM/C among immigrants from northern Africa with current residency in Scandinavia, 73 out of 220 women reported being genitally cut during a return visit to their home country. However, 15 of the women also explained that they had their daughter clitoridectomized while living in Scandinavia (13). Similar data confirming that FGM/C takes place in Western countries have been reported by Chalmers and Hashi (16): among their 432 participants, 11 Somali women said they had FGM/C performed while living in Europe. In a study among 174 young Somali women and men living in London, six women said they had 'sunna' (clitoridectomy or excision) performed between the ages of 10-18 years and two had infibulation performed, at ages 4 and 7, by a health professional in a British clinic (17). Also reinfibulations sometimes take place in Western countries: in one study of 29 women, eight said they had been reinfibulated after delivery in Swiss hospitals (18). Reinfibulation has also been reported after delivery in Sweden (19). Furthermore, a Canadian obstetrician-gynaecologist interviewed in Levine's study (20) said she had performed reinfibulation. Asked

whether she intended to perform reinfibulation in the future, the doctor said "If the patient wants it, I feel strongly one should go along with their beliefs."

CONSEQUENCES

FGM/C causes permanent, irreparable changes in the external female genitalia. Unlike male circumcision, which provides some protection from certain infections, such as urinary tract infections and human immunodeficiency virus (21;22), from a medical point of view, FGM/C offers no benefits (3). Rather, according to WHO (3), girls exposed to FGM/C are at risk of immediate physical consequences such as severe pain, bleeding, shock, difficulty in passing urine and faeces, and infections. Long term consequences can include chronic pain and infections. In general, the consequences are similar for FGM/C type I, II, and III, but they are often more severe and more prevalent the more extensive the procedure.

A review of the health complications of FGM/C (23) identified a range of obstetrical problems, the most common being prolonged labour and/or obstruction, episiotomies and perineal tears, post partum haemorrhage, and maternal and foetal death. A large multi-centre study investigating more than 28,000 women attending obstetric centres in African countries concluded that women with FGM/C were significantly more likely than those without to have adverse obstetric outcomes such as a caesarean section, infant resuscitation, and inpatient perinatal death. The authors also concluded that the risks seemed to be greater with more extensive FGM/C (24). The associations were modest, however (for a discussion of these results see e.g. (25)), and two studies from Sweden did not find that there was a link between FGM/C and prolonged labour or perinatal death (26;27). Also the literature regarding infertility is inconclusive. While a study using Demographic and Health Surveys (DHS) data from the Central African Republic, Côte d'Ivoire, and Tanzania failed to confirm a statistical association between FGM/C and infertility (28), a case-control study from Sudan concluded there was a statistically as well as clinically significant association between FGM/C and primary infertility (29).

A recent systematic review (2) summarized published, empirical data describing the psychological, social, and sexual consequences of FGM/C. The 17 included studies, with a total of 12,755 participants, all compared women who had been subjected to FGM/C with women who had not been subjected to FGM/C. Unfortunately, only two studies included some measure of the social consequences of FGM/C and only four studies assessed the psychological consequences of FGM/C. No conclusions could therefore be drawn for such outcomes, prompting the authors to call for further research. Concerning sexual consequences, the study's meta-analyses showed that compared to women without FGM/C, women with FGM/C were 1.5 times more likely to experience pain during intercourse; to experience significantly less sexual satisfaction; and were twice as likely to report that they did not experience sexual desire. The authors concluded that, collectively, the results substantiated the propo-

sition that a woman whose genital tissues have been partly removed is more likely to experience increased pain and reduction in sexual satisfaction and desire than a woman who has not been subjected to FGM/C, but a causal link could not be established. Unanswered questions, such as the consequences on orgasm, remain and further research was recommended on the consequences of FGM/C on central phases of the sexual response cycle.

INTERVENTIONS TO REDUCE THE PREVALENCE OF FGM/C

Consistent with international condemnation of FGM/C, there has been an increasing number of initiatives geared towards the eradication of the practice among practising communities. Efforts to abandon the practice of FGM/C in Africa have used several different approaches, which have targeted stakeholders at the individual, interpersonal, community, and national levels (30). Recently, the Population Reference Bureau (PRB) identified 92 intervention projects taking place in African countries (31) and a 2009 systematic review took stock of progress to date, using rigorous methods which allowed valid assessment of intervention effects (1). The authors identified and included six controlled, before-and-after studies undertaken in Africa. Because of the paucity of high quality evidence, few firm conclusions could be drawn regarding changes in knowledge, beliefs, attitudes, and behaviours related to FGM/C.

As Western governments have become more aware of FGM/C among the immigrant communities, legislation has been used as the main intervention tool and European Union (EU) institutions and Member States have taken active steps towards ending FGM/C (32;33). Sweden was the first country to introduce a specific law prohibiting FGM/C in Europe, the 1982 'Act Prohibiting Female Genital Mutilation' (34). There are now laws prohibiting FGM/C in most Western countries, including Australia, Canada, New Zealand, USA, and at least 13 countries in Western Europe (8;9). In Europe, about 45 criminal court cases on grounds of suspected FGM/C have been tried, and almost as many convictions obtained (34). However, the implementation of anti-FGM/C laws and their impact on eliminating the practice has so far not been extensively studied (8;35). Although responses to preventing the practice of FGM/C in Western countries primarily consist of prosecution, some countries give priority to prevention strategies. For example, while France focuses primarily on criminal proceedings, countries like Austria, the Netherlands, and the United Kingdom emphasize prevention, including awareness raising, empowerment of women, and education and training of stakeholders such as health professionals and teachers (15). An example of one such initiative is the 'END FGM European Campaign' organized by Amnesty International Ireland (see www.endfgm.eu). This aims to prevent FGM/C and protect women and girls at risk for or living with FGM/C by lobbying EU institutions to ensure that the EU adopts a comprehensive approach towards ending the practice.

To achieve success in preventing the continuation of FGM/C, program architects need to understand the forces perpetuating the practice and tailor their information, messages, and activities to their audiences accordingly. Programs can aim to modify or remove factors perpetuating the practice and use or build upon existing factors that are seen to hinder the continuation of the practice. In this setting, research on perspectives of individuals in exile[1], such as research on the beliefs of women with FGM/C living in a Western country, is particularly useful. As explained by Johansen (36), entering a new society allows exposure to other cultural models, sometimes challenging those of the home culture, and thereby encouraging individuals to reflect upon their own cultural models. Johansen writes:

> "Research in an exile community can help cast new light on cultural processes that were less accessible in the home context, because in exile they are voiced and debated to a higher extent. These debates may also give insight into some of the discrepancies between personal experiences and cultural models, making them more viable for research" (p 275).

It is often the case that in the diaspora, members of communities where FGM/C is practiced more readily reflect upon, question, and challenge their home cultural models and values. Thus, they may be uniquely able to identify the beliefs, values and codes of conduct that influence the practice of FGM/C (36). Additionally, other stakeholder groups like health workers (e.g. nurses, midwives, health professionals within antenatal care and postnatal care clinics) as well as professionals in judicial- and government offices (e.g. police, lawyers, judges, teachers, social workers) are confronted with the issue of FGM/C in various ways and can have an important role to play in preventing the practice among immigrant communities in Western countries. Understanding their knowledge, beliefs, and attitudes is a necessary first step to ensuring the optimal involvement of such professionals as advocates against the practice. For them to work for the prevention of FGM/C, and to provide care and support for girls and women who have undergone the procedure, it is essential that they are equipped with appropriate information.

It is clear that to enable prevention efforts, a systematic review identifying factors promoting and hindering FGM/C as viewed by stakeholders in Western countries is useful for several reasons. It provides a more comprehensive mapping of factors than is possible from individual, primary studies. A systematic review can also form the basis for the assessment of current projects, such as whether prevention messages address the core values, beliefs, or enforcement mechanisms that support the practice. Furthermore, the systematic review results can serve as a programming tool for researchers, practitioners, and policy-makers trying to understand FGM/C and behaviour change, as well as groups contemplating prevention activities. It can increase the capacities of professionals who are key in initiating and executing ac-

[1] We use the expression 'exiled individuals' in this report to refer to people from practicing communities who live in a Western country, regardless of their immigration circumstances.

tivities to prevent the perpetuation of the practice, as well as highlight gaps and uncertainties in current research knowledge.

Method

We conducted a systematic review of the factors promoting and hindering the practice of FGM/C, as expressed by stakeholders residing in Western countries. We followed the standard stages of a systematic review: setting the review question, developing a review protocol, searching for literature, applying inclusion and exclusion criteria, assessing methodological quality, extracting data, and synthesizing findings (37). In the following section, we explicitly report how the systematic review was conducted with a view to allow others to assess potential sources of bias and thus the validity of its findings (38).

LITERATURE SEARCH

The database search strategy was designed and executed February 4-9 2009, by research librarian Sari Ormstad at the NOKC. The search in Anthropology Plus was executed February 19 2009, by Hege Oswald at NKVTS. An update search with identical search strategy was conducted February 10 2010. We searched systematically for relevant literature in the following 13 international databases:

- African Index Medicus
- Anthropology Plus
- British Nursing Index and Archive
- The Cochrane Library (CENTRAL, Cochrane Database of Systematic Reviews, Database of Abstracts of Reviews of Effects)
- EMBASE
- EPOC
- MEDLINE
- PILOTS
- POPLINE
- PsycINFO
- Social Services Abstracts
- Sociological Abstracts
- WHOLIS

The search strategy is detailed in Appendix 1. We supplemented the database searches with searches of the databases of six international organizations that are engaged in projects regarding FGM/C (see Appendix 1), as well as searches of the

reference lists of relevant reviews and included studies. Additionally, we communicated with experts engaged in FGM/C related work. Unpublished reports, abstracts, brief- and preliminary reports were considered for inclusion on the same basis as published reports.

INCLUSION CRITERIA

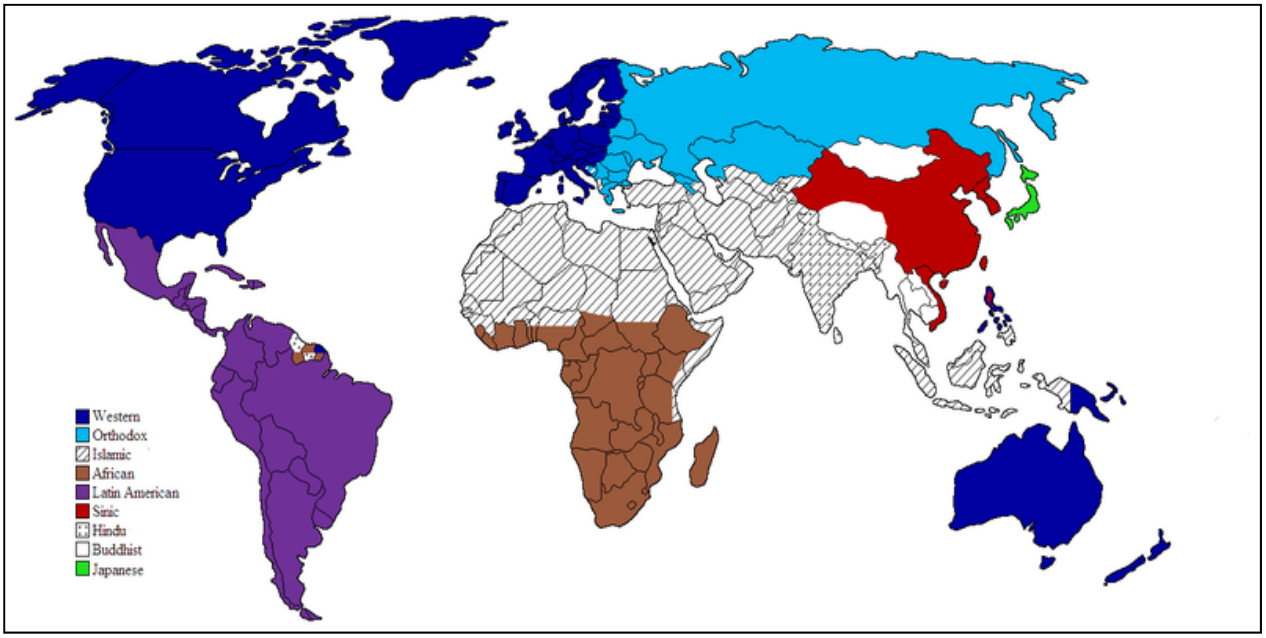
We accepted several study designs:

1. cross-sectional quantitative studies
2. qualitative studies
3. mixed-methods studies.

Our definition of qualitative evidence was: "papers had to report results of qualitative (i.e. textbased and interpretive) analysis based on qualitative methods of data collection" (39), and such studies thus had to use qualitative methods of data collection and analysis. Mixed-methods studies including both quantitative and qualitative components were acceptable, but both the qualitative component and the quantitative component of the study were subjected to the same inclusion criteria as the mono-methods studies.

Population: Stakeholders in FGM/C included girls/young women at risk of FGM/C, other members of communities practicing FGM/C, health workers, and government officials. All stakeholders had to reside in a Western country, defined as a country with a culture of European origin (Figure 1).

Figure 1: World map with 'Western societies' in dark blue.



Legend: 'Western societies' in dark blue. Source (40).

Our operationalization of Western country was derived from Samuel P. Huntington's definition in "Clash of Civilizations" (40), which includes the following countries: Australia, Austria, Belgium, Canada, Croatia, Denmark, Estonia, Finland, France, Germany, Great Britain, Holland, Hungary, Iceland, Italy, Latvia, Lithuania, Monaco, New Zealand, Norway, Papua New Guinea, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, USA. A few other countries, that are part of the EU, were also considered in scope (Bulgaria, Cyprus, Czech Republic, Greece, Ireland, Luxembourg, Malta).

Interest: The practice of FGM/C.

Outcome: Factors promoting and hindering FGM/C, such as tradition, religion, health consequences, marriageability. Thus, the studies had to be at least partly about the stakeholders' perspectives and understandings of the factors promoting (continuance factors) and/or hindering (discontinuance factors) FGM/C.

Languages: We included all languages. When considered likely to meet the inclusion criteria, studies were translated to English.

EXCLUSION CRITERIA

We excluded all studies not meeting our pre-specified inclusion criteria. Specifically, we excluded studies that did not describe the perspectives of stakeholder groups residing in a Western country and studies that did not directly address the issue of factors promoting and hindering FGM/C.

SELECTION OF STUDIES

Two authors (Denison and Berg) independently read all titles and/or abstracts resulting from the search process and eliminated any obviously irrelevant studies. We obtained full text copies of the remaining potentially relevant studies (two studies could not be obtained in full text). The same pair of authors, acting independently, classified these as clearly relevant, that is, met all inclusion criteria and therefore to be included, or not relevant and therefore to be excluded. Pre-designed inclusion/exclusion forms were used for each screening level. It was not necessary to contact the authors of any studies to aid the decision process. Differences in opinion in the screening process were few and were resolved through consensus. Studies formally considered in full text but excluded are listed in Appendix 2 and reasons for exclusion are provided.

DATA EXTRACTION AND ANALYSIS

We grouped all included studies into three main study types according to their methodological focus: 1) quantitative studies, 2) qualitative views studies, 3) mixed-

methods studies. Recognising that the analysis method needs to be appropriate to the aim of the research synthesis, the systematic review utilized an integrative evidence approach. Data extraction and analyses of quantitative and qualitative evidence were largely completed in separate streams, and we delineate each step of this process below.

Quality assessment

Two review authors independently appraised the studies on methodological quality. No studies were excluded due to low quality. However, qualitative papers of the highest level of methodological quality were given priority in the analysis of qualitative studies. To assess the quality of included quantitative studies, we used the NOKC check list for cross-sectional studies (available at www.nokc.no). To appraise the methodological quality of the qualitative evidence we used the Critical Appraisal Skills Programme (CASP) appraisal tool for qualitative research (available at www.sph.nhs.uk/what-we-do/public-health-workforce/resources/critical-appraisals-skills-programme). For mixed-methods studies, both the qualitative component and the quantitative component of the study were subjected to quality appraisal, using the aforementioned tools. A final decision of high, moderate or low methodological quality was agreed upon by Berg and Denison after discussing whether there was a discrepancy between the two reviewers with respect to the components.

Data extraction

Two authors independently extracted data from the published quantitative sources using a pre-designed data recording form. Data that were extracted pertained to study design characteristics, descriptions about the participants, and descriptive data of factors promoting and hindering the practice of FGM/C. Differences in the data extracted by the review authors were resolved through discussion. We extracted data exactly as stated in the publications and did not alter terminology, including when expressions such as female circumcision were used.

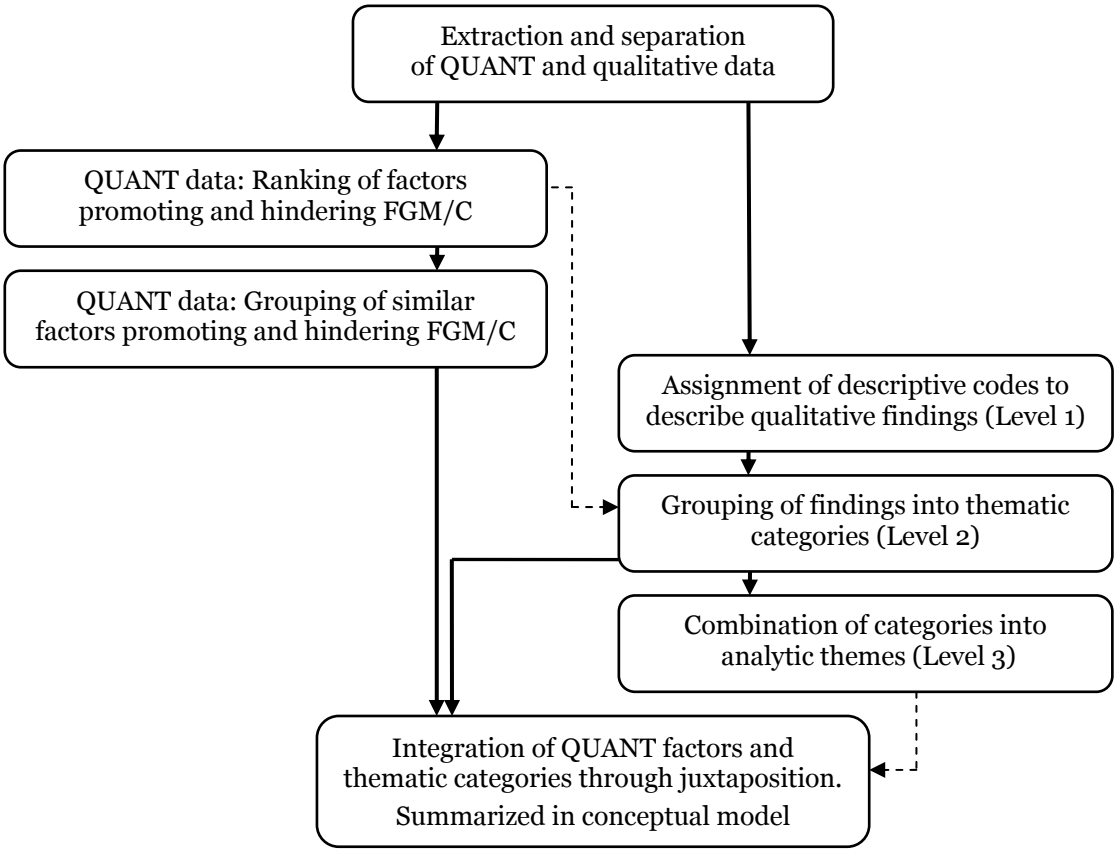
For the qualitative research papers, the review authors read the texts several times independently of each other. The aim was to gain a sense of the whole. In the second reading the reviewers extracted all text data related to views about FGM/C in light of stakeholders' reasoning for its continuance and discontinuance. Our extraction of data was inclusive (41). That is, we did not limit our extraction merely to 'findings', defined by Sandelowski and Barrows (42) as "the data-driven and integrated discoveries, judgements, and/or pronouncements researchers offer about the phenomena, events, or cases under investigation." Rather, we included also other data, defined as "case descriptions or histories, quotes, incidents and stories obtained from participants" i.e. the empirical material in the publications on which findings should be based (42). In effect, to avoid trouble identifying 'data' in the studies we followed the advice of researchers Thomas and Harden (43) and took study findings to be all of the text considered results or findings in the qualitative

publications. We copied all findings in the form of sentences, phrases or text units appearing to deal with factors promoting and hindering the continuance of FGM/C verbatim onto our pre-designed data extraction form. Additionally, we recorded information about study design and participant characteristics. Differences in the data extracted by review authors were resolved through discussion.

Data analysis

The systematic review utilized an integrative evidence approach (Figure 2).

Figure 2: Integrative evidence approach



Data from cross-sectional survey studies (quantitative data) were combined with data from studies which examined various stakeholders' perspective of factors promoting and hindering the practice of FGM/C (qualitative 'views' studies). Our integrative evidence approach was largely based on published examples and guidelines from the Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI Centre) (e.g. (44;45)). The synthesis was aggregative (46) and focused on summarizing data by pooling conceptually similar data from the quantitative studies and the qualitative studies. First, we analysed the two sets of evidence separately (each step is delineated below). That is, first we performed a synthesis within study types and then a synthesis between study types. Results from the quantitative data set were used as organizing principles (shown through capitalization in Figure 2) for the qualitative data analysis. Throughout the analysis we used the quantitative results as our point of departure, that is, the qualitative results were subsumed under

the quantitative results and were used to 'extend' and inform the results from the quantitative analysis.

With respect to the quantitative analysis, we categorized the results from each study according to whether the factors were promoting (continuance) or hindering (discontinuance) factors for the practice of FGM/C. We analysed these units in terms of their ability to answer the question about factors promoting and hindering FGM/C as expressed by stakeholders residing in Western countries. We gave priority to what stakeholders directly expressed as factors (i.e. in response to being asked Why is FGM/C performed?), and secondly what their views indirectly revealed are factors (i.e. in response to being asked questions akin to Why would you circumcise your daughter?) promoting and hindering the continuance of FGM/C. We then determined the frequencies of these factors in order to create a ranked list of factors, ending up with one list for each stakeholder group. In the next step, we grouped similar factors promoting and hindering FGM/C, to facilitate the integration of quantitative factors and thematic categories from the qualitative evidence. The grouping was based on commonality of meaning (an example is provided below).

Our analysis of qualitative evidence was thematic and drew on published EPPI studies (e.g. (44;45)). Thematic analysis involves identifying prominent or recurring themes in the literature and summarizing the findings of the different studies under thematic headings (47). The data for synthesis of qualitative studies were in text form. In order to synthesise these, we copied all findings verbatim into a word processing program (Level 1 findings). These data extracts included both extracts from research participants and extracts of the interpretations made by the researchers. We organized the findings from each study according to whether the factors were promoting (continuance) or hindering (discontinuance) factors, for each stakeholder group separately (as far as possible, given that some studies included several stakeholder groups). Next, we examined the findings of each study in turn and assigned descriptive codes to the findings. Codes were created without prejudging the meaning of the data and inductively to capture meaning and content of each sentence or phrase. For example, we coded the finding "The women explained that people perform FGC to reduce a girl's sexual desire" under continuance factors as 'It curbs women's sexuality.' During the coding process, the reviewers looked for similarities and differences between codes in order to start grouping them.

