Effectiveness of interventions designed to reduce the prevalence of female genital mutilation/cutting

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There is a lack of high-quality studies on strategies for reducing female genital mutilation/cutting (FGM/C). Available data suggest that community leadership is key to decreasing the prevalence of FGM/C on a large scale. Programmes that ignore key stakeholders in the community experience resistance to change. FGM/C programmes cannot be transferred from one community to another. Rather, they must be moulded to the specific needs of each community.

RHL Commentary by Nour N

1. INTRODUCTION

An estimated 100–140 million girls and women worldwide are currently living with female genital mutilation/cutting (FGM/C) (1). FGM/C is practiced in over 28 nations, predominantly in Africa and parts of Asia. Midwives or trained cutters typically perform FGM/C on girls between the ages of six and 12 years. FGM/C is classified into four types (2). Type I and Type II are known as clitoridectomy and excision. Type III, the most severe form called infibulation, entails removing part or all of the external genitalia and narrowing of the vaginal orifice by re-approximating the labia minora and/or labia majora, leaving a small hole for urination and menses. Type IV, the mildest form includes nicking, piercing, scraping, or burning of the genitalia (1). Girls and women who have undergone FGM/C can suffer from numerous health complications including: hemorrhage, infection, sepsis, infertility, dysmenorrhoea, dyspareunia, keloids, cysts/abscesses and difficult vaginal deliveries. Infibulated women should undergo defibulation in order to resolve long-term complications (3). Some reasons why this practice prevails include rite of passage, preserving chastity, hygiene, ensuring marriageability, improving fertility, and religious beliefs. Numerous grassroots, international, governmental and nongovernmental organizations have been working on strategies to stop FGM/C. This systematic review sought to address whether there are effective interventions that reduce the prevalence of FGM/C.

2. METHODS OF THE REVIEW
The Norwegian Knowledge Centre for the Health Services (NOKC) conducted an extensive literature search using national and international scientific and organizational databases in all languages. Their inclusion criteria were: systematic reviews, randomized controlled trials and controlled before-and-after studies. Their exclusion criteria were: non-systematic reviews, studies without control/comparison groups, cross-sectional studies, studies without pre/post measures, studies that did not assess change in knowledge and/or behaviour, and studies where FGM/C is not practiced. The population included communities where FGM/C is practised, girls or women at risk of FGM/C and other members practising FGM/C. The intervention had to reduce the prevalence of FGM/C. The NOKC authors focused on outcomes that demonstrated rates of FGM/C, public declaration to abandon FGM/C, changes in behaviours, awareness, knowledge, belief and attitudes related to FGM/C.

The authors used the McMaster University, Effective Public Health Practice Project, Quality Assessment Tool for Quantitative Studies and the Cochrane Collaboration’s tool to assess the methodological design and quality of evidence. They subsequently applied the Grading of Recommendations Assessment, Development and Evaluation (GRADE) to assess the accuracy of the estimates of effect. To evaluate the effects of intervention, they measured the adjusted absolute risk difference and the relative risk.

3. RESULTS OF THE REVIEW

Of the 3667 publications that were found, 16 were selected for analysis and six met the inclusion criteria. The studies were conducted in Burkino Faso, Egypt, Ethiopia/Kenya (single study), Mali, Nigeria and Senegal. The Nigerian and Egyptian studies were published in peer-reviewed journals, the others were published as reports to study authors' respective funding agencies. Two studies were individually-based (lasting around 2 weeks) and four studies were community-based (lasting on average 18 months). They cumulatively included 6803 participants where prevalence, ethnicity, religion and education varied significantly. The sample size of each study ranged from 108 to 2259 participants. All studies had a control group of no intervention. No biological data were collected in these studies. Using the Quality Assessment Tool, the authors of the systematic review adjudged all six studies as 'weak'. The quality of evidence was poor with 'high' or 'unclear' risk of bias. The intervention and control groups at baseline were not the same, the evaluators may not have been blinded, and data were incomplete. Given that the studies were not randomized, their validity was questionable.

Results from the individually-based study (Mali) demonstrated that training health-care personnel was not effective and few health-care personnel wished to play a role in educating others. The second individually-based study (Egypt) demonstrated that two sessions increased female university students’ knowledge about FGM/C. In the community-based studies, population movement into and out of programmes occurred. Given these issues, the authors decided against assessing the quality of the evidence through GRADE. In general, the results of the multifaceted community-based study (Ethiopia/Kenya and Nigeria) showed increased knowledge and awareness among men and women in the community, with intent not to continue the practice. In general, the results of the community-based empowerment programmes (Senegal and Burkino Faso) showed that after the training there was an increase in knowledge, awareness, regret and a declaration of abandoning the practice upon completion. There was a decrease in the number of women who reported having had their daughters undergo FGM/C.