Next, we grouped findings into thematic categories (Level 2 findings). This was based on commonality of meaning as well as frequency and strength of various stakeholders' cognitions about FGM/C, separately for each stakeholder group. Consistent with thematic analysis, it involved taking concepts from one study and recognizing the same concept in another study, though they may not have been expressed using identical words. As explained by Dixon-Woods (47), thematic analysis can be data driven, i.e. driven by the themes identified in the studies that are included, or theory driven, i.e. driven by themes identified through assessment of the

literature. For this systematic review, given that the quantitative evidence served as our analytic point of departure, we worked by using both *a priori* codes from the included quantitative studies to seek out evidence from the qualitative findings (shown as dotted line in Figure 2), as well as allowing themes to emerge from the qualitative findings. We examined the descriptive codes and their associated data in the light of specific patterns and relationships in stakeholders' reasoning about FGM/C, involving an analysis weighted towards themes that, in the primary studies, appeared to have a high level of explanatory value. Text units appearing to deal with related content were identified and sorted into categories, to which we assigned thematic headings. We did this separately for each stakeholder group, thus developing broader concepts that captured similar themes from different papers. The organization of findings into related areas was first conducted individually by two reviewers, who then discussed and agreed on a set of categories. During the discussion, the units in each category were critically read and compared to achieve reasonability. When necessary, we re-read the study. We selected a set of quotations for each category that represented views that appeared frequently, thereby illustrating the stakeholders' understandings of the factors promoting and hindering the practice of FGM/C.

In the last qualitative analysis step, having created categories that represented descriptive themes of the findings, we then combined categories to create synthesized themes (Level 3 findings). This involved reflecting on the thematic categories as a whole and looking for similarities and differences among the categories. In contrast to the previous analysis step, it depended more on the judgement and insights of the reviewers. The two main authors worked together and examined the categories and their corresponding codes and text units in light of the review question, inferring continuance and discontinuance factors from the views stakeholders expressed about FGM/C. Through discussion and reflection, the main authors came to a consensus on overall understanding and developed a comprehensive set of analytic themes. For each analytic theme, we selected a set of quotations that captured the essence of each theme.

In the last analysis step, once both the quantitative and qualitative sets of data were analyzed, they were integrated. The integration involved creating a matrix in which we juxtaposed the list of quantitative factors and thematic categories for each stakeholder group. We worked from the quantitative results and sought out evidence from the qualitative results, thus working 'down' from pre-existing quantitative understandings. The juxtaposition of findings allowed us to examine factors and themes that had been investigated, factors and thematic categories for which there were more credible information due to convergence and corroboration, and the commonalities and differences across stakeholder groups. We generated a set of statements that aggregated the underlying meanings of the factors promoting and hindering the practice of FGM/C identified from different papers. Having already grouped results according to stakeholder groups, we could consult these to provide the contextual backdrop for our statements. The accumulation of the analyses and

our conclusions were summed in a conceptual model which linked the factors and concepts together and delineated the likely determinants of the underlying forces perpetuating the practice, and halting the practice. We used the analytic themes from the last qualitative synthesis as conceptual guide (shown as dotted line in Figure 2). Because it was not possible to synthesise extensively across stakeholder groups, the model integrated the perspectives of women and men from communities practicing FGM/C.

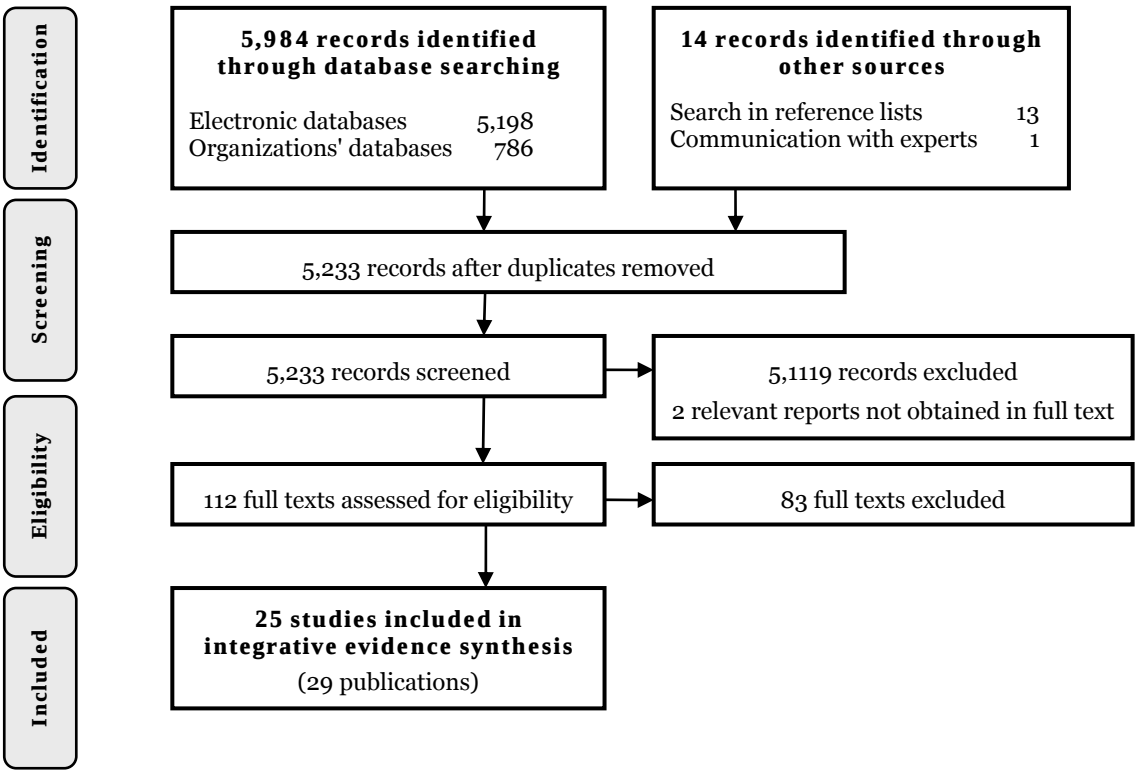
Results

DESCRIPTION OF INCLUDED LITERATURE

Results of the search

The electronic searches resulted in 5,984 individual publications and the manual search in 14 relevant publications (Figure 3). After removal of duplicates, Berg and Denison screened the publications by reviewing titles and abstracts. We eliminated obviously non-relevant publications based on titles and, where available, abstracts. We excluded 5,119 publications, leaving 114 potentially relevant publications, two of which could not be obtained in full text. In the end, we excluded 83 publications read in full text (characteristics of excluded studies are presented in Appendix 2) and included 25 studies presented in 29 publications.

Figure 3: PRISMA flow diagram of the literature reviewing process



Included studies

A total of 25 primary studies were included in this systematic review (13;14;17;19;33;36;48-70). Among the included studies, two were in French (49;53) and one was in Italian (63). These three studies were translated to English. Fifteen of the studies were qualitative investigations, eight were quantitative cross-sectional studies, while the remaining two were mixed-methods studies. In one mixed-methods study (33), only qualitative data were relevant for the purposes of the current systematic review and, consequently, we extracted only text-based data. This study was therefore treated as qualitative. We included two dissertations (36;52), three studies were reports submitted to funding agencies (65-67), and the remaining 20 studies were published in peer-reviewed journals. Most publications were relatively new: they were published between 1992 and 2009, with the majority of the studies (88%) being published since 2000 (Tables 1-2).

About half of the studies (12 of 25) were assessed as having low methodological quality, eight moderate and four high methodological quality. The mixed-methods study by Morison and colleagues (17) had high and moderate methodological quality for the qualitative and quantitative components, respectively. Further details on our quality assessments are found in Appendix 3.

In total, the 25 studies included 2,440 participants (one publication (64) did not report the number of participants in the study). The studies were from nine different Western areas/ countries (Belgium, Canada, England, France, Italy, New Zealand, Scandinavia, Spain, USA). Most of them (76%) were from Europe, especially Northern Europe with seven studies from Sweden. Five studies were conducted in North America and one in New Zealand.

Quantitative studies

The cross-sectional studies included 1,724 participants in total (Table 1). They assessed the cognitions and activities of women and men from communities practicing FGM/C (n= 1,061). In addition, three studies – from Belgium (61), Italy (63) and Spain (14) – reported the knowledge and views of health professionals (n= 663).

Table 1: Included quantitative studies (n= 9)

Author, year	Method. quality	Population & Setting	Aims
Chalmers, 2000 (51)	Low	N=432 women from community practicing FGM/C (Canada)	To gain information about Somali women's perception of care during pregnancy and birth, and their genital mutilation experience.
Elgaali, 2005 (13)	Moderate	N=315 women and men from community practicing FGM/C (Scandinavia)	To investigate types of female circumcision, to characterize the women, and report attitudes to female circumcision among the women and their husbands.
Kaplan-Marcusan, 2009 (14)	Moderate	N=225 health workers (Spain)	To analyze the perceptions, degree of knowledge, attitudes and practices of primary healthcare professionals in relation to FGM.

Leye, 2008 (61)	Low	N=334 health workers (Belgium)	To assess the knowledge, attitudes and practices with regard to FGM among gynaecologists in Flanders, Belgium.
Litorp, 2008 (19)	Low	N=40 women from community practicing FGM/C (Sweden)	To explore knowledge of, attitudes toward and practice of FGM among women originally from countries where it is customary.
Mitello, 2006 (63)	Low	N=104 health workers (Italy)	To find out what health workers in a Rome hospital knew about FGM.
Morison, 2004 (17) (mixed-methods)	Moderate	N=174 women and men from community practicing FGM/C (England)	To examine the association between age on arrival in Britain and experiences and attitudes relating to female circumcision among young, single Somalis living in London.
Mwangi-Powell, 1999 (65)	Low	N=15 women from community practicing FGM/C (England)	To provide information about participants' attitudes towards FGM.
Mwangi-Powell, 2001 (66)	Low	N=85 women and men from community practicing FGM/C (England)	To identify the community's knowledge, attitude and practice of FGM.

Legend: Method.= Methodological.

Qualitative studies

The qualitative studies included 716 participants in total, representing the attitudes of women and men from communities practicing FGM/C (n= 663), health professionals (n= 26), and various government officials (n= 27) (Table 2). One publication did not report the number of participants enrolled in the study (64). The participants' beliefs and attitudes were elicited through interviews and focus groups using open-ended questions. Five of the studies specified their study focus as reasons for and against FGM/C. The remaining studies explored more broadly experiences and practices surrounding FGM/C and participants' reasons for and against FGM/C emerged during the research process.

Table 2: Included qualitative studies (n= 16)

Author, year	Method. quality	Population & Setting	Aims
Ahlberg, 2004 (48)	Moderate	N=110 women and men from community practicing FGM/C + health workers (Sweden)	To gain insight into how immigrants from countries in eastern Africa reason around female circumcision and their experiences as they migrate to new social, cultural and political contexts.
Allag, 2001 (49)	Low	N=14 women from community practicing FGM/C (France)	To understand the justifications and the consequences of FGM.
Berggren, 2006 (50)	High	N=21 women from community practicing FGM/C (Sweden)	To explore the encounters with the health care system in Sweden of women who have been genitally cut.
Gali, 1998 (52)	Low	N=50 women from community practicing FGM/C (USA)	To explore the relationship between the psychological and medical concerns circumcised women face and barriers to reproductive health care delivery in the Unites States.
Gilette-Frenoy, 1992 (53)	Low	N=41 women and men from community practicing FGM/C (France)	To reflect the reality of FGM as seen by those from communities where it is practiced, including reasons for it and the concept of responsibility.
Guerin, 2006 (54)	Moderate	N=64 women from community practicing FGM/C (New Zealand)	To provide a safe means by which Somali women could express their views about female genital cutting.

Johansen, 2006 (36)	High	N=70 women and men from community practicing FGM/C (Norway)	To explore the way affected women and men perceive and discuss the relationship between FGC and personal sexual experience.
Johnsdotter, 2009 (70)	Moderate	N=33 women and men from community practicing FGM/C (Sweden)	To investigate the logic of discussions on female genital cutting, to gain deeper insights into 'traditional', locally based understandings of it and changes in views due to migration to Sweden.
Johnsdotter, 2003 (56)	Moderate	N=~30 women and men from community practicing FGM/C (Sweden)	To examine the practice of female circumcision among Somalis living in Sweden and review the role of Islam in this context.
Leval, 2004 (59)	Moderate	N=26 health workers (Sweden)	To analyze how Swedish midwives discuss sexuality in circumcised African women patients.
Leye, 2007 (33)	Low	N=27 government officials (multiple countries)	To identify and compare factors inhibiting the implementation of FGM legislation in five European countries.
Lundberg, 2008 (62)	High	N=15 women from community practicing FGM/C (Sweden)	To explore Eritrean immigrant women's experiences of FGM during pregnancy, childbirth, and the postpartum period.
Morris, 1996 (64)	Low	N=Unknown. Women from community practicing FGM/C (USA)	To describe the reasons for and against female circumcision, the health implications, and the attitudes of circumcised women.
Norman, 2009 (67)	High	N=30 women from community practicing FGM/C (England)	To investigate beliefs, perceptions, and experiences about FGM/C among women affected by FGM/C.
Upvall, 2009 (68)	Moderate	N=23 women from community practicing FGM/C (USA)	To explore healthcare perspectives of Somali Bantu refugees in relation to their status as women who have been circumcised and recently resettled in the United States.
Vissandjèe, 2003 (69)	Low	N=162 women and men from community practicing FGM/C (Canada)	To explore the practices of female genital excision and infibulation as they relate to gender identity and the acculturation process in Canada.

Legend: Method.= Methodological. Unknown= Number of participants not reported.

Population

The included studies presented the views of four stakeholder groups: 1) women from communities practicing FGM/C, 2) men from communities practicing FGM/C, 3) health professionals, and 4) government officials. Eleven studies included only women from communities practicing FGM/C (19;49-52;54;62;64;65;67;68), while both men and women were included in eight studies (13;17;48;53;56;66;69;70). No study included only men. Four studies included health professionals (14;59;61;63) and one study both health professionals and various government officials (33).

With regard to exiled members of communities practicing FGM/C (Table 3), about 80% of the participants were women, while about 350 men were included. One study (48) also included some individuals working with immigrants. As these individuals were few in number and their views were not specific to factors promoting and hindering FGM/C, we treated this study as dealing with the views of members of communities practicing FGM/C. The participants were mostly from northern Africa and the horn of Africa, especially Eritrea, Ethiopia, Somalia, and Sudan. Of the 20 studies with members of communities practicing FGM/C, nine studies included only participants whose country of origin was Somalia (n= 903). Currently, however, the

female and male participants resided in various Western countries, the majority in either Scandinavia (n= 634) or Canada (n= 594), while the remaining reported residency in England, France, New Zealand, or USA. Duration of residency in the West varied – from about a year to two decades – but, across the nine studies reporting duration of residency in the West, it was about 10 years. Thirteen of the studies reported on the participants' age, which ranged from 15 to 73 years. The majority appeared to have been in their 30s and 40s at the time of the study. According to the ten studies reporting religious affiliation, most were Muslim and 10-36% said they were Christian. With respect to FGM/C status among the female participants, almost all women included in the 13 studies where this was reported had been subjected to FGM/C, and the most common type was infibulation, which had been performed around the ages 6-7 (range 0-15).

Table 3: Description of members of communities practising FGM/C participating in included studies

Author, year Study type	Demographic characteristics of study participants from communities practicing FGM/C (n= 1,709)
Ahlberg, 2004 Qual	110 individuals living in Sweden. Girls/women (n=60) and boys/men (n=35) Somali immigrants living in Sweden + school authorities & networks of professionals working with immigrants (n=15).
Allag, 2001 Qual	14 females living in France. From: Ethiopia, Guinea, Ivory Coast, Mali, Mauritania, Senegal. Lived in France mean 9 years. 71% Muslim, 29% Christian. 100% FGM/C, at mean age 7.5 (6-10).
Berggren, 2006 Qual	21 females living in Sweden. From: Eritrea, Somalia, Sudan. Median age 35 (24-73). Lived in Sweden median 7 years. 90.5% Muslim, 9.5% Christian. 100% FGM/C: 85.7% infibulation, 9.5% clitoridectomy, 4.8% 'intermediate' cutting.
Chalmers, 2000 QUAN	432 female Somalis living in Canada (greater Toronto region). 100% FGM/C, at mean age 5.7.
Elgaali, 2005 QUAN	220 females and 95 males (husbands) living in Scandinavia. From: Northern Africa. Median age of women 20.5 (16-42). 100% FGM/C: 57.3% clitoridectomy, 31.8% excision, 10.9% infibulation, at mean age 7 (1-15).
Gali, 1998 QUAN	50 females living in USA (San Francisco). From: Egypt, Eritrea, Ethiopia, Sudan. Age 21-45. First generation or recent immigrant. 62% Muslim, 36% Christian.
Gilette-Frenoy, 1992 Qual	25 females and 16 males living in France. From: Burkina Faso, Cameroon, Côte d'Ivre, Mali, Mauritania, Senegal, Zaire.
Guerin, 2006 Qual	64 female Somalis living in New Zealand. Age 27-48. 100% FGM/C type I or III.
Johansen, 2006 Qual	45 female and 25 male Somalis living in Norway (Oslo). Lived in Norway 1-7 years. Age 18-60. From all five majority (Somali) clans. Most Muslim. Most infibulated.
Johnsdotter, 2009 Qual	33 female Ethiopians and male Eritreans living in Sweden (Gothenburg, Malmö, Stockholm). Age 28-69. Most lived in West since 1980s. Most Muslim.
Johnsdotter, 2003 Qual	About 30 female and male Somalis living in Sweden (about half female).
Litorp, 2008 QUAN	40 females living in Sweden. From: Egypt, Eritrea, Ethiopia, Gambia, Kenya, Somalia. Mean age 31.8 (21-41). 80% Muslim, 20% Christian. Mean age of arriving in Sweden 21.2 (7-31). 92.5% FGM/C, done at mean age 6.1 (0-12).
Lundberg, 2008 Qual	15 female Eritreans living in Sweden. Lived in Sweden 10-22 years. Age 31-45. 87% Muslim, 13% Christian. 100% FGM/C type III.
Morison, 2004 Mixed-method	94 young female and 80 young male Somalis living in England (London). Mean age 18.4 (16-22). 83.3% Muslim. Mean years duration in UK 14. 70.2% FGM/C: 28.8% type I, 53.0% type III.
Morris, 1996	Sample size not reported. Female Somalis living in USA (San Diego, CA). 100% FGM/C type III, done

Qual	at age 5-10.
Mwangi-Powell, 1999 QUAN	15 female Somalis living in England (Manchester). Age 20-65 (48% 31-40). All but one woman FGM/C type III, done at age 7-14.
Mwangi-Powell, 2001 QUAN	42 females and 43 males living in England (Birmingham). From: Somalia (48%), Sudan, Ethiopia, Eritrea, Emirates. Age 15-66 (44% 26-35). 85% Muslim, 10% Christian. 95% FGM/C: 48% infibulation, 52% other type.
Norman, 2009 Qual	30 females living in England. From: Eritrea, Somalia, Sudan. Age 25 and older.
Upvall, 2009 Qual	23 female Somalis living in USA (Pennsylvania). Lived in the USA 11-27 months. Age 19-43 (median 33). All were married. Most were Muslim. 100% FGM/C.
Vissandjèe, 2003 Qual	96 females and 66 males living in Canada. From: 23 different African countries.

Legend: NR= Not reported; multiple= several countries were included, *=data were collected at two time points from the same cohort. From= Country of origin.

Four studies (14;59;61;63) presented the views of health professionals and one study (33) the views of both health professions and government officials, including prosecutors, lawyers, police officers, and judges (Table 4). The health professionals (n= ~544) worked in six countries in Europe, generally in the reproductive- and sexual health field. One study (33) presented views of about 15 government officials and others (not health workers) concerning factors inhibiting the implementation of FGM/C legislation in five European countries. Thus, 'government officials' is the smallest stakeholder group included in the systematic review.

Table 4: Description of health workers and government officials participating in included studies

Author, year Study type	Demographic characteristics of health workers and government officials (n= 566)
Kaplan-Marcusan, 2009 QUAN	225 health professionals (physicians, paediatricians, nurses, midwives, gynaecologists) working in Spain. Age 20-50+.
Leval, 2004 Qual	26 female midwives working in Sweden. Age 37-53.
Leye, 2008 QUAN	184 health professionals (physicians, paediatricians, nurses, midwives, gynaecologists) working in Belgium. Age 25-40+.
Leye, 2007 Qual	27 health professionals (physicians, gynaecologists, midwives, social workers), government officials (prosecutors, lawyers, police officers, judges), others (activist, gender and youth advisor, project manager) working in Belgium, France, Spain, Sweden, and UK.
Mitello, 2006 QUAN	104 male and female health workers (physicians, nurses, psychologists, obstetricians, social workers) working in Italy.

QUALITY ASSESSMENT

With respect to the quantitative studies, we reached a final decision of low study quality for six of the studies and moderate for the remaining two, based on the seven quality assessment questions of the NOKC checklist for cross-sectional studies (Appendix 3). All of the studies lacked documentation about whether the measures were reliable and valid, and most of them failed to explain clearly whether and how the participants who agreed to participate were different from those who refused to par-

ticipate. Most of the studies did not specify clearly whether the sample was representative of the population.

Concerning the qualitative studies, application of the CASP checklist showed that six of the 16 studies had low methodological quality. We arrived upon a decision of moderate study quality for six of the studies and high for another four. While the research design was appropriate to the aims of the research, a great number of the studies failed adequately to describe consideration of the relationship between the researcher and participants, ethical issues, and rigour of data analysis. We evaluated the qualitative and quantitative components of the mixed-methods study (17) separately, and these were judged as high and moderate, respectively.

FACTORS PROMOTING AND HINDERING FGM/C

Quantitative data

We extracted data related to continuance and discontinuance factors and placed these in tables, organized according to stakeholder group and study (alphabetically listed in Appendix 4).

Ranking of factors promoting and hindering FGM/C

The first step in our integrative evidence analysis was examining the data presented in the quantitative studies (see Appendix 4) and ranking the factors perceived as promoting and hindering FGM/C, for each stakeholder group separately. As far as possible, we copied the expressions used in the publications to avoid interpretation errors.

Women from communities where FGM/C is practiced

There were three cross-sectional studies which examined the views of women from communities where FGM/C is practiced (19;51;65). Additionally, two studies examined the views of women and men (13;17), and reported the results of these two groups separately, thus results from women are included in this section. Among these five studies, three studies (13;19;51) included a closed-ended question about what the women thought were reasons for FGM/C. Across the five studies, twelve different reasons were reported (Appendix 4, Table 4). According to frequency of reporting, the following reasons were ranked highest:

1) religion
2) tradition / culture
3) increase marriageability
4) decrease sexual desire
5) please the man
6) protect virginity.

Five studies addressed the question of factors hindering FGM/C (13;17;19;51;65). Our ranked list of factors perceived as hindering the practice of FGM/C included seven factors (Appendix 4, Table 5):

1) negative effects
2) no support in religion
3) own negative experiences
4) against the law
5) no need to do it
6) it's not natural
7) husband is against it.

Men from communities where FGM/C is practiced

We identified no studies which investigated only men's perspectives. However, three studies examined the views of both women and men from communities where FGM/C is practiced (13;17;66), and two of these reported the results of men separately (13;17). Based on these two studies, three factors perceived as promoting FGM/C were evident: a preference for circumcised wife, a wish to circumcise their own daughter, a belief that FGM/C should continue in a modified way (Appendix 4, Table 6).

Three factors perceived as hindering FGM/C were evident: a view that the practice should be stopped, do not view FGM/C as a religious requirement, do not think that uncircumcised women are promiscuous (Appendix 4, Table 7).

Women and men from communities where FGM/C is practiced

While three studies included both women and men as participants (13;17;66), only Mwangi-Powell (66) reported the views of men and women together. Based on this one study, our list of factors perceived as promoting the practice of FGM/C included four factors (Appendix 4, Table 8), with the following reasons ranked highest: 1) religion, 2) tradition/culture, 3) decrease sexual desire.

Based on one study (66), our list of factors perceived as hindering the practice of FGM/C included three factors (Appendix 4, Table 9): complications, bad sex, belief that FGM/C should be stopped.

Health workers

Three studies (14;61;63) reported the views of health workers regarding FGM/C. Our list of factors perceived by health workers to be promoting the practice of FGM/C included nine factors (Appendix 4, Table 10), with the two factors 'tradition/culture' and 'religion' ranked highest.

With respect to discontinuance factors, we identified nine (unranked) factors among health workers which could be seen as hindering the practice of FGM/C (Appendix 4, Table 11). These factors included their beliefs that FGM/C is a health problem,

FGM/C is a cultural problem that should be removed, and that there should be legal approaches to counteract and/or to change the practice.

Grouping of similar factors promoting and hindering FGM/C

The second step in our analysis was grouping, based on commonality of meaning, similar factors promoting and hindering FGM/C, for each stakeholder group. Because only one quantitative study (66) reported perspectives of women and men together and there were only 43 men in the study (out of 85 participants in total), we grouped this study with the studies reporting the perspectives of women. To synthesize quantitative data we grouped similar factors, ranking highest those factors that the greatest number of stakeholders directly expressed as promoting or hindering FGM/C. We listed last those factors the stakeholders' views indirectly revealed were factors promoting and hindering the continuance of FGM/C (Appendix 4, Tables 12-17). For example, we grouped together in one group, which we called 'religion', factors such as reason is religious requirement, reason is religion, believe FGM is important because of religion, believe FGM is important because of sunna, and would circumcise own daughter because of religion (see Appendix 4,Table 12). There were a higher number of studies, and accordingly a higher number of factors, reporting women's views, compared to other stakeholder's views. The result of the process of grouping similar factors is presented in Table 5.

Table 5: Factors promoting and hindering FGM/C

Women	Men	Health workers
Factors promoting FGM/C		
Religion Tradition Marriageability Sexual morals Health benefits Perceived male preference Aesthetics Perceived social pressure (Positive feeling about own FGM/C) (Intention to continue practice) (Think practice should continue) (Believe it is important) (Don't know the health implications)	Want circumcised wife Intention to continue practice Think practice should continue	Tradition Religion Hygiene (Willing to perform FGM/C) (Believe should not engage) (Believe should encourage) (Believe should respect practice)
Factors hindering FGM/C		
Negative health issues Negative personal experiences Illegal There's no need to do it Not religious requirement It's not natural Husband is against it (Disapprove of practice) (Don't think uncut women are promiscuous) (Positive expectations regarding not performing FGM/C on daughters)	Think practice should stop Not religious requirement Don't think uncut women are promiscuous	Negative health issues Oppose the practice Believe it is violence Believe it is violation of human rights Believe should educate/report

Legend: The factors in parentheses are those that the stakeholders indirectly expressed as promoting or hindering FGM/C.

Qualitative data

Having completed the synthesis within study type with respect to quantitative studies, the next step was the synthesis within the qualitative studies. There were 16 qualitative studies and one mixed-methods study with a qualitative component. Tables of qualitative (Level 1) findings are included in Appendix 5, organized according to stakeholder group and alphabetically by study author.

Qualitative data synthesis – thematic categories

We grouped findings into thematic categories (Level 2 findings). We did this separately for each stakeholder group, but no studies examined only men's perspectives, so, except for three findings referring to men's views specifically, men's views are incorporated with women's views. Only one qualitative study examined health worker's views (59) and only one study the perspectives of government officials (33).

Women and men from communities where FGM/C is practiced

With respect to continuance factors expressed by women and men from communities where FGM/C is practiced, we identified five main thematic categories: 1) cultural tradition, 2) decrease women's sexual desires, 3) protect virginity, 4) increase marriageability, and 5) social pressure. Other thematic categories which emerged less prominently included honour, religion, hygiene, men want women to have undergone FGM/C, become a woman, social identity, please men, and avoid shame. All categories are presented in Appendix 5 (Table 18).

The following examples from the qualitative dataset are provided to illustrate the perspectives of the respondents with respect to the main thematic categories for continuance. They demonstrate how some of the thematic categories are related and that a chain of reasoning is operating. First, the category 'cultural tradition' emerged most frequently and prominently in the included studies as a factor perceived as perpetuating FGM/C, as in Gillette-Frenoy (53): "Questioned on the reasons why the practice of circumcision is perpetuated, some informants have no other argument than to invoke the custom. 'This has always been done, my mother, my grandmother did it, so my children will be excised'" and Johnsdotter and colleagues (70): "It is our tradition. I want to respect it." Second, findings with respect to FGM/C reducing women's sexual desires were evident in almost all the studies, and aptly expressed in Johansen (36): "Generally the practice was believed to reduce women's sexuality in various ways" and Norman and colleagues (67): "The reasons to circumcise are to reduce sexual desires of women." A 35-year old female interviewee said: "You want her to get rid of her sexual desires and they think if you cut away the clitoris, you cut away the sexual emotions" (50). Findings from several studies described the chain of reasoning that FGM/C was perceived to reduce women's sexual desires, thus helping to ensure that women remained virgins, which in turn increased their marriageability. For example, "The women explained that people perform FGC to reduce a girl's sexual desire to preserve her virginity before marriage" (50), "Parents emphasized the importance of infibulations in proving virginity as an assurance of their daugh-

ter's marriageability. This was the most commonly cited reason for the continuance of the practice" (36). Virginity emerged as an important category through findings like "circumcision has become synonymous with ensuring virginity" (67) and "Excision without infibulations is intended to ensure virginity" (69). FGM/C was also viewed as ensuring marriageability. According to one study: "One of the reasons most frequently cited by the informants to justify the fact that they excise their daughters is that the girl who is not circumcised would not get married" (53). One informant in another study simply said "No excision, no husband" (49). These four thematic categories were also found as recurring factors in the quantitative studies.

The last thematic categories that were prominent – honour and social pressure – emerged from the qualitative evidence. FGM/C was closely linked with honour: "It is a question of honour" (49), "In our community the mother usually tells you that you have to protect yourself and your honour" (67). In addition, the data revealed that women and men from communities where FGM/C is practiced perceived there was social pressure to continue the practice. The researchers in one study concluded: "We make the main observation that the obligation to excise and/or infibulate girls stems from collective and social pressures" (69). A female participant in Johnsdotter and colleagues (70) said: "If you are in society, there's pressure: 'This just has to be done,' a duty to perform if you are to be in society. I mean, even if you are against it, it is hard to resist the pressure."

With respect to factors hindering the existence of FGM/C (discontinuance factors) expressed by women and men from communities where FGM/C is practiced, we identified four thematic categories: 1) negative consequences, 2) against the law, 3) migration changes conditions, and 4) no support in religion. These broader concepts, that captured similar themes from different papers, are presented in Appendix 5 (Table 19).

We provide some examples from the qualitative dataset to illustrate the perspectives of the respondents with respect to the thematic categories for discontinuance. Most often negative consequences were identified as hindering the practice to continue: "This is a harmful tradition causing many health problems" said one man (48). The law against FGM/C in their country of residence was frequently mentioned as a reason not to continue the practice: "The findings show that most Somali women ... are aware of the illegality of the procedure" (64) and it was regularly viewed in a positive light: "All female in-depth interviewees supported the legislation prohibiting female circumcision" (17). The third category, migration changes conditions, was in contrast to the other categories not a factor mentioned in the quantitative studies. According to the findings in one study: "Many informants mentioned experiences in an entirely new country as forces behind a change in their attitude toward FGC" and one woman said "When I moved to Sweden I learned that you shouldn't do this [cut]" (70). As stated above, FGM/C was perceived as a religious duty, but the findings also revealed a perception that the practice was not a religious requirement: "It

is not in the Qur'an. It is something that belonged in our culture, it is absolutely clear that it is not in the Qur'an. Many who know about this now will leave [the tradition]" (56) (Johnsdotter03). Lastly, some participants believed that FGM/C was a violation of rights.

Men from communities where FGM/C is practiced

Men's unique perspectives were stated in three studies. According to findings by Morison and colleagues (17), men perceived there was pressure to marry a (virgin) woman with FGM/C, and Johansen (57) concluded that "men's demand for a circumcised bride mainly concerned a desire for a moral wife", as they expressed doubts about the virginity and moral standards of an uncut potential wife. Relatedly, Gillette-Frenoy and colleagues (53) found that men saw FGM/C as preserving their honour in that it prevented women's sexual desires which, initially, ensured women's virginity until marriage, and later, faithfulness during marriage: "excision reduce women's sexual desires, who for example due to polygamy, would not be tempted to have adulterous relationships."

Health workers

Only one qualitative study examined health worker's views (59), thus no within-stakeholder group synthesis across qualitative studies could be conducted. Here, we present the main Level 1 findings. The perspectives of 26 female midwives in Sweden were elicited in interviews and focus groups. Findings showed that they perceived largely similar reasons for the continuance of FGM/C as women and men from communities where FGM/C is practiced, namely that it reduces sexual desires, increases marriageability, relates to social identity, and that there is social pressure to be cut. But midwives also stated "it is related to men's need for power over women." There were no findings related to discontinuance of FGM/C. The data from this study are presented in Appendix 5 (Table 20).

Government officials

Only one qualitative study presented the perspectives of government officials (plus some health workers, social services workers, law enforcement officials, activists) from five European countries (33), thus no within-stakeholder group synthesis across qualitative studies could be conducted. Nonetheless, we present Level 1 findings where we have grouped similar perspectives voiced by participants in different countries. In this study, perspectives that shed light on reasons for the continuance of the practice despite legislative measures were primarily that finding evidence of FGM/C having taken place is difficult (mentioned by respondents in four countries), that professionals lack knowledge (mentioned by respondents in three countries), and that there is a lack of cooperation and that identifying cases is difficult (mentioned by respondents in two countries). Conversely, the main factor in hindering the practice was that they perceived support from the law (mentioned by respondents in two countries). The data from this study are presented in Appendix 5 (Table 21).

Qualitative data synthesis – analytic themes

To create analytic themes, the reviewers moved between the list of thematic categories and the developing abstracted findings list. Themes were reworked until a set of analytic themes was produced that most parsimoniously and accurately captured the content and meaning of all the findings, but there is some overlap between these themes. Since there was only one qualitative study addressing the perspectives of health workers (59) and one study the perspectives of government officials (33), the themes largely reflect the viewpoints of men and women from practicing communities.

The synthesis resulted in eight analytic themes that influence the practice at multiple levels, from the intrapersonal level to the macro level: cultural tradition, sexual morality, marriage, religion, hygiene, achievement of womanhood, FGM/C being unlawful, negative consequences of FGM/C.

The first analytic theme related to cultural tradition. In almost all studies, FGM/C was mentioned as a highly meaningful and valued cultural tradition. "FGC was traditionally practiced because of culture to become normal, to be like the other girls" a participant in Berggren and colleagues (50) said. It was linked to social identity: "Most respondents agreed that submitting to these practices meant conforming to social norms that frame the recognition of women's social role in African societies. Traditional practices are considered an integral part of female identity" (69). In almost all studies the participants described enforcement of the norm through community mechanisms, explaining "There are several social pressures and everyone has a say with regards to circumcising, especially from family and friends and the society as a whole" (67). According to Gillette-Frenoy's (53) findings, the tradition persisted partly because the communities remained isolated in their host countries, and there was a perception among women – largely confirmed by men – that men wanted women to conform to the norm. This led some women to express concern for women who already had FGM/C, if the cultural model of FGM/C were to change. In fact, there was clear evidence of FGM/C as a tradition in transition. Due to exposure to Western thought models migration allowed the participants to question taken-for-granted (doxic) cultural models, including those of FGM/C, a reassessment that helped slow the continuation of the practice. "In exile the 'naturalness' of the practice of female circumcision becomes questionable" Johnsdotter (56) concluded. Effectively, some of the previous value and meaning of FGM/C was lost, as she explains: "Two strong motives for female circumcision in Somali lose their significance: the earlier fear of social criticism for deviation and the demand for circumcision of girls for marriage-ability" (56). Migration seemed to be key in removing social pressure to cut: Participants in Berggren and colleagues (50) explained that "because of migration, they got rid of most of the female peer pressure to continue all forms of FGC." The host country discourse's rejection of FGM/C instead revealed an expectation not to subject girls to FGM/C.

Related to the theme of cultural tradition, Johansen (55) writes that a "A fear of losing cultural identity and sexual morals was often expressed in the emphasis on premarital virginity and intra-marriage." The two linked analytic themes of sexual morality and marriage were crucial as facilitators of FGM/C. In almost all studies, participants reasoned that FGM/C decreased women's sexual desires, thus protecting virginity, which was in many communities seen as prerequisite for marriage: "the women explained that people perform FGC to reduce a girl's sexual desire to preserve her virginity before marriage" (50). Johansen (36) described: "Virginity, considered to be extremely important by the vast majority of my Somali informants, was not considered an inborn quality but had to be socially constructed through infibulations ... The morality of an uncut girl would be questioned; she would be feared to be 'loose' and 'oversexed'." That is, FGM/C was a physical sign of morality, which was intimately linked with own- and family honour. Chastity was important before as well as within marriage, for "ensuring that women remain faithful" (69) and keeping honour inviolate and avoiding shame. In exile a few men and women had started questioning such beliefs, saying FGM/C didn't prevent sexual desire or ensure virginity, and that women without FGM/C could get married. However, FGM/C was in most participants' worldview linked with morality in a significant way.

Another analytic theme was religion. While not mentioned as frequently or strongly as the previous reasons, religion was voiced consistently as a factor maintaining FGM/C among exiled communities. One participant said: "A girl who is not excised is considered as a bad Muslim" (49). According to Norman's (67) findings, many of the interviewees stated that community members would cite religion as a reason for FGM/C, viewing it as a religious duty. As one respondent noted: "From very early parents tell their children about FGM, as they explain to them that it is part of our religion and if they do not get circumcised they will not be good Muslims. As such they convince the younger generations to getting circumcised." Conversely, religion consistently also appeared as a factor slowing the continuation of FGM/C in that many saw it merely as a religious option, not duty. One man in Ahlberg and colleagues (48) stated: "It is groundless... there is no evidence in religion." Some perceived FGM/C in violation of religion: "The most important reason for the women involved in our study for being opposed to pharaonic circumcision is that they are convinced that pharaonic circumcision is contrary to basic Islamic principles. The crucial principle seems to be that one must not damage what God created" (58).

A fifth analytic theme was hygiene. As a recurring theme in several studies, FGM/C was seen as ensuring the hygiene of the genitals, which in their natural form were classified as unclean. Asked what they thought to be the reasons behind the practice of FGM/C, one woman from a practicing community replied: "Some say that the girl who is not circumcised has a bad odour because she is not clean down there" (67).

A last analytic theme looking specifically at the continuance factors was related to 'gendering', meaning that some perceived womanhood to be accomplished or acti-

vated through FGM/C. Going through FGM/C allowed women to actively construct their gendered selves, which they were not simply passive beneficiaries of: "Among the Somali, the natural genitals are seen as ambiguous, consisting of both male and female elements" (55); "men say that a woman who is not excised is like a boy" (53). In Vissandjée and colleagues' study (69), interviewees from practicing communities stated that FGM/C conferred womanhood and adult status, for example: "As long as she hasn't been through it [excision] she hasn't become a woman!" Having FGM/C signalled identity and being an ideal girl: "FGC has been seen as a component in shaping girls in the image of the female ideal prevalent in the countries concerned" (70).

Factors hindering the practice constituted two additional analytic themes, most prominently FGM/C as an unlawful practice. It was clear in several of the studies that most exiled members from FGM/C practicing communities were aware of Western countries' laws against the practice. While some disagreed with it – "The majority of the women reported knowing about the laws and most felt that these were unfair and harsh" (54) – most respected these laws and found these supportive in their decision to abandon FGM/C. For example, Berggren and colleagues (50) found that "Almost all women explained how they perceived the Swedish law as supporting them in their decision to protect their daughters from FGC." Government officials also perceived FGM/C related laws as an asset in their work since these provided a clear operational framework and message of the national governments' commitment to prevent FGM/C (33).

The negative consequences of FGM/C emerged as a last analytic theme, voiced as a factor hindering the practice. FGM/C was seen as a loss of natural body parts and sexual pleasure: "You know, circumcision affects your sexual life. I feel less. I feel I miss something" (55). As explained by a Somali woman in Johansen's study (55):

> "The bad thing about infibulations is that they remove something from your body, your sexual feeling. There is something missing. Sometimes I joke with my sister-in-law that we should go back home and look for 'our things', the things that they cut away from us. But of course, there is no way you can replace what has been removed."

The grief with regards to a reduction in sexual pleasure was a recurrent theme in Johnsdotter (70), also among men in this study. Men were particularly concerned about the loss of health following FGM/C, stating "I don't think that I will circumcise my girls because it's not healthy" (17). The health consequences were wide-ranging, as explained by one woman in Norman (67): "Harmful effects and complications arise from circumcision, especially the pharaonic type, which has a lot of complications – emotional, physical, and health problems. A woman suffers those complications throughout her life." Some women who themselves had suffered pain and complications following FGM/C did not want to expose their daughters to such risks: "I don't want my daughter to pass through all the pain and suffering that I

had" stated one woman in Lundberg and Gerezgiher (62). She continued: "I have no right to cut any part from her body", revealing a view voiced also by others, that FGM/C was a violation of girls' bodily integrity.

Briefly, a few other factors influencing the practice were mentioned in the qualitative studies. They did not form consistent themes, but generally signalled beliefs promoting and countering FGM/C, including: FGM/C enhances sexual pleasure (generally for men), it preserves male sexual power, and it controls women socially. There was a belief that the clitoris was dangerous ('kleitorid dangereux') by having the ability to hurt the penis, prevent intercourse, or even kill the baby at birth. Lastly, a few thought that being cut was shameful.

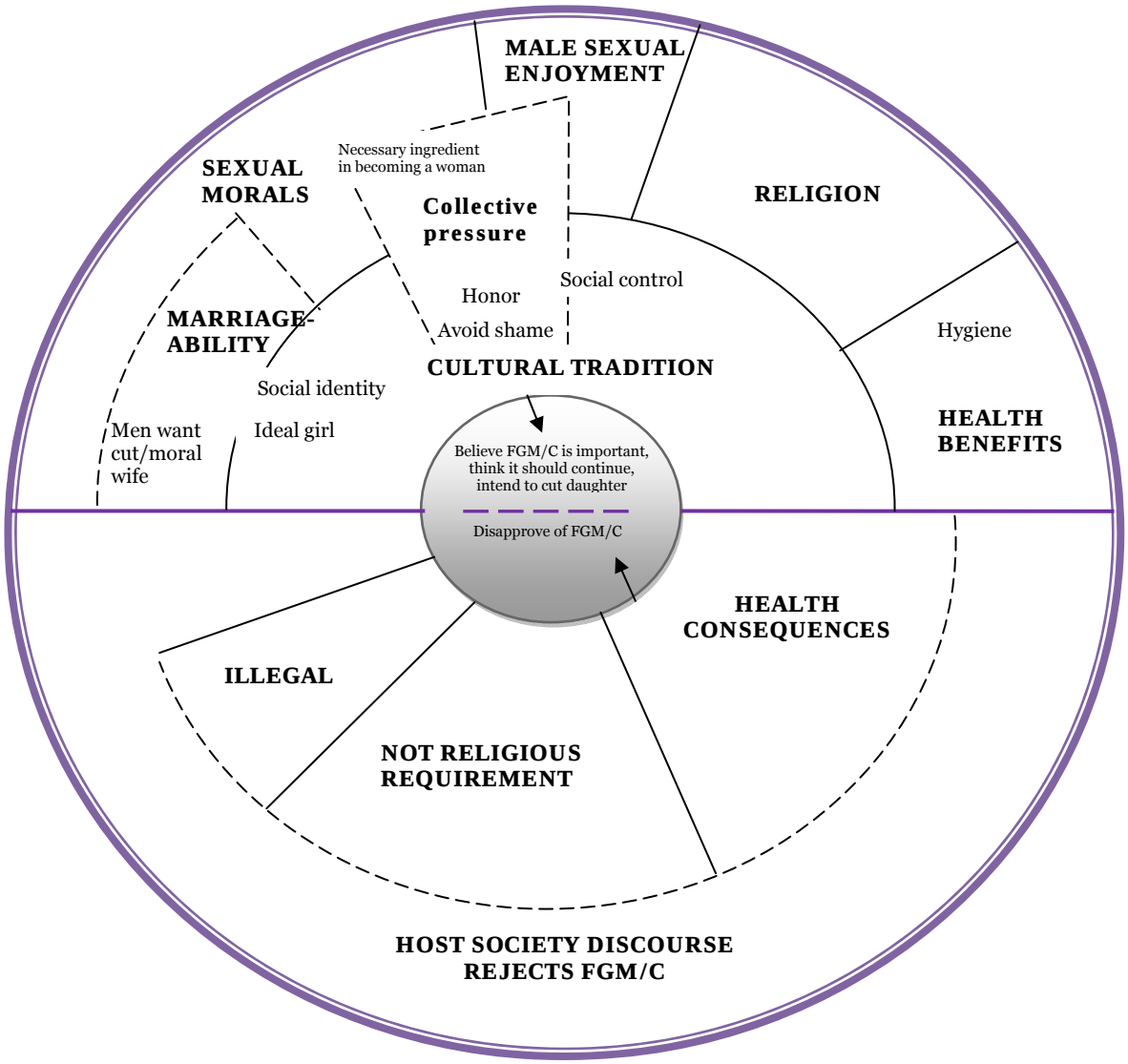
Integration of data

In our last analysis step, we integrated the quantitative and qualitative sets of data by creating a matrix in which we juxtaposed the list of quantitative factors and thematic categories. We found no noteworthy divergences between the two data sets. Further, while overall we found that there were few differences across stakeholder groups, similarities and differences across stakeholder groups could not be thoroughly explored. The reasons for this were that there were few studies reporting the views of health workers (4 studies) and government officials (1 study) and that the specific study questions asked did not allow extensive synthesis across stakeholder groups. For example, one study (33) investigated barriers to effective implementation of FGM/C legislation among mostly government officials and another (63) knowledge of FGM/C among health workers.

Thus, as far as synthesis across quantitative and qualitative sets of data we were largely able to integrate those of 20 studies including men and women from communities practicing FGM/C. There were six key factors perceived as promoting and four key factors perceived as hindering the practice of FGM/C. We created a conceptual model which summarized the findings from the last synthesis, factors promoting and hindering FGM/C across stakeholder groups and data sets, integrating analytic themes (Figure 4).

The conceptual model shows the most dominant factors, those with more and credible data through convergence and corroboration (marked through capitalization), perceived as promoting and hindering the continuation of FGM/C as expressed largely by women and men from practicing communities presently residing in a Western country. The centre represents any member of a practicing community, exposed to a myriad of influences regarding FGM/C. Attitudes toward the practice are shaped accordingly, and the findings in this systematic review show that many members believe FGM/C is important, that it should continue – possibly modified – and that they intend to subject their daughter to FGM/C.

Figure 4: Conceptual model of factors promoting and hindering FGM/C



Legend: Key factors promoting FGM/C are presented in the upper half and key factors hindering FGM/C are placed in the lower half of the model. Capitalized words are key factors. More dominant factors occupy larger areas and are more proximal to the centre, which represents members of practicing communities. Dotted, porous lines signal that factors are related.