4. DISCUSSION

4.1. APPLICABILITY OF THE RESULTS
This review concludes that although there have been a variety of strategies to stop FGM/C including human rights frameworks, highlighting health risk factors, training health workers to effect change, enacting laws, and social development approaches, there is a lack of systematic appraisal on the effectiveness of these approaches. The findings of this review are applicable to all settings where FGM/C is performed.

4.2. IMPLEMENTATION OF THE INTERVENTION

After assessing each of these studies independently and given their quality of data, it is challenging to reach clear-cut conclusions. For example, in the Mali individually-based study, the results demonstrated no convincing evidence that training health-care personnel improved their knowledge, that intervention discouraged health personnel from playing a role in educating others and that in fact medicalizing FGM/C can be safe. It is difficult to understand this conclusion. We can draw from other studies that address controversial health issues and note that trainings are indeed effective. When health personnel in Nigeria were educated on HIV/AIDS, its social implications, including prevention and treatment, findings showed that fear and discrimination were significantly reduced, while knowledge and skill had increased compared to the control state (4). This study illustrates that using a structured curriculum and a positive message effectively increases practitioners’ knowledge and belief. Their attitude towards AIDS patients was replaced with professional concern. New curricula on FGM/C have been developed by integrating best practices and lessons-learned. (5, 6)

With regard to the Egyptian individual-based study, the effectiveness of educating female students seemed promising. However, the students were taught over two sessions. What might have strengthened the results was conducting a follow up evaluation one year later to assess knowledge retention regarding the causes, side-effects, and beliefs/attitudes towards the health benefits of FGM/C. It would have been valuable to measure whether behaviour was altered. Increased knowledge does not necessarily translate into intention to stop FGM/C.

The effectiveness of the multifaceted community activities that integrated women’s rights framework did not significantly change participant’s beliefs about women’s rights. The variation in intention to stop FGM/C was 17% to 99%. The Somali refugees and one site in Ethiopia appeared to be the most resistant to change. The main fear was that uncut girls would remain unmarried. Of the many reasons for perpetuating FGM/C, ensuring marriageability for an uncut girl is difficult to tackle. Health practitioners and religious leaders can help in dealing with health (personal hygiene, infertility) and religious beliefs (e.g. the belief among certain communities that Islam mandates FGM/C), but ensuring marriageability requires men to demand uncut girls for marriage. It is indeed encouraging to note that in these studies men within the community favored stopping FGM/C. The authors’ suggestion of applying the Theory of Planned Behavior to the intention of stopping FGM/C is an interesting idea and should be explored further.

The effectiveness of community-based empowerment programmes appears heartening given the declaration of abandonment upon completion. The study authors noted, however, that the prevalence data were self-reported and that no physical examination (a gold standard for documenting FGM/C and its type) was performed to confirm this data. Nevertheless, decreasing the prevalence of FGM/C on a large scale requires community leadership. Having the community play a large role in identifying their needs and fully participating throughout the intervention process creates goodwill and long-lasting partnership. The authors noted that those programmes that ignored key stakeholders in the community experienced resistance. A lesson learned from these studies is the importance of understanding each community and recognizing that programmes cannot simply be transferred from one community to another, rather they must be moulded to the underlying needs of each one.

4.3. IMPLICATIONS FOR RESEARCH

Perhaps the most disappointing finding of this systematic review is that after identifying 3667 studies only six met their inclusion criteria. The review authors noted that the Population Reference Bureau had researched studies that demonstrated best practices. After identifying 92 projects, they found three that met the United Nations’ criteria. These findings underscore just how difficult it is to conduct high-quality studies.
on communities practising FGM/C. Prior to conducting multidisciplinary interventions with community involvement, collaborating with experienced epidemiologists and biostatisticians on study design and implementation is incredibly crucial for the future of FGM/C research.

As the review authors point out, there are considerable difficulties associated with studying FGM/C given the complexity of reasons to perpetuate it, the various ethnicities, languages and cultures that practice it, and the numerous stakeholders who are committed to it. Nevertheless, it is strongly recommended that the criteria for future studies should include randomized controlled, long-term, community driven, cross-disciplinary and international collaborative studies. Future studies should also assess the effectiveness of new curricula developed for training health-care professionals based on best practices and lessons-learned.

References