Key factors promoting FGM/C are presented in the upper half of the model with the most dominant factor, cultural tradition, most proximal to the centre because there were more data for this factor than the other five key factors situated more distally. Juxtaposition of findings identified cultural tradition as the most influential determinant promoting FGM/C among men and women from practicing communities. When asked why FGM/C is performed, in almost all studies, the participants considered it a meaningful cultural tradition, which functioned as a form of social control as well as a form of identity for women and as a feature of the ideal girl. It was deeply rooted in their social systems and the compulsory nature of the practice was reflected in the community mechanisms enforcing it. Extensive collective enforcement of the tradition was strongly linked with honour and avoidance of shame, not just for the girl but also the mother and sometimes the extended family. A few studies described that FGM/C was necessary to confer womanhood, that "to make a girl

a proper woman, her genitals have to be molded or carved to fit cultural standards" (55).

There was strong convergence between quantitative and qualitative findings concerning also the second key factor, sexual morals, which reflected the common view among women and men from practicing communities that FGM/C is a cornerstone of moral virtue. FGM/C, especially infibulation, was believed to reduce sexual desire, which was seen as easily aroused and difficult to control thus likely to lead the uncut woman to sexual promiscuity. Infibulation was also seen to prevent sexual activity. Together with FGM/C, virginity until marriage and chastity within marriage was seen to function as proof of morality, granting the woman social respect. Related, the factor marriageability was frequently found in both the quantitative and qualitative data sets and converged to a significant extent with sexual morals (thus a porous line between these factors in the model) in that premarital virginity served as a guarantee of moral standards. FGM/C in childhood or young adulthood was considered a prerequisite for good marriage later in life. Results from quantitative studies showed that men strongly favoured a future wife to have FGM/C, and findings from qualitative studies indicated that the preference concerned a desire for a moral wife.

As a fourth important factor influencing the continuation of FGM/C, the practice was commonly expressed as a duty according to the religion of Islam. Religion was the most frequently mentioned reason for FGM/C in the quantitative studies and an important finding in four of the qualitative studies. Men and women from countries where FGM/C is traditionally performed believed that FGM/C is required as part of Islamic religion. Individuals who did not conform to the practice were considered to be acting against their religion and the Qur'an.

Two additional, less influential factors reported in the included studies were health benefits and male sexual enjoyment. Health benefits referred to cleanliness and hygiene. Male sexual enjoyment was a less prevalent factor, which in contrast to the previous five factors was only put forth by women, and refuted by men from practising communities. The perception that men preferred cut women for sexual enjoyment was mentioned in some quantitative as well as qualitative studies, promoting the view among women that men favoured women who had been subjected to FGM/C, specifically infibulation, because they gained greater sexual pleasure from a tight vagina. Again, this was a perception male study participants refuted.

The bottom half of the circle shows the four key factors perceived as hindering the practice of FGM/C: its health consequences, that it is not a religious requirement, that it is illegal, and that host society discourses reject FGM/C. This part of the circle in some ways presents a negated reflection of the top half in that three factors promoting FGM/C are similarly found to hinder FGM/C, thus illustrating that FGM/C among exiled communities is a tradition in transition. It shows that some factors coexisted on two levels, simultaneously promoting and hindering FGM/C. Assess-

ment of the present evidence showed that one factor perceived as hindering FGM/C was mentioned more frequently in the data sets, represented by a bigger area than the other factors in the model. Health issues was the most frequently mentioned factor in the quantitative studies and negative consequences the most dominant theme in the qualitative studies. The male and female participants were conscious of the consequences following FGM/C, both mentioning their own pain and women's reduced sexual responsiveness in particular, and that they wished to avoid similar problems for their daughters. Also health workers expressed strong concern over the detrimental health issues following FGM/C.

There was also strong convergence between quantitative and qualitative findings concerning the second and third factors hindering FGM/C; that it was illegal and that it was not a religious requirement. They were about equally prominent in the data sets, represented in the model by equal, adjoining areas. First, most members of practicing communities knew the illegal status of FGM/C in their Western host countries. The law was not just a deterrent but for many also a support in their decision to abandon FGM/C. Similarly, the clear operational framework that FGM/C related laws presented was seen as advantageous by government officials in their work against the practice. Second, many members from practicing communities stated that FGM/C was not an Islamic duty and put this forth as an important reason why they would not continue the practice. The last key factor hindering FGM/C, which also influenced the first three factors (conveyed by a porous line in the model) is more distally placed in the conceptual model as less data were found on it. Host society discourse's rejection of FGM/C was found both among exiled members and government officials as a factor hindering the practice. Migration presented exiled men and women exposure to other cultural models, models which opposed FGM/C, thereby allowing sharper scrutiny of the practice. Similarly, government officials believed the visibility of FGM/C, specifically the public discourse's opposition to FGM/C, was as asset that hindered the continuation of FGM/C.

Finally, concerning the views of health workers presented in three quantitative studies and one qualitative study, we mention that these corresponded with what women and men from practicing communities stated as factors perpetuating the practice.

Discussion

This systematic review aimed to summarize empirical studies examining the factors promoting and hindering FGM/C, as expressed by stakeholders residing in Western countries. We included 20 studies which delineated the perspectives of exiled women and men from communities practicing FGM/C, four studies concerned health professionals, and one study concerned government officials. The methodological study quality was variable, with 12 studies judged as low quality while five studies, all qualitative, had high quality. The rest were judged as having moderate methodological quality. Through an integrative evidence synthesis including quantitative and qualitative data we identified six key factors promoting and four key factors hindering the practice of FGM/C. Key factors promoting the practice, as perceived and expressed by primarily exiled members of communities practicing FGM/C, included cultural tradition, the interconnected factors sexual morals and marriageability, religion, health benefits, and male sexual enjoyment. Factors hindering the practice included health consequences, that it is not a religious requirement, that it is illegal, and that the host society discourse rejects FGM/C.

DISCUSSION OF MAIN FINDINGS

Data from this systematic review show that FGM/C has become deeply rooted culturally and strongly entrenched in practicing communities' social system. In the included studies, exiled members of practicing communities consistently argued that FGM/C was simply a cultural traditional and so must continue. Arthur Kleinman (71) has described culture as an integrated pattern of human knowledge, beliefs, and behaviours as well as a set of shared attitudes, values, and practices that characterize a group. From this description it follows that, as Gali (52) explains, the practice is embedded in many cultural systems through multiple ties to historical tradition, tribal affiliation, social status, marriageability, and religion. Some of these ties were perceptible in the present systematic review and we will discuss these below. A related way of understanding its continuance at the meso level through culture is by noting how it is culture congruent: According to Leininger (72) the actions and decision for FGM/C are highly meaningful and preserve the valued lifeways of people in the community, whether in the home community or a Western host community. Or, as related to for example the Somalis, among whom the practice is near universal (11), the practice occupies an important place in the psyche of the society (73). Our

results are also largely congruent with the WHO's "mental map" of why the practice continues. The organization found that members of practicing communities held culturally entrenched beliefs about FGM/C, which formed a "mental map", and largely included psycho-sexual and social reasons, religion, society, and hygiene and aesthetics (74). It seems the reasons for FGM/C as viewed by individuals living in home communities are largely the same as those expressed by exiled members. Based on the results of the current systematic review, we propose that factors promoting FGM/C form a belief set, in which its value as a cultural tradition takes precedence. It is performed out of cultural conformity and, over time, the practice has developed and maintained social significance, signalling people's sense of identity and respectability as an ideal member of the community.

Today, even in the context of life in exile, FGM/C continues to be valued and has strong social and cultural support. In fact, our results assessing perceived reasons as expressed in the 1990s and 2000s show that pressure is enforced by their own communities. Accepting its place as a social organizing principle in practicing communities, the socially constructed normalizing mechanisms perceived by exiled members are not wholly unexpected. On the one hand, girls who undergo FGM/C, and their family, are provided with rewards in the form of admiration, respectability, and honour (69). Gillette-Frenoy (53) writes that pressure to submit to the practice themselves or subject their daughters to it came from extended family members living in the West and those still residing in their countries of origin. On the other hand, findings from our systematic review showed that additional social mechanisms included teasing and making fun of the uncut girls, insulting the uncut girl's mother, denying uncut women social acceptance and adult status, and most significantly, rejecting uncut women as marriage partners (e.g. (17;48;50;52;53;69)). Linguistically, the enforcement mechanisms are evident for example among the kikuyu people where an uncut woman is referred to as a *kirigu*, meaning a thing or object of little value (48). These findings show the role of FGM/C as a tool in social control. In many cases, it seemed that the woman who had not undergone FGM/C was not accepted as woman, eligible for the adult status of wife and mother. The process of stigmatisation seems to have pressured women to succumb to the practice. Refusing FGM/C would not only introduce the psychological problem of being different, but also almost eliminate any chance of marriage and economic survival in their community, since FGM/C confers status and material opportunity. In most societies where FGM/C is practiced, it is considered a precondition for marriage (58;75) and therefore becomes a strategy. It is important to note that for most women in these societies being a wife and mother is the only 'career' available in their home country, as very few have the opportunity to seek education, employment or a life economically independent of a husband. Initially, women are economically dependent on their fathers and, once married, on their husbands (58;73;76). Marriage, a role the woman is eligible to fulfil through her FGM/C, is the obvious route to socio-economic security and a safe old age (58;73).

Continuing from above, our results showed that the promoting factor of marriageability was significantly linked with the ideology of sexual morals. We found that many exiled members of practicing communities considered premarital virginity as a guarantee of moral standards, the fundamental assurance of marriageability. In the included studies and in other reports (e.g. (77-79)), a belief that a woman's sexuality is irresponsible and wanton and therefore must be controlled through FGM/C was expressed. It is in this respect a means to control the sexuality of women analogous to the iron chastity belts allegedly used in medieval Europe. From a physiological perspective, implications of FGM/C on sexual desire and satisfaction have been confirmed (2), but the procedure does not ensure virginity, including among infibulated women— deinfibulation and reinfibulation can be and are performed (e.g. (18;20)). Albeit not unquestioned (see e.g. (36)), the perception remains in the exile environment that through FGM/C, especially infibulations, girls bear witness of unquestionable moral status and virginity (36;58). As with marriage, it must be recognized that the concept of virginity is of utmost importance in many practicing communities in that a family's and indeed the whole wider group's honour depends on girls' chastity (36). Kassamali (80) writes that in patrilineal societies in which women have limited influence, family honour is customarily closely associated with women's sexual behaviour. As an example, in Sudanese society "the greatest measure of a family's honor is the sexual purity of its women. Any transgression on the part of the woman disgraces the whole family" writes Lightfoot-Klein (76). Also among the exiled men in our included studies, collectively, FGM/C was primarily considered as preserving the sexual morality of their (future) wives and thereby their honour. It seems the use of FGM/C has much to do with the social value system that honours the preservation of female virginity.

When examining the views of exiled people who perform FGM/C, we learned that the argument of religion coexisted on two levels, simultaneously promoting and hindering FGM/C. This reflects the fact that a 'true' Islamic position on FGM/C is impossible to state, given those involved argue from their own interpretation of the written sources. There are four Islamic law schools, of which three regard FGM/C as recommended and one, the Shafi'i law school, regards FGM/C as compulsory, but each manifests differently in various countries according to socio-cultural practices (81). For example, FGM/C is virtually non-existent in several countries which adhere to the Shafi'i law school (e.g. Palestine, Lebanon, Syria) but almost universal in others (e.g. Somalia). It is not practiced in Morocco or Algeria but widespread in Sudan despite the fact that these countries belong to the same school of law (81). Lightfoot-Klein (76) found that FGM/C is not practiced in an overwhelming majority of Muslim societies. Further, the genesis of FGM/C cannot be attributed to Islam as the practice was evident in pre-Islamic Arabia, the Middle East, and Africa (75;82;83). What is important is to draw attention to the fact that Islamic scholars interpret written sources differently. Additionally, while researchers believe that today's position of the Islamic scholars urges Muslims practicing FGM/C to adopt the most moderate form of FGM/C, many Muslims nevertheless understand clitoridec-

tomy and infibulation to be religious duties (80;82;83). Because many women, and men, who consider whether to perform FGM/C on their daughter are illiterate or religious texts are out of reach for them or they cannot interpret Islamic sources, they listen to Imams, who often promote the practice (52). Grassivaro and Viviani (75) write that FGM/C to lay people is seen as an authentic way to be religious, a sign of religious devotion. Further, linked to the discussion above, while some salafi Islamists consider FGM/C as a means to heighten female sexual desire, others regard it as a tool to reduce sexual desire (81). Bullough (84), a specialist in historical attitudes to sexuality in different religions, states that Islam is essentially a sex positive religion. He writes that the Prophet considered sexual intercourse as one of life's true sources of rejoicements. As an Islamic principle, women, like men, have an inalienable right to sexual gratification within marriage and sex not for procreation (82;84;85). Others similarly state that in Islam, a man's impotence and sex too seldom are valid reasons of divorce for women (80). FGM/C partly derives from religious reasons at the macro level and although it is not fully clear how, religious faith intersects with culture and sexuality in important ways.

As with religion, we found that another consideration on FGM/C coexisted on two levels: among exiled women and men from practicing communities FGM/C was seen as conferring health benefits while simultaneous viewed as having adverse health implications. Belief in purported benefits of FGM/C in general and cleanliness and hygiene in particular was a less influential factor reported in the included studies, but seemed to reflect that respondents found cut female genitals somehow cleaner. Conversely, among the hindering factors health issues was the most frequently mentioned factor. Male and female participants alike were concerned about the intrapersonal level consequences following FGM/C, mentioning own pain and women's reduced sexual responsiveness in particular. As described in the introduction, the literature is not entirely conclusive with respect to health complications from FGM/C, but a recent meta-analysis confirmed that, statistically, a woman who has been subjected to FGM/C is more likely to experience increased pain and reduction in sexual satisfaction and desire than a woman whose genital tissues have not been cut (2). Concerning men, one of their worries was the women's suffering during intercourse. As one man in Johansen's study (36) said "How can I enjoy sex when it causes pain to my wife?" In fact, men's interest in FGM/C centred on FGM/C's role in preserving morality and honour, not providing sexual enjoyment, contrary to what some female respondents (e.g. in (58)) and researchers had suggested. This idea at the inter-personal level that men become aroused and are sexually excited by a tight vagina is mentioned by for example van der Kwaak (86). In the studies by Johansen (36) and Johnsdotter (58), male respondents strongly denied that men prefer infibulated women for sexual reasons. One man stated "The men don't demand such things. I don't know any man who expects women to be [vaginally] tight. That is about women's ideas. I know there are women who believe this, but as far as I know, men don't think about small openings." Another man said " There is hardly anywhere to get in, constantly he has to struggle to make the opening bigger. To talk

about pleasure... it's not even close to pleasure. It is torture. It is nothing but a sheer hell" (58). According to Kassamali (80), results from a study in Sudan showed that among 300 men who had two wives each, one infibulated and the other clitoridectomized or non-cut, all preferred the clitoridectomized or non-cut wife because they could share sexual gratification with them. That the procedure, especially infibulation, provides greater pleasure for the man is apparently mistaken.

As presented in the results section, both exiled members and government officials considered the anti-FGM/C laws in Western countries and host society discourse's rejection of the practice as important factors hindering its continuation. The first specific law prohibiting FGM/C in a Western country appeared in 1982 (34). Almost thirty years later, not just Sweden but most Western countries have instituted legislation as their main intervention tool (32;33), without neither their implementation nor effectiveness having been extensively studied (8;35). Further, it is possible that the existence of a law in the host country may in itself have influenced the diaspora community members' responses to questions about whether they would continue the practice. Participants may have adjusted their responses to the social non-acceptability of FGM/C. Nonetheless, results from this systematic review suggest positive implications from FGM/C related legislation. Migrating to new social, political, and cultural contexts with specific laws seems to have led some to question the normalized practice of FGM/C. It is possible that legislation has worked according to its three main purposes, as stated by UNICEF (87): making explicit a country's disapproval of FGM/C, sending a clear message of support to those who abandon the practice, and acting as a deterrent to FGM/C. Criminal law and actual court cases showing the implementation and consequences of the law coupled with public disapproval of FGM/C appear to be perceived as a deterrent, as well as a support, to the parents and communities concerned, possibly due to fear and embarrassment caused to possibly endure criminal- and/or social sanctions.

In sum, our findings show that like other socially entrenched practices, FGM/C derives from a complex belief set, in which reasons are at once ideological, material, and spiritual. As suggested in the discussion above, important factors exist at multiple levels: intrapersonal (e.g. health consequences), interpersonal (e.g. male sexual enjoyment), meso (e.g. cultural tradition), and macro level (e.g. religion, legislation). Despite our grouped presentation of factors, it is crucial to avoid isolating one reason for the practice and explaining it separately. Rather, it is important to acknowledge the connections among the aspects influencing the practice. For example, with respect to our model (Figure 4), the discontinuance factors in the lower part of the model present a negated reflection of the top half, showing a migrant perspective of living in two worlds, where the multiple contexts and discourses surrounding FGM/C are negotiated. It also illustrates that FGM/C among exiled communities is a tradition in transition with, in time, a likely transfer of relative weight to discontinuing the practice. In effect, the results suggest that there is a cultural accommodation taking place indicating that in the long run FGM/C is unlikely to persist in Western

countries. In principle then, we agree with Mackie (88) who suggests that FGM/C as the 'natural' way has become a belief trap. He explains that FGM/C is a self-enforcing belief, in which the cost of testing it has become so high that it traps people. Outside the realm of doxa, however, we believe people are in a state of transition, which stimulates and enables them to reflect on values of home and host communities. Johansen (36) writes that her Somali interviewees in Norway reported on the opportunities research participation gave them for negotiating change, for moving towards ending a practice they felt was difficult and painful.

Finally, we end this section with a few specifics regarding implications. Two publications recently confirmed that controlled intervention projects to decrease the prevalence of FGM/C have yet to take place outside of the African continent (1;31), although legislation and prevention activities exist in many Western countries. It appears that laws and actual court cases showing the effects of the law can be used as a deterrent within the communities concerned. It therefore seems essential to continuously and consistently inform all citizens about the fact that FGM/C is prohibited by law and a human rights violation. Laws in themselves are not enough, and results from this systematic review suggest that obstructive elements for their implementation may exist that should be removed. For example, respondents reported that collaboration among enforcement agencies and the gathering of evidence were difficult. Legislation can work in a complementary fashion with prevention strategies such as awareness- and educational intervention approaches by creating enabling environments for change. We also agree with UNICEF (87) that comprehensive social support mechanisms and awareness raising campaigns may be advantageous. Strategies of this kind may foster greater public discussion and reflection, such that previously non-discussed costs of FGM/C may emerge as people share their experiences and team with others similarly committed to prevent FGM/C. Just as members of 'home' communities exercise influence on exiled members (89), community members in exile exert substantial influence on the financial, political, and cultural spheres in their home countries, thus contributing to social changes (90). Moreover, it is possible that immigrants who return to their home countries may gradually have considerable effect on the maintenance of FGM/C in those countries. Future interventions should target stakeholders at the intrapersonal through to the macro levels. Our results also suggest there is a need to continue to educate and train concerned professionals, such as health workers, police, and judicial authorities.

What is crucial is that information, messages, and activities are tailored to their audiences. Specifically, our results show that programs can build upon legislation and society discourse's rejection of FGM/C, as well as existing beliefs about detrimental sexual consequences from FGM/C and that the practice is not a religious obligation. The findings indicate advantages in establishing an alliance with religious leaders, who often function as norm authorities. To achieve success in preventing FGM/C health promotion professionals can also aim to modify or remove continuance fac-

tors identified in this systematic review. We believe it would be useful to correct women's misperceptions regarding male sexual pleasure and cleanliness of genitals, and to inform community members of the greater likelihood of sexual problems with FGM/C. Regarding the other factors, we see that parents wanting their daughters to be successful in marriage and material opportunity chose the strategy of FGM/C. When migration removes pressure, and other options for social and economic survival other than FGM/C seem possible (as they in most cases do in their host countries), parents and other community members will consider refraining from FGM/C. As one parent in Upvalls and colleagues' study (68) stated: "If my daughter finishes school, learns how to drive a car, and gets a job, she doesn't need a man whether she is circumcised or not." This speaks to the importance of educational opportunities and economic independence for women immigrants in Western societies.

QUALITY OF THE EVIDENCE

We rated the study quality of 12 of the 24 mono-methods studies as low, eight as moderate, and the remaining four studies as having high study quality. We evaluated the qualitative and quantitative components of the mixed-methods study separately, and these were judged as high and moderate, respectively.

Based on the seven quality assessment questions of the NOKC checklist for cross-sectional studies, none of the quantitative studies were judged as having high study quality. We arrived upon a final decision of low study quality for six of the studies and moderate for the remaining two. With exception of two studies, it was unclear in all whether the sample was representative of the population. This is linked with response rate, which was unclear or inadequate in most quantitative studies. High research response rates help ensure that results are representative of the target population and produce accurate, useful results. Future studies should take heed to ensure representativeness as much as possible by recruiting large samples through a variety of recruitment strategies. This can be achieved through strategies such as providing information about the purpose of the survey, how the results will be used, and the terms of confidentiality; giving clear instructions on how to complete and submit it; offering incentives. It is unknown the extent to which the included quantitative studies applied these kinds of approaches.

With respect to the qualitative studies, application of the CASP checklist showed that six of the studies had low methodological quality. We arrived upon a decision of moderate study quality for six of the studies and high for another four. It was a limitation that several studies failed adequately to describe the recruitment strategy, ethical issues, and consideration of the relationship between the researcher and participants. In this respect, in most cases, neither researchers' positionality nor theoretical framework were included. In general, we would encourage greater reflexivity, that is, that qualitative studies on this subject communicate sensitivity to the ways in which the researcher and the research process have shaped the collected data, in-

cluding the role of prior assumptions and experiences. Most importantly perhaps, only two of the included qualitative studies adequately described the data analysis approach. It is absolutely critical that authors describe how they analyzed the data. For most included qualitative studies, we were unable to tell the degree to which the analysis succeeded in incorporating all the observations. Further, quotes were often few and failed to meaningfully underscore the points or findings being presented. For secondary analysis, this is an obvious drawback.

STRENGTHS AND LIMITATIONS

A strength of the present systematic review is the comprehensive and systematic literature search as well as systematic process for identifying relevant publications. Two independent researchers at NOKC carried out the inclusion selection of publications based on pre-set inclusion criteria. A further strength is that we included a range of study designs in our systematic review. This type of integrative approach, sometimes referred to as mixed studies review, is an emerging form of literature review in the health sciences (46;91). Such reviews, by consolidating often scattered literature on a defined topic, provide insightful, detailed and highly practical understanding of complex health issues (46;91). The added value of an integrative review approach also includes the detailed context of the data and complete picture of people's views (92). We developed, and propose for wider use, a systematic method for synthesising quantitative and qualitative research examining people's perspectives. The inclusion of quantitative, qualitative, and mixed-methods studies helped offset the shortcomings of each type of evidence with the strengths of the other (93;94) and include various dimensions of phenomena. Related, our integrative evidence approach helped check the consistency of findings. Combining quantitative and qualitative opinion data gives more confidence when similarity of results is disclosed. Complementarity clarifies and illustrates results from one set of evidence with the use of another set. Conversely, discrepant data from a range of sources must be treated with caution. Moreover, the advantage of expansion provided richness and detail to the review (95).

Similar to the EPPI Centre reviews upon which we built, the benefits of synthesising diverse views studies in a systematic way included gaining a greater breath of perspectives and a deeper understanding (44) of factors influencing the continuance of the behaviour. The integrated results thus informed the reviews' conclusions and implications for research and practice that are optimally relevant for researchers, practitioners, and policy-makers trying to understand FGM/C and behaviour change, as well as groups contemplating prevention activities. As a result, the integration of both quantitative data and qualitative perspectives about FGM/C ultimately improved the relevance and utility of the systematic review.

Advantages notwithstanding, our systematic review has some limitations. First, the systematic review may be subject to publication bias because it is not always possible

to identify all studies addressing the question of the systematic review. However, in contrast to effectiveness reviews, for synthesis of views studies this is probably a minor problem as it is unlikely that one large additional study would drastically change the findings. Second, despite several attempts to obtain two potentially relevant records, we failed to obtain these in full text: One appears to be an unpublished report (96) and could not be obtained in spite of extensive library retrieval efforts and attempts to locate the author. The other publication, a report by the Black women's health and support group (97), was not available through the organization. These two studies could potentially have been included in our systematic review.

We recognize that some caution is warranted in interpreting the results of this systematic review. About half of the studies had low methodological quality and only five, all qualitative components, were judged as high quality. In particular, representativeness was unclear in most quantitative studies, which introduces questions of external validity. In contrast, the qualitative datasets were more restrained regarding credibility ('internal validity') given inadequate descriptions of data analysis approach and consideration of the relationship between the researcher and participants, as well as regarding research ethics.

Further, it is important to recognize that the identified factors are as perceived by exiled community members, health workers, and government officials living in Western countries at various points in time. Overall we found that there were few differences across stakeholder groups, but similarities and differences could not be thoroughly explored. Understandably, we do not imply that there is complete unanimity among or even within stakeholder groups – the reasons for FGM/C are not everywhere the same – what we present are recurring and dominant factors found in the recent literature.

While we aimed to explore factors related to FGM/C among immigrants in Western countries, it was not always clear whether the respondents in the included studies referred to barriers in their home community or in their current immigrant setting. Thus, some of the identified factors may be perceived as more important in their country of origin than in exile. We do, however, not consider this to be problematic since practically all factors we identified that promote the continuation of FGM/C are likely to be important in both contexts: FGM/C is embedded in cultural systems that transgress geographical boundaries, and we would therefore expect that identified factors among Western immigrants reflect home community factors. We also recognize that factors perceived as important likely change over time. Because four of the 25 studies were from the 1990s it is possible that factors identified by participants in these studies may not fully represent today's situation. Lastly, given the integrative nature of this synthesis it is possible that other review authors would have produced a different overall model and come to a different conclusion, based on the same set of studies. The methods for conducting integrative syntheses are evolving and there is no agreement in the field about which approaches are best for particular

types of data or questions (47). The synthesis method proposed here is by no means the only method on offer, but benefits from building on years of methodological development and appears promising.

Conclusions

Our systematic review found that an intricate web of cultural, social, religious, and medical pretexts for FGM/C exists. According to primarily exiled women and men from communities that practice FGM/C, its continuation is largely attributable to six factors: cultural tradition, the interconnected factors of sexual morals and marriageability, religion, health benefits, and male sexual enjoyment. Factors hindering its continuance included its health consequences, that it is not a religious requirement, that it is illegal, and that the host society discourse rejects FGM/C. These factors exist on multiple levels forming a reciprocal and dynamic relationship. The results indicate that among women and men from practicing communities now living in a Western country, there is a tendency towards abandonment of FGM/C, as opportunities for abandoning FGM/C are greater. When interpreting the findings, however, variable quality of the evidence and the limitations of this systematic review must be taken into consideration.

NEED FOR FURTHER RESEARCH

More research is needed regarding factors promoting and hindering the practice of FGM/C among exiled members of practicing communities, especially among men, and those living in non-Northern European countries. There would be advantages in research conducted within the cultural framework of the target population, possibly using participatory research. Irrespective of approach, the research must be culturally grounded, ethical, and non-exploitative. This research could be qualitative, quantitative, or include a combination of these approaches.

There is a need for research about

- the needs of the various FGM/C communities in Western locales, especially their informational needs
- avenues for effective dissemination of information, perhaps particularly on legislation and on the sexual consequences of FGM/C
- knowledge of legislation, attitudes towards it, and indications of the degree to which it is perceived as a deterrent
- the role of Islam in attitudinal change
- parental attitudes
- the influence of the acculturation process.

Limited research exists on the views and professional practices related to FGM/C among medical professionals and other health workers, and professionals in judicial- and government office. It is largely unclear the extent to which their knowledge and beliefs are optimal for ensuring such professionals' involvement as advocates in preventing the continuation of FGM/C among migrants in Western exile, and more research is needed.

Lastly, groups who seek to encourage communities to discontinue FGM/C need to explore ways to address the belief set that underpins the practice prior to instituting prevention programs. Although our results suggest factors promoting and hindering FGM/C are fairly consistent across the many migrant communities in the West, to optimally inform prevention efforts research should be done locally because the factors may vary across locations as well as time. However, we believe that the findings here form a clear starting point.

In sum, further research on the factors sustaining and hindering FGM/C should

- examine the perspectives of men living in Western exile
- be conducted within the cultural framework of the exiled communities
- explore ways to address the belief set that sustains the practice of FGM/C .

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Appendices

1. SEARCH FOR LITERATURE

Database: African Index Medicus (AIM)
Search: Sari Ormstad
Date: 05.02.2009 and 19.02.2010
Retrieval: 12
Strategy:
"CIRCUMCISION" [Descriptor] or "CIRCUMCISION, FEMALE" [Descriptor] or "INFIBULATION" [Descriptor]

Database: Anthropology Plus
Search: Hege Oswald
Date: 18.02.09
Retrieval: 200
Strategy:
((kw: female* or kw: wom#n) or kw: girl*) and ((kw: mutilation* or kw: infibulate*) or kw: cutting*) or kw: infibulate*

Database: Ovid British Nursing Index and Archive
Search: Sari Ormstad
Date: 04.02.2009 and 20.01.2010
Retrieval: 135 and 153
Strategy:
1. Circumcision/
2. ((female$ or wom#n or girl$1) adj3 (mutilation$ or infibulate$ or cutting$)).tw.
3. "fgm/c".tw.
4. ((removal$ or alteration$ or excision$) adj6 female genital$).tw.
5. pharaonic circumcision$.tw.
6. sunna.tw.
7. (clitoridectom$ or clitorectom$).tw.
8. (infibulate$ or reinfibulat$ or deinfibulat$).tw.
9. or/1-8

Database: The Cochrane Library
Search: Sari Ormstad
Date: 04.02.2009 and 21.01.2010
Retrieval: 3 and 6
Strategy:

#1 MeSH descriptor Circumcision, Female, this term only

#2 ((female* or woman or women or girl or girls) near/3 (mutilation* or circumcis* or cutting*)) or "fgm/c" or ((removal* or alteration* or excision*) near/6 (female next genital*)) or (pharaonic next circumcision*) or sunna or clitoridectom* or clitorectom* or infibulat* or reinfibulat* or deinfibulat*:ti or ((female* or woman or women or girl or girls) near/3 (mutilation* or circumcis* or cutting*)) or "fgm/c" or ((removal* or alteration* or excision*) near/6 (female next genital*)) or (pharaonic next circumcision*) or sunna or clitoridectom* or clitorectom* or infibulat* or reinfibulat* or deinfibulat*:ab

#3 (#1 OR #2)

Database: Ovid EMBASE (Excerpta Medica Database)
Search: Sari Ormstad
Date: 04.02.2009 and 20.01.2010
Retrieval: 570 and 60
Strategy:
1. female circumcision/ or female genital mutilation/ or female genital cutting/ or infibulation/
2. ((female$ or wom#n or girl$1) adj3 (mutilation$ or infibulate$ or cutting$)).tw.
3. "fgm/c".tw.
4. ((removal$ or alteration$ or excision$) adj6 female genital$).tw.
5. pharaonic circumcision$.tw.
6. sunna.tw.
7. (clitoridectom$ or clitorectom$).tw.
8. (infibulate$ or reinfibulat$ or deinfibulat$).tw.
9. or/1-8

Database: EPOC Register – BiblioWeb – Advanced search
Search: Sari Ormstad
Date: 09.02.09
Retrieval: 0
Strategy:
Title or Abstract or Keyword: circumcise% or mutilation% or FGM or clitoridectom% or clitorectom% or infibulate% or deinfibulat% or de-infibulat% or reinfibulat% or re-infibulat% or female genital%

Database: Ovid MEDLINE® In-Process & Other Non-Indexed Citations and Ovid MEDLINE® 1950 to Present
Search: Sari Ormstad
Date: 04.02.2009 and 20.01.2010
Retrieval: 1100 and 79
Strategy:
1. Circumcision, Female/
2. ((female$ or wom#n or girl$1) adj3 (mutilation$ or infibulate$ or cutting$)).tw.
3. "fgm/c".tw.
4. ((removal$ or alteration$ or excision$) adj6 female genital$).tw.
5. pharaonic circumcision$.tw.
6. sunna.tw.
7. (clitoridectom$ or clitorectom$).tw.
8. (infibulate$ or reinfibulat$ or deinfibulat$).tw.
9. or/1-8

Database: CSA Illumina: PILOTS (Published International Literature on Traumatic Stress) database (1871-Current)
Search: Sari Ormstad
Date: 04.02.2009 and 25.01.2010
Retrieval: 14 and 15
Strategy:
((DE=("genital mutilation")) or (TI=(((female* or woman or women or girl or girls) within 3 (mutilation* or infibulate* or cutting*)) or fgm or ((removal* or alteration* or excision*) within 6 female genital*) or pharaonic circumcision* or sunna or clitoridectom* or clitorectom* or infibulate* or reinfibulat* or deinfibulat*)) or (AB=(((female* or woman or women or girl or girls) within 3 (mutilation* or circumcis* or cutting*)) or fgm or ((removal* or alteration* or excision*) within 6 female genital*) or pharaonic circumcision* or sunna or clitoridectom* or clitorectom* or infibulate* or reinfibulat* or deinfibulat*)))

Database : POPLINE® (POPulation information onLINE)
Search: Sari Ormstad
Date: 05.02.2009
Retrieval: 1566
Strategy:
POPLINE Advanced Search KEYWORDS:
FEMALE GENITAL CUTTING

Database: Ovid PsycINFO
Search: Sari Ormstad
Date: 04.02.2009 and 21.01.2010
Retrieval: 401 and 60

Strategy:
1. Circumcision/
2. ((female$ or wom#n or girl$1) adj3 (mutilation$ or infibulate$ or cutting$)).tw.
3. “fgm/c”.tw.
4. ((removal$ or alteration$ or excision$) adj6 female genital$).tw.
5. pharaonic circumcision$.tw.
6. sunna.tw.
7. (clitoridectom$ or clitorectom$).tw.
8. (infibulate$ or reinfibulat$ or deinfibulat$).tw.
9. or/1-8

Database: CSA Illumina: Social Services Abstracts (1979-Current)
Search: Sari Ormstad
Date: 04.02.2009 and 25.01.2010
Retrieval: 40 and 39
Strategy:
((DE=(“circumcision” or “genital mutilation”)) or (TI=(((female* or woman or women or girl or girls) within 3 (mutilation* or infibulate* or cutting*)) or fgm or ((removal* or alteration* or excision*) within 6 female genital*) or pharaonic circumcision* or sunna or clitoridectom* or clitorectom* or infibulate* or reinfibulat* or deinfibulat*)) or (AB=(((female* or woman or women or girl or girls) within 3 (mutilation* or infibulate* or cutting*)) or fgm or ((removal* or alteration* or excision*) within 6 female genital*) or pharaonic circumcision* or sunna or clitoridectom* or clitorectom* or infibulate* or reinfibulat* or deinfibulat*)))

Database: CSA Illumina: Sociological Abstracts (1952-Current)
Search: Sari Ormstad
Date: 04.02.2009 and 25.01.2010
Retrieval: 325 and 334
Strategy:
((DE=(“circumcision” or “genital mutilation”)) or (TI=(((female* or woman or women or girl or girls) within 3 (mutilation* or infibulate* or cutting*)) or fgm or ((removal* or alteration* or excision*) within 6 female genital*) or pharaonic circumcision* or sunna or clitoridectom* or clitorectom* or infibulate* or reinfibulat* or deinfibulat*)) or (AB=(((female* or woman or women or girl or girls) within 3 (mutilation* or infibulate* or cutting*)) or fgm or ((removal* or alteration* or excision*) within 6 female genital*) or pharaonic circumcision* or sunna or clitoridectom* or clitorectom* or infibulate* or reinfibulat* or deinfibulat*)))

Database: WHO Library & Information Networks for Knowledge Database (WHOLIS)
Search: Sari Ormstad
Date: 05.02.2009 and 19.02.2010

Retrieval: 65 and 67
Strategy:
words or phrase "((female$ or wom?n or girl or girls) near3 (mutilation$ or circumcis$ or cutting$))"
OR
words or phrase ""fgm/c""
OR
words or phrase "((removal$ or alteration$ or excision$) near6 (female adj genital$))"
OR
words or phrase "(pharaonic adj circumcision$)"
OR
words or phrase "sunna"
OR
words or phrase "(clitoridectom$ or clitorectom$)"
OR
words or phrase "(infibulate$ or reinfibulat$ or deinfibulat$)"

We searched databases of international organizations that are engaged in projects regarding FGM/C: the Centre for Development and Population Activities (CEDPA), Population Council, Population Reference Bureau (PRB), the United Nations Children's Fund (UNICEF), the United Nations Population Fund (UNFPA), and the World Health Organization (WHO).

2. EXCLUDED STUDIES

We excluded 83 studies read in full text. These are listed in Table 1 with reasons for exclusion. For the complete citation we refer to the reference list.

Table 1: Excluded studies and cause for exclusion of study

Study (ref id)	Cause for exclusion of study
Aden 2004 (98)	The study did not present data about factors promoting/hindering FGM/C.
Anuforo 2004 (99)	Stakeholders in western society and non-western society combined.
Assali 1992 (100)	The study did not include empirical data from a primary study.
Barnes-Dean 1985 (101)	The study did not include empirical data from a primary study.
Bashir 1997 (102)	The study did not include empirical data from a primary study.
Bergström 1994 (103)	The study did not include empirical data from a primary study.
Berlinicioni 2006 (104)	The data were not collected or analyzed in qualitative way.
Bhopal 1998 (105)	The study did not present data about factors promoting/hindering FGM/C.
Black 1995 (106)	The study did not include empirical data from a primary study.
Bonnet 1946 (107)	The study did not include empirical data from a primary study.
Brown 1989 (108)	The study did not include data by stakeholders residing in western society.

Cameron 1998 (109)	The study did not include empirical data from a primary study.
Chalmers 2002 (16)	The study did not present data about factors promoting/hindering FGM/C.
Cohen 1999 (110)	The study did not include empirical data from a primary study.
Cordesius 1997 (111)	The study did not include empirical data from a primary study.
Daley 2004 (112)	The study did not include empirical data from a primary study.
Dekkers 2005 (113)	The study did not present data about factors promoting/hindering FGM/C.
Donovan 2005 (114)	The study did not include empirical data from a primary study.
Elchalal 1999 (115)	The study did not include empirical data from a primary study.
Essén 2003 (116)	The study did not include empirical data from a primary study.
Eyega 1997 (117)	The study did not present data about factors promoting/hindering FGM/C.
Farooqui 1997 (118)	The study did not include empirical data from a primary study.
Farshi 2000 (119)	The study participants were not eligible stakeholders in FGM/C.
Gallo 1992 (120)	The study did not present data about factors promoting/hindering FGM/C.
Garnier 1991 (121)	The study did not present data about factors promoting/hindering FGM/C.
Horowitz 1997 (122)	The study did not present data about factors promoting/hindering FGM/C.
Huber 1969 (123)	The study did not include empirical data from a primary study.
Jäger 2002 (124)	The study did not present data about factors promoting/hindering FGM/C.
Johansen 2006 (125)	The study did not present data about factors promoting/hindering FGM/C.
Johansen 2002 (126)	The study did not present data about factors promoting/hindering FGM/C.
Kangoum 2004 (127)	The study did not present data about factors promoting/hindering FGM/C.
Kaplan-Marcusan 2006 (128)	The study did not include empirical data from a primary study.
Knight 1999 (129)	The study did not present data about factors promoting/hindering FGM/C.
Knott 1996 (130)	The study did not include empirical data from a primary study.
Lee 2007 (131)	The study did not include empirical data from a primary study.
Levine 1999 (20)	The study did not present data about factors promoting/hindering FGM/C.
Martin 2007 (132)	The study did not include empirical data from a primary study.
Martin-Espildora 2005 (133)	The study did not include empirical data from a primary study.
McIntyre 1996 (134)	The study did not include empirical data from a primary study.
Mekki 1979 (135)	The study did not include empirical data from a primary study.
Mitello 2006 part1 (136)	The study did not include empirical data from a primary study.
Morowitz 1988 (137)	The study did not include empirical data from a primary study.
Nau 2007 (138)	The study did not include empirical data from a primary study.
Ng 2000 (139)	The study did not include empirical data from a primary study.
Nienhuis 1993 (140)	The study did not include empirical data from a primary study.
Nkrumah 1999 (73)	The study did not include empirical data from a primary study.
Philippe 2008 (141)	The study did not include empirical data from a primary study.
Piet 1999 (142)	The study did not include empirical data from a primary study.
Pikarinen 2009 (143)	The study did not include empirical data from a primary study.
Reitmanova 2008 (144)	The study did not present data about factors promoting/hindering FGM/C.
Rendell 1999 (145)	The study did not include empirical data from a primary study.
Rendell 2008 (146)	The study did not include empirical data from a primary study.

Reyners 1989 (147)	The study did not present data about factors promoting/hindering FGM/C.
Rickford 1994 (148)	The study did not include empirical data from a primary study.
Rizvi 1999 (149)	The study did not include empirical data from a primary study.
Robison 1998 (150)	The study did not present data about factors promoting/hindering FGM/C.
Rubin 2001 (151)	The study did not present data about factors promoting/hindering FGM/C.
Scherf 2001 (152)	The study did not include empirical data from a primary study.
Schwartz 1994 (153)	The study did not include empirical data from a primary study.
Scull 1986 (154)	The study did not include empirical data from a primary study.
Seewald 1972 (155)	The study did not include empirical data from a primary study.
Shaw 1985a (156)	The study did not present data about factors promoting/hindering FGM/C.
Shaw 1985b (157)	The study did not present data about factors promoting/hindering FGM/C.
Silva-Anoma 2008 (158)	The study did not include empirical data from a primary study.
Straus 2009 (159)	The study did not present data about factors promoting/hindering FGM/C.
Sureau 2004 (160)	The study did not include empirical data from a primary study.
Sylla 1984 (161)	The study did not present data about factors promoting/hindering FGM/C.
Taba 1980 (162)	The study did not include empirical data from a primary study.
Tamaddon 2006 (163)	The study did not present data about factors promoting/hindering FGM/C.
Taylor 2003 (164)	The study did not include empirical data from a primary study.
Thierfelder 2005 (18)	The study did not present data about factors promoting/hindering FGM/C.
Thierfelder 2003 (165)	The study did not present data about factors promoting/hindering FGM/C.
Thorup 1979 (166)	The study did not include empirical data from a primary study.
Turner 2007 (167)	The study did not include empirical data from a primary study.
Vacher 2008 (168)	The study did not include empirical data from a primary study.
Vangen 2004 (169)	The study did not present data about factors promoting/hindering FGM/C.
Vasilev 1989 (170)	The study did not include empirical data from a primary study.
Vloeberghs 2010 (171)	The study did not present data about factors promoting/hindering FGM/C.
Walder 1995 (172)	The study did not include empirical data from a primary study.
Wollman 1973 (173)	The study did not include empirical data from a primary study.
Zaidi 2007 (174)	The study did not present data about factors promoting/hindering FGM/C.
McGown 2003 (175)	The study did not present data about factors promoting/hindering FGM/C.
Johnsdotter 2003 (176)	The study did not present data about factors promoting/hindering FGM/C.

3. QUALITY ASSESSMENT

Quality assessment questions for quantitative (cross-sectional) studies

All questions are answered 'yes', 'unclear/somewhat', or 'no':

1. Was the population from which the sample was drawn clearly defined?
2. Was the sample representative of the population?
3. Is it explained whether (and how) the participants who agreed to participate are different from those who refused to participate?
4. Is the response rate adequate?
5. Were standardized data collection methods used?

6. Were measures shown to reliable and valid?
7. Were the statistical methods appropriate?

Table 2: Results of quality assessment of quantitative (cross-sectional) studies

Study	1	2	3	4	5	6	7	Assessment
Chalmers 2000	Yes	Unclear	No	Unclear	Yes	No	Yes	Low
Elgaali 2005	Yes	Unclear	Unclear	Yes	Yes	No	Yes	Moderate
Kaplan-Marcusan 2009	Yes	Yes	No	Yes	Yes	No	Yes	Moderate
Leye 2008	Yes	Unclear	No	No	Yes	No	Yes	Low
Litorp 2008	Yes	Unclear	No	Yes	Yes	No	Unclear	Low
Mitello 2006	Yes	Yes	No	No	Unclear	No	Yes	Low
Morison 2004*	Yes	Unclear	Yes	Unclear	Yes	No	Yes	Moderate
Mwangi-Powell 2001	Yes	Unclear	No	No	Unclear	No	Yes	Low
Mwangi-Powell 1999	Yes	Unclear	No	No	Yes	No	Yes	Low

Legend: Number refers to assessment question. *= Mixed-methods study, qualitative and quantitative components are evaluated separately.

Description of assessment of study quality:

High quality (few limitations): All or almost all of the criteria from the checklist are met. If some of the criteria are not met, it must be unlikely that the study conclusions will change.

Moderate quality (some limitations): Some of the criteria are not met and/or the study does not adequately address the criteria. It is unlikely that the study conclusions will change.

Low quality (serious limitations): Few or no criteria are met and/or the study does not adequately address the criteria. It is likely that the study conclusions will change.

Quality assessment questions for qualitative studies (CASP checklist)

We do not have permission to reproduce the CASP checklist questions, but they may be accessed via the following link:
http://www.sph.nhs.uk/what-we-do/public-health-workforce/resources/critical-appraisals-skills-programme
The first two questions are answered 'yes' or 'no' while all other questions are answered 'yes', 'unclear/somewhat', or 'no'.

Table 3: Results of quality assessment of qualitative studies

Study	1	2	3	4	5	6	7	8	9	10	Assessment
Ahlberg 2004	Yes	Yes	Yes	Unclear	Yes	No	Unclear	No	Yes	Yes	Moderate
Allag 2001	Yes	Yes	Unclear	Unclear	Unclear	No	No	No	No	No	Low
Berggren 2006	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Yes	Yes	Yes	High
Gali 1998	Yes	Yes	Yes	Yes	Unclear	Yes	No	No	Unclear	No	Low
Gillette-Frenoy 1992	Yes	Yes	Unclear	Unclear	No	Unclear	No	No	No	No	Low
Guerin 2006	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Unclear	No	No	Moderate

Johansen 2006	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Yes	High
Johnsdotter 2009	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Moderate
Johnsdotter 2003	Yes	Yes	Yes	Unclear	Yes	Unclear	Unclear	No	Yes	Yes	Moderate
Leval 2004	Yes	Yes	Yes	Yes	Unclear	Unclear	Yes	Unclear	Yes	No	Moderate
Leye 2007	Yes	Yes	Unclear	Unclear	Unclear	No	No	Unclear	Yes	Unclear	Low
Lundberg 2008	Yes	Yes	Yes	Yes	Yes	Unclear	Unclear	Yes	Yes	Yes	High
Morison 2004*	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Yes	High
Morris 1996	Yes	Yes	Yes	Unclear	Unclear	No	No	No	Unclear	No	Low
Norman 2009	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Yes	High
Upvall 2009	Yes	Yes	Yes	Yes	Yes	No	Yes	Unclear	Unclear	Unclear	Moderate
Vissandjèe 2003	Yes	Yes	Yes	Unclear	Unclear	No	No	Unclear	Yes	Yes	Low

Legend: Number refers to assessment question. *= Mixed-methods study, qualitative and quantitative components are evaluated separately.

Description of assessment of study quality:

High quality (few limitations): All or almost all of the criteria from the checklist are met. If some of the criteria are not met, it must be unlikely that the study conclusions will change.

Moderate quality (some limitations): Some of the criteria are not met and/or the study does not adequately address the criteria. It is unlikely that the study conclusions will change.

Low quality (serious limitations): Few or no criteria are met and/or the study does not adequately address the criteria. It is likely that the study conclusions will change.

4. QUANTITATIVE DATA AND RESULTS

Quantitative study-level data

The tables in this section show data related to continuance and discontinuance factors, first as expressed by women from practicing communities presently residing in a Western country, next as expressed by women and men from practicing communities, and then as expressed by health workers. Variables are listed in the left column. The number of people (of the total) in the study, and percent of respondents, who agreed with the statement /checked the option are listed in the right hand column. The studies are listed alphabetically according to author.

Women from practicing communities

Chalmers, 2000: Low methodological quality Stakeholders: Women from community where FGM/C practiced	N=432
Variables	Result (n/N (%))
Reason for circumcision: Religious requirement	395/432 (91.4%)

Reason for circumcision: Tradition	308/432 (71.3%)
Reason for circumcision: To protect virginity	241/432 (55.8%)
Reason for circumcision: To make girls marriageable	230/432 (53.2%)
Reason for circumcision: To make girls beautiful	224/432 (51.8%)
Reason for circumcision: To decrease sexual desires	63/432 (14.6%)
Reason for circumcision: To enhance men's sexual enjoyment	57/432 (13.2%)
Would circumcise own daughter (hypothetically if had daughter)	209/432 (48.4%)
Would be criticized for raising an uncircumcised daughter	195/432 (45.1%)
Would be happy to raise an uncircumcised daughter	188/432 (43.5%)
Would be embarrassed to raise an uncircumcised daughter	146/432 (33.8%)
Would be praised for raising an uncircumcised daughter	44/432 (10.2%)
Agree with the law against FGM/C in Canada	147/432 (34.0%)
Current feeling about own circumcision: Proud	315/432 (72.9%)
Current feeling about own circumcision: 'Pure'	227/432 (52.6%)
Current feeling about own circumcision: More beautiful	130/432 (30.1%)
Current feeling about own circumcision: Faithful to their husbands	129/432 (30.0%)
Current feeling about own circumcision: Pleased for their husbands	72/432 (16.7%)
Current feeling about own circumcision: Sorry it had been done	71/432 (16.4%)
Current feeling about own circumcision: Angry	23/432 (5.3%)
Current feeling about own circumcision: Betrayed	13/432 (3.0%)

Litorp, 2008: Low methodological quality Stakeholders: Women from community where FGM/C practiced	N=40
Variables	Result (n/N (%))
Reason for performing FGM in the home country: Tradition	19/40 (47.5%)
Reason for performing FGM in the home country: Sexual control	9/40 (22.2%)
Reason for performing FGM in the home country: Hygiene	4/40 (10.0%)
Reason for performing FGM in the home country: Religion	2/40 (5.0%)
Reason for performing FGM in the home country: Good for the girl	1/40 (2.5%)
Reason for performing FGM in the home country: To reduce hormone levels	1/40 (2.5%)
Reason for performing FGM in the home country: For the man	1/40 (2.5%)
Reason for performing FGM in the home country: Because of the elderly generation	1/40 (2.5%)
Reason for performing FGM in the home country: Imported Maroccan culture	1/40 (2.5%)
Reason for performing FGM in the home country: Don't know	7/40 (17.5%)
Believe there are negative effects of FGM	35/40 (87.5%)
Reason for not performing FGM on own daughter: It's not good	9/29 (31.0%)
Reason for not performing FGM on own daughter: Complications	7/29 (24.1%)
Reason for not performing FGM on own daughter: Own negative experiences	6/29 (20.7%)
Reason for not performing FGM on own daughter: There is no need to do it	4/29 (13.8%)
Reason for not performing FGM on own daughter: It is forbidden	4/29 (13.8%)
Reason for not performing FGM on own daughter: There is no support in the religion	2/29 (6.9%)
Reason for not performing FGM on own daughter: It's not natural to be circumcised	1/29 (3.5%)
Reason for not performing FGM on own daughter: My husband is against it	1/29 (3.5%)

Mwangi-Powell, 1999: Low methodological quality Stakeholders: Women from community where FGM/C practiced	N=15
Variables	Result (n/N (%))
Think female circumcision is important	4/15 (27.0%)
Think female circumcision is not important	10/15 /67.0%)
Thinks female circumcision should be stopped	11/15 (73.0%)
Think female circumcision should not be stopped	4/15 (27.0%)

Would have own daughter circumcised	5/15 (33.0%)
Would not have own daughter circumcised	10/15 (67.0%)

Women and men from practicing communities

Elgaali, 2005: Moderate methodological quality Stakeholders: Women & men from community where FGM/C practiced	N=315 (220 women, 95 men)
Variables	Result (n/N (%))
Women	
Reason for circumcision: Religious requirement	127/220 (58%)
Reason for circumcision: Cultural tradition	52/220 (27%)
Reason for circumcision: Increased chance of marriage	21/220 (21%)
Reason for circumcision: Health promotion	8/220 (4%)
Reason for circumcision: Prevention of promiscuity	2/220 (1%)
Reason for circumcision: No motivation	10/220 (5%)
Women	
Opinion on circumcision: Should be continued, but modified	80/220 (36%)
Opinion on circumcision: Should be stopped	78/220 (35%)
Opinion on circumcision: Should be continued as present	43/220 (20%)
Opinion on circumcision: No opinion	19/220 (9%)
Men	
Opinion on circumcision: Should be stopped	65/95 (69%)
Opinion on circumcision: Should be continued, but modified	25/95 (26%)
Opinion on circumcision: No opinion	5/95 (5%)
Opinion on circumcision: Should be continued as present	0/95 (0%)

Morison, 2004: Moderate methodological quality Stakeholders: Women & men from community where FGM/C practiced	N=174 (94 women, 80 men)
Variables	Result (n/N (%))
Women	
Disagree with "FGC is a religious requirement"	66/94 (70.2%)
Disagree with "Uncircumcised women are promiscuous"	64/94 (68.0%)
Wish to circumcise own daughter	73/82 (89.0%)
Men	
Disagree with "FGC is a religious requirement"	35/80 (43.8%)
Disagree with "Uncircumcised women are promiscuous"	34/80 (42.5%)
Wish to circumcise own daughter	39/57 (68.4%)
Want a circumcised wife	61/72 (84.7%)

Mwangi-Powell, 2001: Low methodological quality Stakeholders: Women & men from community where FGM/C practiced	N=85
Variables	Result (n/N (%))
Believe FGM is important	25/85 (29%)
Reason why FGM is important: Religion	7/25 (30%)
Reason why FGM is important: Tradition	5/25 (22%)
Reason why FGM is important: Sunna	5/25 (20%)
Reason why FGM is important: Sex	4/25 (15%)
Reasons why would circumcise own daughter: Religion	20/29 (68%)
Reasons why would circumcise own daughter: Culture	12/29 (43%)
Reasons why would circumcise own daughter: Reduce sexual desire	4/29 (14%)
Believe would not have been married if were not circumcised (women)	3/42 (7%)
Would not marry an uncircumcised woman (men)	4/43 (8%)

Not aware of any health implications of FGM	35/85 (41.2%)
Believe FGM is not important	60/85 (71%)
Reason why FGM is not important: Pain	29/60 (48%)
Reason why FGM is not important: Delivery	7/60 (12%)
Reason why FGM is not important: Death	6/60 (11%)
Reason why FGM is not important: Bad sex	6/60 (11%)
Reason why FGM is not important: Not good	5/60 (8%)
Believe FGM should be stopped	52/85 (61%)

Health workers

Kaplan-Marcusan, 2009: Low methodological quality Stakeholders: Health workers (Spain)	N=225
Variables	Result (n/N (%))
Believe reason for circumcision is: Tradition	114/225 (52%)
Believe reason for circumcision is: Religious and tradition	61/225 (28%)
Believe reason for circumcision is: Religious	32/225 (15%)
Believe reason for circumcision is: Hygiene and tradition	7/225 (3%)
Believe reason for circumcision is: All	3/225 (1%)
Believe reason for circumcision is: Religious and hygiene	1/225 (0%)
Attitude of healthcare professionals to FGM should be: Educate and report	80/184 (44%)
Attitude of healthcare professionals to FGM should be: Educate	57/184 (31%)
Attitude of healthcare professionals to FGM should be: Report to authorities	44/184 (24%)
Attitude of healthcare professionals to FGM should be: Ignore	0/184 (0%)

Leye, 2008: Low methodological quality Stakeholders: Health workers (Belgium)	N=334
Variables	Result (n/N (%))
Believe FGM is violence against women	286/334 (85.6%)
Believe FGM is violation of human rights	203/334 (60.8%)
Would have expressed unwillingness to carry out procedure	157/316 (49.7%)
Would have explained to patient that could not perform re-infibulation due to its illegality	97/316 (30.7%)
Would have performed re-infibulation	60/316 (19.0%)

Mitello, 2006: Low methodological quality Stakeholders: Health workers (Italy)	N=104
Variables	Result (n/N (%))
Believe FGM is a health problem because it is harmful for women	40/104 (39%)
Believe FGM is physically and mentally harmful for women	33/104 (32%)
Believe FGM is associated with cultural traditions that must be removed	23/104 (22%)
Believe FGM is associated with cultural traditions that must be respected	2/104 (2%)
Believe legal intervention regarding FGM should be to counteract it	54/104 (52%)
Believe legal intervention regarding FGM should be to change it	37/104 (36%)
Believe legal intervention regarding FGM should be to not raise the issue/address it	9/104 (9%)
Believe legal intervention regarding FGM should be to encourage it	3/104 (3%)

List of factors

The following tables contain the ranked factors promoting and hindering FGM/C and our reasons for the ranking. Percentages (rounded to its nearest tenth) refer to

the proportion of people in the study who agreed with the statement. Some factors are unranked because they were indirect expressions of factors, and/or were equally infrequently mentioned in the studies. Unranked factors are listed without numbers at the bottom of each table. We present the results in the order women from practicing communities, men from practicing communities, women and men from practicing communities, health workers.

Women from practicing communities

Table 4: Ranked list of factors promoting FGM/C (women)

Factor	Basis for rank
1 Religion	Reason is religious requirement (91%, Chalmers); Reason is religious requirement (58%, Elgaali); Reason is religion (5%, Litorp).
2 Tradition / Culture	Reason is tradition (71%, Chalmers); Reason is cultural tradition (27%, Elgaali); Reason is tradition (48%, Litorp); It is imported Maroccan culture (3%, Litorp).
3 Increase marriageability	Reason is make girls marriageable (53%, Chalmers); Reason is increased chance of marriage (21%, Elgaali); Believe would not have been married if were not circumcised (7%, Mwangi-Powell 2001).
4 Decrease sexual desires	Reason is to decrease sexual desires (15%, Chalmers); Reason is sexual control (22%, Litorp); Reason is to reduce hormone levels (3%, Litorp).
5 Please the man	Reason is to enhance men's sexual enjoyment (13%, Chalmers); Reason is for the man (3%, Litorp).
6 Protect virginity	Reason is to protect virginity (56%, Chalmers).
7 Beauty	Reason is to make girls beautiful (52%, Chalmers).
8 Hygiene	Reason is hygiene (10%, Litorp).
9 Health promotion	Reason is health promotion (4%, Elgaali).
10 Good for the girl	Reason is it's good for the girl (3%, Litorp).
11 Because of the elderly generation	Reason is because of the elderly generation (3%, Litorp).
12 Prevent promiscuity	Reason is to prevention of promiscuity (1%, Elgaali).
Feel positive about own circumcision	Feeling about own circumcision: proud (73%, Chalmers), pure (53%, Chalmers), more beautiful (30%, Chalmers), faithful (30%, Chalmers), pleased for husband (17%, Chalmers).
Believe would be criticized/ embarrassed to raise uncircumcised daughter	Believe would be criticised for raising uncircumcised daughter (45%, Chalmers); Believe would be Embarrassed to raise uncircumcised daughter (34%, Chalmers)
Believe should continue FGM	Opinion on FGM: should be continued modified (36%, Elgaali); should be continued as present (20%, Elgaali); Do not think circumcision should be stopped (27%, Mwangi-Powell 1999).
Have intention to circumcise daughter	Intends to circumcise daughter (48%, Chalmers); Wish to circumcise own daughter (89%, Morison).Would circumcise own daughter (33%, Mwangi-Powell 1999).
Think it is important	Think female circumcision is important (27%, Mwangi-Powell 1999).

Table 5: Ranked list of factors hindering FGM/C (women)

Factor	Basis for rank
1 There are negative effects / complications	Reason for not performing FGM on own daughter is there are negative effects (88%, Litorp); Reason for not performing FGM on own daughter is it's not good (31%, Litorp); Reason for not performing FGM on own daughter is there are complications (24%, Litorp).
2 No support in religion	Reason for not performing FGM on own daughter is there is no support in religion (7%, Litorp); Disagree with 'FGC is a religious requirement' (44%, Morison).
3 Own negative experiences	Reason for not performing FGM on own daughter is own negative experiences (21%, Litorp).

4 Against the law	Reason for not performing FGM on own daughter is it's forbidden (14%, Litorp).
5 No need for it	Reason for not performing FGM on own daughter is there is no need to do it (14%, Litorp).
6 It's not natural	Reason for not performing FGM on own daughter is it's not natural (4%, Litorp).
7 Husband is against it	Reason for not performing FGM on own daughter is the husband is against it (4%, Litorp).
Think it is not important	Do not think female circumcision is important (67%, Mwangi-Powell 1999).
Would not have own daughter circumcised	Would not have own daughter circumcised (67%, Mwangi-Powell 1999).
Don't think uncircumcised women are promiscuous	Disagree with 'uncircumcised women are promiscuous' (68%, Morison).
Have negative feelings about own circumcision	Feelings about own circumcision: sorry it had been done (16%, Chalmers), angry (5%, Chalmers), betrayed (3%, Chalmers).
Support the law	Agree with the law against FGM (34%, Chalmers).
Believe would be happy to raise uncircumcised daughter	Believe would be happy to raise uncircumcised daughter (43%, Chalmers).
Believe would be praised to raise uncircumcised daughter	Believe would be praised to raise uncircumcised daughter (10%, Chalmers).
Oppose FGM	Think circumcision should be stopped (35%, Elgaali); think circumcision should be stopped (73%, Mwangi-Powell 1999).

Men from practicing communities

Table 6: Factors promoting FGM/C (men)

Factor	Basis for rank
Preference for circumcised wife	Want a circumcised wife (85%, Morison); Would not marry an uncircumcised woman (8%, Mwangi-Powell 2001).
Wish to circumcise daughter	Wish to circumcise own daughter (68%, Morison).
Think it should continue	Think it should continue modified (26%, Elgaali).

Table 7: Factors hindering FGM/C (men)

Factor	Basis for rank
Think it should be stopped	Think it should be stopped (69%, Elgaali), think it should continue as present (0%, Elgaali).
Don't think FGC is a religious requirement	Disagree with 'FGC is a religious requirement' (44%, Morison).
Don't think uncircumcised women are promiscuous	Disagree with 'uncircumcised women are promiscuous' (43%, Morison).

Women and men from practicing communities

Table 8: Ranked list of factors promoting FGM/C (women and men)

Factor	Basis for rank
1 Religion	Believe FGM is important because of religion (30%, Mwangi-Powell 2001); believe FGM is important because of sunna (20%, Mwangi-Powell 2001); would circumcise own daughter because of religion (68%, Mwangi-Powell 2001).

2 Tradition / Culture	Believe FGM is important because of tradition (22%, Mwangi-Powell 2001); would circumcise own daughter because of culture (43%, Mwangi-Powell 2001).
3 Decrease sexual desires	Believe FGM is important because of sex (15%, Mwangi-Powell 2001); would circumcise own daughter to reduce sexual desire (14%, Mwangi-Powell 2001).
Not aware of health implications	Not aware of health implications (41%, Mwangi-Powell 2001).

Table 9: Ranked list of factors hindering FGM/C (women and men)

Factor	Basis for rank
1 Believe it is not important because of complications	Believe FGM is not important because of pain (48%, Mwangi-Powell 2001); believe FGM is not important because of delivery (12%, Mwangi-Powell 2001); believe FGM is not important because of death (11%, Mwangi-Powell 2001); believe FGM is not important because it is not good (8%, Mwangi-Powell 2001).
2 Believe it is not important because of bad sex	Believe FGM is not important because of bad sex (11%, Mwangi-Powell 2001).
Think it should be stopped	Think FGM should be stopped (61%, Mwangi-Powell 2001).

Health workers

Table 10: List of factors promoting FGM/C (health workers)

Factor	Basis for rank
1 Tradition / Culture	Believe reason for FGM is tradition (52%, Kaplan-Marcusan).
2 Religion and tradition	Believe reason for FGM is religion and tradition (28%, Kaplan-Marcusan).
3 Religion	Believe reason for FGM is religion (15%, Kaplan-Marcusan).
4 Hygiene and tradition	Believe reason for FGM is hygiene and tradition (3%, Kaplan-Marcusan).
5 Tradition, religion, hygiene	Believe reason for FGM is tradition, religion, hygiene (1%, Kaplan-Marcusan).
Would have performed re-infibulation	Would have performed re-infibulation (19%, Leye).
Legal approach should be not to address it	Legal approach should be not to address it (9%, Mitello).
Legal approach should be to encourage	Legal approach should be to encourage (3%, Mitello).
FGM cultural tradition that should be respected	FGM cultural tradition that should be respected (2%, Mitello).

Table 11: List of factors hindering FGM/C (health workers)

Factor	Basis for rank
Believe FGM is a health problem	Believe FGM is health problem because harmful for women (39%, Mitello), physically & mentally harmful (32%, Mitello).
FGM cultural problem that should be removed	Believe FGM is cultural tradition that should be removed (22%, Mitello).
Legal approach should be to counteract	Believe legal approach should be to counteract it (52%, Mitello).
Legal approach should be to change	Legal approach should be to change it (36%, Mitello).
Believe it is violence against women	Believe it is violence against women (86%, Leye).

Believe it is violation of human rights	Believe it is violation of human rights (61%, Leye).
Would have expressed unwillingness to re-infibulate	Would have expressed unwillingness to re-infibulate (50%, Leye).
Would have explained cannot re-infibulate because illegal	Would have explained cannot re-infibulate because it is illegal (31%, Leye).
Believe attitude of healthcare professionals should be to educate and/or report	Believe attitude of healthcare professionals should be to educate and/or report (100%, Kaplan-Marcusan).

Grouping of similar factors

Tables 12-17 contain our grouping of similar factors promoting and hindering FGM/C and the basis for the grouping, for each stakeholder group separately in the order women from practicing communities, men from practicing communities, health workers. Percentages (rounded to its nearest tenth) refer to the proportion of people in the study who agreed with the statement. Some factors are un-grouped because there was no commonality with other factors and these are listed at the bottom of each table.

Women from practicing communities

Table 12: Grouping of similar factors promoting FGM/C (women)

Factor	Basis for grouping
Religion	Reason is religious requirement (91%, Chalmers); Reason is religious requirement (58%, Elgaali); Reason is religion (5%, Litorp). Believe FGM is important because of religion (30%, Mwangi-Powell 2001); believe FGM is important because of sunna (20%, Mwangi-Powell 2001); would circumcise own daughter because of religion (68%, Mwangi-Powell 2001).
Tradition	Reason is tradition (71%, Chalmers); Reason is cultural tradition (27%, Elgaali); Reason is tradition (48%, Litorp); It is imported Maroccan culture (3%, Litorp). Reason is because of the elderly generation (3%, Litorp). Believe FGM is important because of tradition (22%, Mwangi-Powell 2001); would circumcise own daughter because of culture (43%, Mwangi-Powell 2001).
Marriageability	Reason is make girls marriageable (53%, Chalmers); Reason is increased chance of marriage (21%, Elgaali); Believe would not have been married if were not circumcised (7%, Mwangi-Powell 2001).
Sexual morals	Reason is to decrease sexual desires (15%, Chalmers); Reason is sexual control (22%, Litorp); Reason is to reduce hormone levels (3%, Litorp). Reason is to protect virginity (56%, Chalmers). Reason is to prevention of promiscuity (1%, Elgaali). Believe FGM is important because of sex (15%, Mwangi-Powell 2001); would circumcise own daughter to reduce sexual desire (14%, Mwangi-Powell 2001).
Health benefits	Reason is hygiene (10%, Litorp). Reason is health promotion (4%, Elgaali). Reason is it's good for the girl (3%, Litorp).
Perceived male preference	Reason is to enhance men's sexual enjoyment (13%, Chalmers); Reason is for the man (3%, Litorp).
Aesthetics	Reason is to make girls beautiful (52%, Chalmers).
Perceived social pressure	Believe would be criticised for raising uncircumcised daughter (45%, Chalmers); Believe would be Embarrassed to raise uncircumcised daughter (34%, Chalmers)
Positive feeling about own FGM/C Intention to continue practice Think practice should	Feeling about own circumcision: proud (73%, Chalmers), pure (53%, Chalmers), more beautiful (30%, Chalmers), faithful (30%, Chalmers), pleased for husband (17%, Chalmers). Intends to circumcise daughter (48%, Chalmers); Wish to circumcise own daughter (89%, Morison).Would circumcise own daughter (33%, Mwangi-Powell 1999). Opinion on FGM: should be continued modified (36%, Elgaali); should be continued as present (20%, El-

continue	gaali); Do not think circumcision should be stopped (27%, Mwangi-Powell 1999).
Believe it is important	Think female circumcision is important (27%, Mwangi-Powell 1999).
Don't know health implications	Not aware of health implications (41%, Mwangi-Powell 2001).

Table 13: Grouping of similar factors hindering FGM/C (women)

Factor	Basis for grouping
Negative health issues	Reason for not performing FGM on own daughter is there are negative effects (88%, Litorp); Reason for not performing FGM on own daughter is it's not good (31%, Litorp); Reason for not performing FGM on own daughter is there are complications (24%, Litorp). Believe FGM is not important because of pain (48%, Mwangi-Powell 2001); believe FGM is not important because of delivery (12%, Mwangi-Powell 2001); believe FGM is not important because of death (11%, Mwangi-Powell 2001); believe FGM is not important because it is not good (8%, Mwangi-Powell 2001). Believe FGM is not important because of bad sex (11%, Mwangi-Powell 2001).
Negative personal experiences	Reason for not performing FGM on own daughter is own negative experiences (21%, Litorp). Feelings about own circumcision: sorry it had been done (16%, Chalmers), angry (5%, Chalmers), betrayed (3%, Chalmers).
Illegal	Reason for not performing FGM on own daughter is it's forbidden (14%, Litorp). Agree with the law against FGM (34%, Chalmers).
There's no need to do it	Reason for not performing FGM on own daughter is there is no need to do it (14%, Litorp).
Not religious requirement	Reason for not performing FGM on own daughter is there is no support in religion (7%, Litorp); Disagree with 'FGC is a religious requirement' (44%, Morison).
It's not natural	Reason for not performing FGM on own daughter is it's not natural (4%, Litorp).
Husband is against it	Reason for not performing FGM on own daughter is the husband is against it (4%, Litorp).
Disapprove of practice	Do not think female circumcision is important (67%, Mwangi-Powell 1999). Would not have own daughter circumcised (67%, Mwangi-Powell 1999). Think circumcision should be stopped (35%, Elgaali); think circumcision should be stopped (73%, Mwangi-Powell 1999). Think FGM should be stopped (61%, Mwangi-Powell 2001).
Don't think uncircumcised women are promiscuous	Disagree with 'uncircumcised women are promiscuous' (68%, Morison).
Positive expectations to it	Believe would be happy to raise uncircumcised daughter (43%, Chalmers). Believe would be praised to raise uncircumcised daughter (10%, Chalmers).

Men from practicing communities

Table 14: Grouping of similar factors promoting FGM/C (men)

Factor	Basis for grouping
Want circumcised wife	Want a circumcised wife (85%, Morison); Would not marry an uncircumcised woman (8%, Mwangi-Powell 2001).
Intention to continue practice	Wish to circumcise own daughter (68%, Morison).
Think practice should continue	Think it should continue modified (26%, Elgaali).

Table 15: Grouping of similar factors hindering FGM/C (men)

Factor	Basis for grouping
Think practice should stop	Think it should be stopped (69%, Elgaali), think it should continue as present (0%, Elgaali).
Not religious requirement	Disagree with 'FGC is a religious requirement' (44%, Morison).
Don't think uncircumcised women are pro-	Disagree with 'uncircumcised women are promiscuous' (43%, Morison).

miscuous

Health workers

Table 16: Grouping of similar factors promoting FGM/C (health workers)

Factor	Basis for grouping
Tradition	Believe reason for FGM is tradition (52%, Kaplan-Marcusan). Believe reason for FGM is hygiene and tradition (3%, Kaplan-Marcusan).
Religion	Believe reason for FGM is religion (15%, Kaplan-Marcusan).Believe reason for FGM is religion and tradition (28%, Kaplan-Marcusan).
Hygiene	Believe reason for FGM is tradition, religion, hygiene (1%, Kaplan-Marcusan).
Willing to perform FGM/C	Would have performed re-infibulation (19%, Leye).
Believe should not engage	Legal approach should be not to address it (9%, Mitello).
Believe should encourage	Legal approach should be to encourage (3%, Mitello).
Believe should respect practice	FGM cultural tradition that should be respected (2%, Mitello).

Table 17: Grouping of similar factors hindering FGM/C (health workers)

Factor	Basis for grouping
Negative health issues	Believe FGM is health problem because harmful for women (39%, Mitello), physically & mentally harmful (32%, Mitello).
Oppose the practice	Believe FGM is cultural tradition that should be removed (22%, Mitello). Believe legal approach should be to counteract it (52%, Mitello). Legal approach should be to change it (36%, Mitello). Would have expressed unwillingness to re-infibulate (50%, Leye). Would have explained cannot re-infibulate because it is illegal (31%, Leye).
Believe it is violence	Believe it is violence against women (86%, Leye).
Believe it is violation of human rights	Believe it is violation of human rights (61%, Leye).
Believe should educate/report	Believe attitude of healthcare professionals should be to educate and/or report (100%, Kaplan-Marcusan).

5. QUALITATIVE DATA AND RESULTS

Qualitative study-level data (Level 1)

The following tables present qualitative study-level data. They are organized by stakeholders in the order women from practicing communities, women and men from practicing communities, health workers, and government officials. They are organized alphabetically according to author. When data that were captured by the same code were presented multiple times within the same study, we did not repeat it here but only stated it once. This was done to avoid redundancy. However, to communicate frequency and strength of stakeholders' cognitions we extracted multiple quotes. The dotted line in the table separates factors related to continuance and factors related to hindering the practice. FG= Focus groups.

Women from practicing communities

Allag, 2001 (Low methodological quality): Interviews with 14 women from African countries living in France
Code and associated raw data

-It is done to ensure a long life and God's protection: The Malians excise their daughters to ensure them a long life and the protection of God (p2)
-It means being a good Muslim: A girl who is not excised is considered as a bad Muslim (p2)
-It is a custom: It has always been.. It is the custom. It is hard to deny one's origin (p2)
-It is a sign of honour: It is a question of honour (p2) It is inconceivable for a mother to propose her daughter in marriage when she is not circumcised. Female circumcision is a sign of good repute, integration, even submission (p3)
-It ensures marriageability: no excision, no husband (p2) It is inconceivable for a mother to propose her daughter in marriage when she is not circumcised (p3)
-It curbs women's sexuality: the practice curbs women's sexuality (p2)

Berggren, 2006 (High methodological quality): Interviews with 21 women from African countries living in Sweden
Code and associated raw data

-Not being cut is shameful: Not having FGC was perceived as shameful in the countries of origin (p52) They would be ashamed in their home countries if they had not undergone FGC (p55) If a girl is not circumcised, the other mothers talk about the girl so that the mother hears it and feels ashamed (p55)
-To become like other girls: there were a few women who had wished to undergo the procedure to become like the other girls (p53) FGC was traditionally practiced because of culture to become normal, to be like the other girls (p54)
-It is a cultural practice: FGC was traditionally practiced because of culture to become normal, to be like the other girls (p54)
-To reduce a girl's sexual desire: The women explained that people perform FGC to reduce a girl's sexual desire to preserve her virginity before marriage (p55) You want her to get rid of her sexual desires and they think that if you cut away the clitoris, you cut away the sexual emotions, and the girl gets calmer (p55)
-It preserves virginity: The women explained that people perform FGC to reduce a girl's sexual desire to preserve her virginity before marriage (p55)
-There is social pressure to be cut: They further explained that in their ethnic groups in Eritrea, Somalia, and Sudan, everybody is still expected to undergo FGC, and mothers of girls without FGC are teased and insulted by other women (p55)
.....
-Migration removed social pressure to continue cutting: They also explained that because of migration, they got rid of most of the female peer pressure to continue all forms of FGC (p55)
-There is support in the law not to cut: Almost all women explained how they perceived the Swedish law as supporting them in their decision to protect their daughters from FGC (p55)
-Being cut is shameful: In the encounter with Swedish health care, they felt ashamed because they had been subjected to FGC (p55)

Gali, 1998 (Low methodological quality): Interviews with 50 women from African countries living in the USA
Code and associated raw data

-To follow wish of family: The women who indicated that they would circumcise their daughters stated that they must follow the wish of their family members at home (p88)
-It ensures marriageability: The women who indicated that they would circumcise their daughters stated that they…didn't want they daughters to ruin their chances for a good marriage later in life (p88)
.....
-It is not a religious requirement: The majority of the women indicated that they would not circumcise their daughters because it is not a mandatory requirement of religious duty (p88)
-Migration removed social pressure to continue cutting: If I lived in Eritrea I would have circumcised my daughter, but now I am in the U.S. I do not have to face this, since nobody will ask me 'Did you circumcise your daughter?' (p88)

Lundberg, 2008 (High methodological quality): Interviews with 15 female Eritreans living in Sweden
Code and associated raw data

-It is a tradition: Some of them stated that women are victims of old customs and traditions (p221) We are a result of tradition (p221)
-It is for happiness of men: I think circumcision is for happiness of men (p221)
-It controls women's sexual desires: Circumcision was devised by society for control of female sexual desire and response (p221)
.....
-They learned from own pain and suffering: They were against the practice of female circumcision because they had learned from their own pain and suffering (p221) I don't want my daughter to pass through all the pain and suffering that I had (p221)

Morris, 1996 (Low methodological quality): Interviews with unknown number of female Somalis living in the USA
Code and associated raw data

-It is a tradition: The assessment indicates that the Somalis in San Diego view circumcision as an integral part of their heritage, culture

and tradition (p7)
-It is a religious requirement: Most women firmly believed that the practice is dictated by their religion (p7)
-Being cut is hygienic: Some women told us that being circumcised and infibulated is hygienic (p7) Whoosh! The lumps are gone. It is smooth and clean (p7)

.....

-It is illegal: The findings show that most Somali women living in the United States are very frustrated that they cannot have their daughters circumcised. They are aware of the illegality of the procedure in California (p8)

Norman, 2009 (High methodological quality): Interviews with 30 female Somalis, Eritreans, Sudanese living in England
Code and associated raw data

-It is a tradition: People know of it as a tradition. They take it for granted as an operation that must be done to all girls (p20). Reasons to circumcise are traditional. It is a social identity not for the person, a cultural identity the Somali must keep (p20)
-It is part of religion: From very early parents tell their children about FGM, as they explain to them that it is part of our religion and if they do not get circumcised they will not be good Muslims (p21)
-It is related to cleanliness: Some say that the girl who is not circumcised has a bad odour down there because she is not clean down there (p23)
-It curbs women's sexuality: The reasons to circumcise are to reduce sexual desires of women (p21). The perception is that a girl who is circumcised does not get as aroused as one who is 'qalfa' (meaning 'with a hood') whose clitoris is intact (p21)
-It enhances men's sexual pleasure: when married the idea is that the man gets more pleasure through entering a tightly circumcised woman, which increases his pleasure during sexual intercourse (p22) Women get circumcised for men because men like it during married life. Some women force their daughters for this reason (p22)
-There is social pressure to be cut: There are several social pressures and everyone has a say with regards to circumcising, especially from family and friends and the society as a whole. Society pressurises those who refuse to circumcise (p25) It was more the grand-mother who insisted and pressured the mothers into circumcising their girls (p26)
-It protects honour and prevents shame: In our community the mother usually tells you that you have to protect yourself and your hon-our and not bring the family shame (p21)
-It ensures marriageability: Many believe that uncircumcised girls will be unable to find a husband (p21) Somali men do not marry un-circumcised women (p22)
-It ensures virginity: circumcision has become synonymous with ensuring virginity (p21) People are worried about their daughter's future. If she did not have FGM, they think she might have intercourse before she gets married (p22)

.....

-It is harmful to women's health: harmful effects and complications arise from circumcision, especially the pharaonic type, which has a lot of complications – emotional, physical, and health problems. A woman suffers those complications from circumcision throughout her life (p24).
-It does not prevent sexual desire: Circumcision does not prevent a girl from having desires – it is in her head, there is no circumcision that would prevent that (p25)
-It does not ensure virginity: I have heard stories of girls who have had sex before marriage, even if they are circumcised, and then go to get stitched up afterwards so that they will still bleed because of the tightness (p24)
-It harms girl's relationship with family members: This lady says that she now has feelings of hatred to all those who have participated in the circumcision, including her mother, her grandmother, her father and even her husband as he put her in such a position and ex-perience (p25)
-It violates girls' rights: You have a right to your body as it was intended— God created the body this way and nothing should be done to change this (p25)
-They are afraid of legal consequences: Maybe here in the UK some women may think of FGM, but they are afraid the child can be discovered by others, as you can't stop the child from talking. The social worker may also discover it. Women in Somalia are not afraid to practice FGM like women here in the UK (p25)
-It is not a religious requirement: many Somalis mistakenly view circumcision to be a religious obligation, and that is not true as it is more a cultural issue, which with time turned into a religious belief (p25)

Upvall, 2009 (Moderate methodological quality): FGs with 23 female Somalis living in the USA
Code and associated raw data

-It is the traditional norm: The predominant theme 'Living with the norm of circumcision' reflected the women's worldview of FC as normality rather than an aberration (p363) The only women I know who are not circumcised are American women. I thought that all the women in the world were circumcised (p363) Not being circumcised was an alien concept for all the women and with the exception of one woman, all believed circumcision to be recommended through both their cultural traditions and Islam (p363) They know and hear through their friends that it's a belief that we have and that we should do it (p364) These women prefer to have the tradition continued with their daughters and do not understand why it is not allowed in the US (p364) I do not think that circumcising the girls should be outlawed (p364)
-It is a way to remain clean: Circumcision was perceived as a way for women to remain 'clean' (p364)
-It curbs women's sexuality: The women were concerned that the labia would continue to grow if it was not removed and they would desire men if not circumcised (p364)
-It ensures marriageability: Some were concerned that their daughters would not be able to marry without being circumcised and did not want their sons to marry a woman who was not circumcised (p364)

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-Belief that women can marry without being circumcised: Some were concerned that their daughters would not be able to marry without

being circumcised... Others had a very different point of view. They stated: If my daughter finishes school, learns how to drive a car, and gets a job, she doesn't need a man whether she is circumcised or not (p364)

Women and men from practicing communities

Ahlberg, 2004 (Moderate methodological quality): Interviews and FGs with 110 female and male Somali immigrants living in Sweden
Code and associated raw data

-There is social pressure to be cut: the traditional social pressure to be circumcised (p59) the girl to girl pressure where circumcised girls are expected to tease and abuse the uncircumcised (p65) The pressure from friends and relatives was enormous (p65) the fear of what parents perceive as liberal sexual morality is a major source of pressure for young girls (p66)

-Fear of liberal sexual morality: Despite increased knowledge about its harm and lack of religious connection, the research participants said they feared Swedish liberal sexuality (p64)

-It is a tradition: the practice is now regarded as a tradition rather than a religious rite (p64) First of all we have a tradition, an old tradition, not something we are starting now (p68) FC was described as deeply rooted in the Somali social system (p69)

-There may be problems for cut women: We cannot encourage men to be involved in this. We fear what would happen to the already circumcised women. There would be no husbands for us if men decided to marry only uncircumcised women (p67)

-Not being cut leads to uncertainty about virginity: Even those girls who are infibulated have problems because their husbands do not trust them to be virgins (p68) FC is justified as a way of ensuring virginity (p67)

-Men prefer cut women: a girl said in an interview that young men still prefer circumcised women (p68) When women were pressed that they circumcised their daughters to secure marriage partners for them, they agreed (p69)

-Men enforce it: the women agreed adding that men actually enforce FC by: 'refusing to eat food prepared by an uncircumcised woman' (p69)

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-There is social pressure not to be cut: the traditional social pressure to be circumcised and the new pressure not to be circumcised (p59) the Swedes see this as a big deal, and talk about it…That is the main source of pressure and discrimination for the circumcised girl. You are forced to say you are not circumcised even when you are in order to belong. It is a big pressure (p59)

-It is against the law: the women in particular said the law was important.. Women religious leaders for example said in a focus group discussion: 'The law is not bad (p63) I agree with it [the law]. It is great (p62)

-It is not a religious requirement: It is groundless.. there is no evidence in religion (male p59)

-It is harmful: This is a harmful tradition causing many health problems and suffering during the wedding night (male p59)

Gillette-Frenoy, 1992 (Low methodological quality): Interviews with 41 females and males from African countries living in France
Code and associated raw data

-An uncut woman is like a man: Men say that a woman who is not excised is like a boy, and this is hard to hear (p7)
-It is the custom: Questioned on the reasons why the practice of excision is perpetuated, some informants from rural areas and of low educational level, have no other argument than to invoke the 'custom.' This has always been done, my mother, my grandmother did it, so my children will be excised (p8). I've done it because it is a custom and I want to continue a tradition (p11) The law at home is to cut. And according to French law I am wrong but according to my family, my ancestors, I am not wrong, and in relation to that, I do it (p20).
-To be integrated in community: she asked her excision to be integrated in the village community (p8). I am not French, I have to go back to Africa where my roots are, and there FGC is practiced. So you see, I don't really have a choice (p8). As one of the informants told said 'they are in France, but live as in Africa' (male p14). As a result, some...obey rules not to be marginalized, perpetuate the customary practices of their societies of origin such as excision. For one of the informants, it is 'so not to be excluded from the society, not to be an outcast.' (p14) excision is still practiced in France. Among the many reasons for this we have selected only three: ... the fear to oppose ... especially the community, both in Africa and in France (p22).
-The uncut clitoris can hurt the penis, prevent intercourse, kill the baby at birth: a number of beliefs reinforce the tradition, such as the fact that the clitoris can hurt the husband's sex, or even prevent sexual relations or kill the baby at birth, by contact (p8)
-There is social pressure to be cut: she will be excised as soon as she arrives in the Ivory Coast because her father didn't dare to say no to his own mother (p9) social control refers to the very strong social pressure exerted by the community of origin (p13)
-It ensures marriageability: One of the reasons most frequently cited by informants to justify the fact that they excise their daughters is that the girl who is not circumcised would not get married (p11) If girls are not excised they cannot marry, we make fun of them (p11)
-To comply with Islam: many families practice it to comply with Islam (p11) According to male and female Muslim informants we interviewed, although they know that excision is not recommended by the Koran, they quote Koranic values such as the virginity of girls and the chastity of wives (p11)
-It preserves honour: For men in particular, they see excision as a way of preserving 1) family honour; excision ensures the girl's virginity until marriage, prevention of sexual desires, and therefore prenuptial sex. 2) honour of husbands; excision reduces women's sexual desires, who, for example due to polygamy, would then not be tempted to have adulterous relationships. One of the informants told us that the men from his country practicing excision had answered, when he had questioned them about this practice 'So they will not be whores' (male p12)
-It ensures virginity until marriage: excision ensures the girl's virginity until marriage, prevention sexual desires, and therefore prenuptial sex (p12)

-It reduces women's sexual desires: excision is presented as a means of controlling female sexuality (p11) As the husbands cannot answer to the sexual appetite of all their wives, they had to find a way of handling it (p12) excision reduce women's sexual desires, who, for example due to polygamy, would then not be tempted to have adulterous relationships. One of the informants told us that the men from his country practicing excision had answered, when he had questioned them about this practice 'So they will not be whores' (male p12)
-It is related to cleanliness and hygiene: talks about the notion of cleanliness or of hygiene (p12)
-Men want it: if men don't want it [excision] anymore, women will not do it…as long as they have the full power, it won't stop (p15) it is men who hold the dice, if they wanted, if they understood, in two days it would be finished, nobody would do it again in Senegal (p15) If men no longer attached any importance to it, women would not continue (p15)
-The communities are isolated and don't integrate: excision is still practiced in France. Among the many reasons for this we have selected .. the isolation of the migrant population, especially women... the unwillingness or inability to integrate into the society that receives them (p22)

Guerin, 2006 (Moderate methodological quality): Interviews and FGs with 64 female Somalis living in New Zealand
Code and associated raw data

-Being uncut can affect identity: if I have daughters and if they are not cut it will not be a problem unless it starts affecting their identity or they become outcast (p19)

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-It is illegal: The majority of the women reported knowing about the laws…and most felt that these laws were unfair and harsh (p18) We should be able to cut our girls without fear of being jailed (p19)

Johansen, 2006 (High methodological quality): Interviews and FGs with 70 female and male Somalis living in Norway
Code and associated raw data

-It curbs women's sexuality: Generally the practice was believed to reduce women's sexuality in various ways (p1) Women often claimed that if the clitoris was left intact and the woman kissed or hugged a man, her sexual desire would be beyond control (p34). The clitoris is associated with strong sexual drives and could thus lead its owner to promiscuity if not cut (p33) An uncut woman will run after men and have sex with anyone (p248)
-It is necessary to avoid premarital sex/stay a virgin: Many also deemed infibulations necessary to avoid sexual activity (p22) I think my infibulations helps me to stay a virgin (p22) Physical hindrance thus seemed important or even necessary to prevent premarital sex, as sexual desire was described as easy to arouse and difficult to control mentally (p23)
-It proves /constructs virginity: Premarital virginity was considered to be extremely important by the vast majority of my Somali informants. However, virginity was not considered an inborn quality, but had to be culturally constructed through infibulation. An intact infibulations was believed to both ensure and prove virginity (p21) My informants conveyed similar ideas, suggesting that an 'open' never-married girl would automatically be suspected of having engaged in pre-marital sex (p258) infibulation and defibulation are closely related to central, cultural values of virginity, women's possibility for marriage, and honor (p264)
-Infibulation proves virginity as an assurance of marriageability: Parents emphasized the importance of infibulations in proving virginity as an assurance of their daughters' marriageability. This was the most commonly cited reason for the continuance of the practice and for resistance against premarital defibulation (p24) this was the most frequently expressed worry about uncircumcised daughters – that they would not get married (p44) infibulation and defibulation are closely related to central, cultural values of virginity, women's possibility for marriage, and honor (p264)
-Clitoris is an unclean, male element: To make a girl a propoer woman, her genitals have to molded or carved to fit cultural standards (p264) Among the Somali, the natural genitals are seen as ambiguous, consisting of both male and female elements. The clitoris (kinter) was described as unclean, a male element, a 'penis' out of place (p33) Somali women informants drew various parallels between the clitoris and the penis (p264)
-Men want a circumcised wife because then she is seen as moral: Men's demands for a circumcised bride, then, had nothing to do with male sexual pleasure, but a lot to do with the desire for a moral wife (male p45) My female informants claimed that FGC is performed to satisfy men. Men are expected to demand that a prospective wife has been circumcised .. Men's demand for a circumcised bride mainly concerned a desire for a moral wife. The same view was found among the male informants (p271) some men, although opposed to infibulation on a general level, expressed doubts about the virginity and moral standards of an uncut potential wife (male p258)
-It is a physical sign of morality: Infibulation [was seen] as a physical reminder of moral standards (p22) Virginity was intimately linked to morality in a significant way...premarital sex as evidence of moral failure (p23)
-It is culturally meaningful: most informants, who generally saw FGC as both physically destructive and culturally meaningful, in sexual terms as simultaneously important for sexual morality and destructive to sexual pleasure (p251) cultural emphasis on virginity and sexual chastity, both of which were seen as significant aspects of woman's identity as Somali and Muslim (p257) infibulation and defibulation are closely related to central, cultural values of virginity, women's possibility for marriage, and honor (p264) fear of losing cultural identity and sexual morals was often expressed in the emphasis on premarital virginity and intra-marriage (p257)
-It ensures honour: infibulation and defibulation are closely related to central, cultural values of virginity, women's possibility for marriage, and honor (p264)
-It makes a girl a proper woman: In the informants' home countries, FGC was regarded as a natural and necessary ingredient in becoming a decent woman (p2)

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-It is a loss of body parts: Amber, after moving into exile, had come to see her genital cutting as a loss of significant body parts (p35) they often describe their circumcision as a loss – a loss of body parts, of sexual pleasure, of nature (p266) The bad thing about infibulations is that they remove something from your body, your sexual feeling. There is something missing. Sometimes I joke with my sis-

ter-in-law that we should go back home and look for 'our things', the things that they cut away from us. But of course, there is no way you can replace what has been removed (p268)
-It is physically destructive: most informants, who generally saw FGC as both physically destructive and culturally meaningful (p251)
-It is destructive for sexual pleasure: I have no feeling in bed. I think it is because I was cut (p248) You know, circumcision affects your sexual life. I feel less. I feel I miss something (p268) Most of the informants attributed their reduced sexual feelings to the absence of the clitoris (p268) Male informants who thought that FGC reduced women's sexual pleasure usually associated it with the absent clitoris (male p272) they often describe their circumcision as a loss – a loss of ... sexual pleasure, of nature (p266) The bad thing about infibulations is that they remove something from your body, your sexual feeling. There is something missing (p268) men's main concern regarding FGC was about sexual complications, particularly the painstaking procedure of defibulation, and their perception that FGC reduced women's 'sexual responsiveness.' Many men had experienced painful defibulations; some had also experiences painful, sore penises. Their main concern, however, was the women's suffering during the process. As Abdi said: 'How can I enjoy sex when it causes pain to my wife?' (male p272)

Johnsdotter, 2009 (Moderate methodological quality): Interviews with 33 female Ethiopians and male Eritreans living in Sweden
Code and associated raw data

-To become an ideal girl with restrained behaviour: A central theme emerging from the interviews is the creation of the good girl, a girl with restrained behaviour. FGC has been seen as a component in shaping girls in the image of the female ideal prevalent in the countries concerned (p119)
-It curbs women's sexuality: By removing the clitoris, it was believed possible to create a calm, restrained woman (p120) The family thinks the girl will become humbler and, well, that it will calm her down. That's the purpose, that she won't feel her body and feel desire and such things (p120)
-It is a tradition: Another theme that clearly emerged from the interviews is 'tradition' (p120) It was the thing to do (p121) It is our tradition. I want to respect it (male p121)
-There is social pressure to be cut: If you're in society, there's pressure: 'This just has to be done,' a duty to perform if you are to be in society. I mean, even if you're against it, it is hard to resist the pressure (male p121)
.....
-It has no meaning or value: the second theme that emerged as central from the analysis is absence of meaning.. none of the informants seemed to be able to link any substantial value to FGC (p123)
-Migration changes the attitude: Many informants mentioned experiences in an entirely new country as forces behind a change in their attitude toward FGC (p126) When I moved to Sweden I learned that you shouldn't do this [cut]. You learn those things in Sweden but not at home (p126) Of course my view on circumcision has changed. It was the women who performed female circumcision, so as a man I didn't know much about it. You know, it is taboo to discuss that thing. Since I came here, definitely, I've seen many debates or social documentaries about different countries and that they perform that kind of circumcision on women. So then I've improved my knowledge about it. So, of course I've changed since I came here (male p126)
-It reduces sexual pleasure: The notion that circumcision reduces the opportunity to experience sexual pleasure as a result of the procedure was a recurrent theme in almost all interviews. Several men emphasized a loss of ability to experience sexual pleasure as a result of the procedure (male p126). Many women expressed strong grief in relation to the experience of losing part of their sexuality: Since I've been circumcised, I don't know, I actually thought I was normal, but a lot is gone though circumcision. During intercourse, for instance, you know it takes longer for us circumcised to have an orgasm. You know, it takes longer. Because there is no ... clitoris. You feel less (p127)

Johnsdotter, 2003 (Low methodological quality): Interviews with ~30 female and male Somalis living in Sweden
Code and associated raw data

-It is about culture and tradition: Yes, I am Muslim. But this is also about culture. I am afraid of God's punishment. Yes I would choose tradition (p368) This is our tradition, it's something we should do (p129)
-To stay a virgin until marriage: Traditionally, pharaonic circumcision has partly been seen as one of the ways to make sure that young girls stay virgins until they are married (thus, no illegitimate children are born outside the patrilineal clan structure) (p98) When the girl is young, she can't be [have sex] with boys or men (p100) The purpose is that they want to be able to control if the girl has had intercourse or not (male p101) Some of the women discussed the fact that a sunnah circumcision fails in being a visible sign of virginity, a state which is said to be a prerequisite of social acceptance of unmarried girls: If a girl is [pharaonically] circumcised she hasn't been with any other men. It's a sign of virginity.. A sunnah circumcised girl can lie about whether she is a virgin or not (p108)
-It is beautiful: I think it is so beautiful when it is cut (p100) I am opposed to pharaonoc circumcision. But in my opinion I think it is good to take away the part of the clitoris that sticks out. I've seen both women with clitoris and without, and I prefer a circumcised woman, where that protruding part of the clitoris is gone, but the rest is left inside. It makes it smooth and neat. It's beautiful (male p106)
-It is proof of being a good girl: A woman who is still 'closed' at her wedding has proved that she is a good girl. It is not only a matter of pride and dignity of the girl herself, but for her whole family – especially for her mother, the one ultimately responsible for raising the girl and teaching her good morals. There seems to be a sharp line between the categories 'good girls' and 'prostitutes' (sharmutooyin or dhilooyin): either a woman refrain from having sex outside marriage or she is categorised as being a (non-paid) prostitute – there is nothing in between: 'Sometimes the girl can lose her virginity behind the back [of her family] and it is such a shame, [if it is known] the family kind of completely loses all pride. So circumcision is seen as a way to make sure the girl doesn't lose this' (p 110) Traditionally, a woman who has had sex before she is married is a bad woman, she is a whore (p116)
-Men prefer a tight vagina: Some women spontaneously came up with the idea that Somali men prefer infibulated women because they gain sexual pleasure out of a tight vagina: The men like it to be a tiny opening (p130) Because they want a tight opening, they want it to be tight when they have sex (p130)

-Migration changes the perspective: In exile the 'naturalness' of the practice of female circumcision becomes questionable. Two strong motives for female circumcision in Somalia lose their significance: the earlier fear of social criticism for deviation and the demand for circumcision of girls for marriage-ability (p361)
-It is not a religious requirement: Most informants agreed on the overwhelming importance of Islam as a motive for changing attitudes (p367) It's not in the Qur'an. It is something that belonged in our culture, it is absolutely clear that it is not in the Qur'an. Many who know about this now will leave [the tradition] (p368) All Somalis are believers.. that is, of Islam.. and if they are told that this is non-Islamic, they have to leave this tradition. You can't act against your religion (male p370).The religious argument was often mentioned as an instrument in defending this new point of view (openly stating that one is opposed to pharaonic circumcision) (p369) The most important reason for the women involved in our study for being opposed to pharaonic circumcision is that they are convinced that pharaonic circumcision is contrary to basic Islamic principles. The crucial principle seems to be that one must not damage what God created (p99) This tradition of pharaonic circumcision among Somalis, it's wrong. The other type of circumcision, the sunnah type, is not important. Islam doesn't recommend that either, that is, it's not obligatory. But under no circumstance it's allowed to do pharaonic circumcision. That will lead to punishment from God (male p106)
-It causes health problems: Other aspects discussed by many women were the medical complications and the pain inflicted in girls at the time of operation: many know more now, about how the body works. Then they can see no reason... like me, I have had so many problems, I simply do not want to do the same things to my girls (p100) I am entirely opposed to pharaonic circumcision. Pharaonic circumcision is harmful to women. They cut it [clitoris]away and they then stitch. Women get problems while they have their menstruation, when they give birth...and sometimes they get sick from this circumcision (male p100). In don't feel bad about the girls who are not circumcised. What I do regret, on the other hand, is that the older girls were circumcised while we lived in Somalia. As i can see the difference, the one who is not circumcised doesn't have any problems. The one who is circumcised get sick. She can't go to school and she has problems. She gets more angry, as she feels that part of her life has been ruined. It's not only about the pains when the operation was done, but that she has got lifelong problems (male p101)
-It violates women's rights: A couple of men mentioned women's rights as an argument for being opposed to pharaonic circumcision: A woman and a man have equal rights... I think it is a crime, a violation of women's rights to cut in the genitals (male p101)
-It reduces sexual pleasure: I'm opposed to all forms of female circumcision. When you do sunnah you cut away this thing called clitoris, or a tiny part of it... I think that this makes the person lose her ability to enjoy sex. She will be left with less sexual urge (male p.106)

Morison, 2004 (High methodological quality): Interviews with 174 young female and male Somalis living in England
Code and associated raw data

-Not being cut is shameful: There in Somalia you want to be circumcised, it is a big shame not to be (p86)
-There is social pressure to marry a cut, virgin woman: in-depth interviews with 10 men revealed a mixture of pressures to marry circumcised girls (male p89) Females gave similar descriptions of the pressures for men to marry circumcised girls with the same emphasis on virginity of the woman at marriage (p91)
-It is a tradition: The majority of the in-depth interview respondents recognized the importance of female circumcision as a tradition (p93) I am against it, but then again it is a tradition I think people have it because our great grandmums had it and so on (p93) Circumcision is our tradition, and I don't know where it came from but I am sure it is a good thing (male p93)
-To not get an appetite for sex: I would do Sunna on them [my daughters] to ensure that they do not get an appetite for sex (male p93)
-Men prefer cut women because they are virgins: Honestly speaking, when it comes down to marriage they [men] prefer women who are circumcised, so as to ensure their virginity (p89)
-It ensures marriageability: no-one marries a girl who is not circumcised (p93)
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-It is illegal: All female in-depth interviewees supported the legislation prohibiting female circumcision (p94)
-It is not healthy: I don't think that I will circumcise my girls because it is not healthy (male p93)

Vissandjé, 2003 (Low methodological quality): Interviews with 162 female and male immigrants from African countries living in Canada
Code and associated raw data

-It is a social value: The discourse of the majority of the women and men interviewed makes clear that these practices are an integral part of the culture's social values (p117)
-It curbs women's sexuality: The discourse of the majority of the women and men interviewed makes clear that these practices ..aim at controlling women sexually (p117) Excision without infibulations is intended to ..reduce female sexual desire (p118)
-It controls women socially: The discourse of the majority of the women and men interviewed makes clear that these practices ..aim at controlling women sexually and socially (p117) These practices are inscribed within a process of division of social roles along lines of gender, in which women's role as mother and wife is granted utmost importance (p117) Excision and infibulations thus appear as practices meant to preserve male sexual power (p117)
-The uncut clitoris is like a penis: The clitoris is considered a barrier to coitus and, consequently, to procreation because it is considered a small penis...The interviews revealed an awareness of the notion of the clitoris as a barrier to coitus: there are others who say that the part [the clitoris], when you have it, your husband can't have proper access to you, you see (p118) And there is more than just a hint that clitoridectomy is performed out of male fear of female sexuality: 'At the time of sexual relations, if the clitoris is uncut, it gets a big erect. So the woman is compared to a man because the penis is in erection and also the clitoris, so it's two men you see' (p118)
-It ensures virginity: Excision without infibulations is intended to ..ensure virginity (p118) female and male respondents from the Horn of Africa also related that virginity is intrinsically linked to family honour (p119)
-To ensure women are faithful: ensuring that women remain faithful (p119)
-It confers womanhood: More commonly cited in our interviews was the power of surgery to confer womanhood and adult status (p118)

As long as she hasn't been through it [excision], she hasn't become a woman! (p118)
-It enhances sexual pleasure: Also mentioned in the interviews' discourse is the potential development of sexual prowess for women who have been excised; this is presented as an advantage for the sexual partners. Those who hold this view considers that since excision reduces sensibility, women are less likely to achieve orgasm quickly, thereby prolonging intercourse and enhancing pleasure for both partners (p118)
-It means conforming to social norms: Most respondents agreed that submitting to these practices meant conforming to social norms that frame the recognition of women's social role in African societies. Traditional practices are considered an integral part of female identity (p119)
-There is social pressure to be cut: from a general point of view, we make the main observation that the obligation to excise and/or infibulate girls stems from collective and social pressures. A great majority of them talked of the compulsory nature of these practices, so that girls be permitted to exist on a social level and to affirm their femininity. The social control exerted over individuals favours the ongoing practice of excision and infibulations (p122) A woman born in a region where these practices are the norm, but who has not been excised or infibulated, is likely to suffer several forms of social disapproval. She is not entitled to the adult status granted to other women (p117). She may decide to submit to the practice in order to recover her dignity and receive social respect (p118) As long as a mother hadn't excised her daughter you were not considered to even have a daughter (p118).

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-Society's attitude to FGM is changing: Norm and value shifts take place through the adoption of new social norms and through new decision-making structures. One respondent related her society's shifting attitudes toward infibulations as well as her own (p121). It is highly significant that these traditional practices, once a sign if conformity to social norms, are viewed in the opposite light in the new cultural context (p121)

Health workers and government officials

Leval, 2004 (Moderate methodological quality): Interviews and FGs with 26 female midwives working in Sweden
Code and associated raw data

-It is related to men's need for power over women: FGC was largely seen to be associated with men's desire for power over women (p751) The reason for it is that they think that the clitoris grows into a penis and they are afraid that the woman will get power over the man. That's where it originated from in the beginning anyway (p751) midwives described FGC as fostered by …men seeking to control women and exert power (p751) And then that it's passed down and you.. think, 'Oh damn men' and all that and their power (p750) the midwives considered FGC to be a cultural expression of manhood (p751)
-It curbs women's sexuality: the midwives considered FGC to be ...a way to control female sexuality (p751)
-There is social pressure to be cut: midwives described FGC as fostered by peer pressure (p751) This social pattern and the like, where you have to be like everyone else and that you don't want to be 'odd' (p751)
-Desire to be part of society: it's also passed down culturally (p750) The midwives also reasoned that the tradition was carried out of a desire to be part of society, not to be shunned from the group (p751) And in their countries it's so important to be circumcised. It's done in order to be part of the group.. you would get circumcised or what, otherwise you are shunned (p751)
-It ensures marriageability: of course if they say that they won't be married if they don't.. If a guy wouldn't give a damn about it, then they would be able to do without it, but if they can't get married without being circumcised first (p752)

Leye, 2007 (Low methodological quality): Interviews with 27 key informants (in health or governmental sectors) working in Belgium, France, Spain, Sweden, and UK
Code and associated raw data

Belgium

-There is a lack of knowledge: They assessed a scarce knowledge of FGM among professionals who could be confronted with FGM, such as police, police physicians, health professionals and teachers, as well as a lack of knowledge about the legal aspects of FGM and referral procedures in case a girl is at risk of FGM (p15)
-Immigrants don't know the law: Two key informants also mentioned that there is a general lack of knowledge about the judicial structures and procedures of Belgium, among the migrant communities (p15) FGM is surrounded by secrecy, it's a family matter, and happens in a world that does not know our judicial world (p15)
-Finding evidence is difficult: Another obstructing factor defined by the key informants was the difficulty in finding evidence, both in cases of performed FGM as well as in cases of girls at risk (p15)
-There is a lack of cooperation: Two key informants stressed the lack of coordinated action at European judiciary level and arbitrary cooperation (p16)

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-Support from law: Most of the key informants also assumed some positive aspects of having a specific law in Belgium, such as the warning function it might have towards practicing communities, the fact that it gives gynaecologists a legal reason of refusing to perform reinfibulation (p15)

France

-Identifying cases is difficult: All key informants mentioned that identifying cases was one of the main barriers to implementing the law (p17)
-Cases are not followed up: not all health professionals follow up the instructions of the PMI regarding systematic screening…Some key informants expressed concern about the occasional lack of follow up by prosecutors (p18)
-There is a lack of guidelines: lack of guidelines for professionals who are confronted with a girl at risk of FGM (p18)
-Finding evidence is difficult: Another difficulty mentioned was that because FGM is committed within the family and within the com-

munity, individuals remain silent when they are interrogated, making it difficult to find sufficient evidence to proceed against the performer (p18)

-There is a lack of cooperation: The lack of cooperation at international level was seen as an obstructing factor (p18)

-Personal beliefs interfere: All key informants mentioned that the perceptions of doctors and other about FGM are a factor that might influence a good implementation of the law (p18)

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-Visibility of FGM is positive: Key informants in France considered that activism, the many court cases and the subsequent media attention they attained, as positive contributing factors to the fact that the majority of the population involved considers FGM as illegal and thus refrain from committing FGM (p18)

Spain

-There is a conflict in acting in interest of child and respecting autonomy of parents: The main difficulty mentioned in Spain is the conflict between acting in interest of child and respecting the autonomy of the parents (p19)

-Professionals don't know enough: Another obstacle identified in Spain is the scarce and/or imprecise knowledge about FGM and the details of the applicable legislation (p19) The lack of knowledge about the procedures to follow when a case is reported is also another obstacle (p19)

-It is done in secret: Another obstacle identified was the secrecy surrounding the practice and the fact that FGM is performed in specific groups of the population (p20)

-Finding evidence is difficult: The difficulty in finding sufficient evidence is also an obstructing factor (p19)

Sweden

-Finding evidence is difficult: One of the obstacles to the implementation of the law, as identified by interviewees in Sweden, was the difficulty in assessing if FGM had been performed (p21) Another difficulty reported in Sweden was the problem in police investigations to prove that an act of FGM was performed after 1999, the time when the principle of double incrimination was removed from the law (p21)

-Identifying cases is difficult: Key informants in Sweden also mentioned that identifying cases remains difficult (p21)

-It is done in secret: general difficulties associated with crimes committed within the family (p22)

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-The Swedish discourse rejects FGM and awareness is high: the consensus in Swedish society that FGM is punishable; the consensus that children cannot be abused; the high level of awareness and good knowledge of FGM (p22)

-There are guidelines: the existence of guidelines on how to act practically when a girl is at risk or a case of FGM is detected (p22)

-There is cooperation: existing good cooperation between authorities (p22)

United Kingdom

-There is a lack of knowledge: primarily, the lack of reliable nationwide baseline data was seen as an obstacle, as it means that legislators and activists are working in a vacuum (p23) There is a lack of knowledge about FGM law among various professionals, such as police legal officers, teachers, school nurses and health visitors (p24)

-There is a fear of being considered racist: Key informants also mentioned that several professionals are paralysed into inaction because of fear of being labelled 'racist' (p24)

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-Support from law: some key informants considered the law in the UK as an asset because it provides a clear operational framework, a message of the government's commitment to protect children as well as support to organizations working in the field of FGM and it makes it possible to punish those who may be caught (p24)

Grouping of findings (Level 2)

The tables in this section present synthesized findings with respect to factors promoting and hindering FGM/C separately for stakeholder groups in the order women and men from practicing communities, health workers and government officials. They are organized according to frequency and strength of occurrence as finding in the included primary studies.

Women and men from practicing communities

Table 18: Result of qualitative data synthesis –thematic categories for factors promoting FGM/C (women and men)

Thematic category	Findings (code and study author)
Cultural tradition	It is a tradition (Ahlberg; Johnsdotter09; Lundberg; Morison; Morris; Norman) It is custom (Allag; Gillette-Frenoy;)

	It is a cultural practice (Berggren) It is culturally meaningful (Johansen) It is about culture and tradition (Johnsdotter03) It is the traditional norm (Upvall) It means conforming to social norms (Vissandjé) It is a social value (Vissandjé)
Decrease sexual desire	It curbs women's sexuality (Allag; Johansen; Johnsdotter09; Norman; Upvall; Vissandjé) To reduce a girl's sexual desire (Berggren) It reduces women's sexual desires (Gillette-Frenoy) It controls women's sexual desires (Lundberg) To not get an appetite for sex (Morison)
Protect virginity	Not being cut leads to uncertainty about virginity (Ahlberg) It preserves virginity (Berggren) It ensures virginity until marriage (Gillette-Frenoy) It is necessary to avoid premarital sex/stay a virgin (Johansen) It proves/constructs virginity (Johansen) To stay a virgin until marriage (Johnsdotter03) It ensures virginity (Norman; Vissandjeé)
Increase marriageability	It ensures marriageability (Allag; Gali; Gillette-Frenoy; Morison; Norman; Upvall) Infibulation proves virginity as an assurance of marriageability (Johansen)
Social pressure	There is social pressure to be cut (Ahlberg; Berggren; Gillette-Frenoy; Johnsdotter09; Norman; Vissandjé) To follow wish of family (Gali)
Honour	It is a sign of honour (Allag) It preserves honour (Gillette-Frenoy) It ensures honour (Johansen) It protects honour and prevents shame (Norman)
Religion	It is done to ensure a long life and Gods' protection (Allag) It means being a good Muslim (Allag) To comply with Islam (Gillette-Frenoy) It is a religious requirement (Morris) It is part of religion (Norman)
Hygiene	It is related to cleanliness and hygiene (Gillette-Frenoy) Being cut is hygienic (Morris) It is related to cleanliness (Norman) It is a way to remain clean (Upvall)
Men want women to have FGM/C	Men enforce it (Ahlberg) Men prefer cut women (Ahlberg) Men want it (Gillette-Frenoy) Men want a circumcised wife because then she is seen as moral (Johansen) Men prefer cut women because they are virgins (Morison)
Become a woman	An uncut women is like a man (Gillette-Frenoy) It makes a girl a proper woman (Johansen) Clitoris is an unclean, male element (Johansen) The uncut clitoris is like a penis (Vissandjé) It confers womanhood (Vissandjé)
Social identity	To become like other girls (Berggren) To be integrated in community (Gillette-Frenoy) Being cut can affect identity (Guerin)
Please men	It is for happiness of men (Lundberg) It enhances men's sexual pleasure (Norman) Men prefer a tight vagina (Johnsdotter03)
To avoid shame	Not being cut is shameful (Berggren; Morison)
	To become an ideal girl with restrained behaviour (Johnsdotter09) It is proof of being a good girl (Johnsdotter03) Fear of liberal sexual morality (Ahlberg) There may be problems for cut women (Ahlberg) The uncut clitoris can hurt the penis, prevent intercourse, kill the baby at birth (Gillette-Frenoy) The communities are isolated and don't integrate (Gillette-Frenoy) It is a physical sign of morality (Johansen) It is beautiful (Johnsdotter 03) It controls women socially (Vissandjé)

	To ensure women are faithful (Vissandjé) It preserves male sexual power (Vissandjé) It enhances sexual pleasure (Vissandjé)

Table 19: Result of qualitative data synthesis –thematic categories for factors hindering FGM/C (women and men)

Thematic category	Findings (code and study author)
Negative consequences	It is harmful (Ahlberg) It is harmful to women's health (Norman) It harms girls' relationship with family members (Norman) It is physically destructive (Johansen) It is a loss of body parts (Johansen) It is destructive for sexual pleasure (Johansen) It reduces sexual pleasure (Johnsdotter09) It reduces sexual pleasure (Johnsdotter03) It causes health problems (Johnsdotter03) It is not healthy (Morison)
Against the law	It is against the law (Ahlberg) It is illegal (Guerin; Morison; Morris) There is support in the law not to cut (Berggren) They are afraid of legal consequences (Norman)
Migration changes conditions	Migration removed social pressure to continue cutting (Berggren; Gali) Migration changes the attitude (Johnsdotter09) Migration changes the perspective (Johnsdotter03) Society's attitude to FGM is changing (Vissandjé)
No support in religion	It is not a religious requirement (Ahlberg; Gali; Johnsdotter03; Norman)
Violation of rights	It violates women's rights (Johnsdotter03) It violate girls' rights (Norman)
	There is social pressure not to be cut (Ahlberg) Being cut is shameful (Berggren) It has no meaning or value (Johnsdotter09) They learned from own pain and suffering (Lundberg) It does not prevent sexual desire (Norman) It does not ensure virginity (Norman) Belief that women can marry without being circumcised (Upvall)

Health workers and government officials

Table 20: Qualitative data summary for factors promoting FGM/C (health workers)

Findings from Leval 2004 (code)
It curbs women's sexuality It ensures marriageability Desire to be part of society There is social pressure to be cut It is related to men's need for power over women

Table 21: Qualitative data summary for factors promoting FGM/C (government and health workers)

Findings from Leye 2007 (code and country)
There is a lack of knowledge (Belgium; UK) Professionals don't know enough (Spain)
Finding evidence is difficult (Belgium; France; Spain; Sweden)
There is lack of cooperation (Belgium; France)
Identifying cases is difficult (France; Sweden)
It is done in secret (Spain; Sweden)

Personal beliefs interfere (France) There is a fear of being considered racist (UK) Immigrants don't know the law (Belgium) Cases are not followed up (France) There is a lack of guidelines (France) There is a conflict in acting in interest of child and respecting autonomy of parents (Spain)

Table 22: Qualitative data summary for factors hindering FGM/C (government and health workers)

Findings from Leye 2007 (code and country)
Support from law (Belgium; Sweden)
Visibility of FGM is positive (France) The Swedish discourse rejects FGM (Sweden) There are guidelines (Sweden) There is cooperation (Sweden)