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# Rapid evidence assessment: Quality of studies assessing interventions to support FGM/C abandonment

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Evidence to End FGM/C

Research to Help Girls and Women Thrive

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February 2017

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# RAPID EVIDENCE ASSESSMENT: QUALITY OF STUDIES ASSESSING INTERVENTIONS TO SUPPORT FGM/C ABANDONMENT

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**The Evidence to End FGM/C: Research to Help Girls and Women Thrive generates evidence to inform and influence investments, policies, and programmes for ending female genital mutilation/cutting in different contexts.** Evidence to End FGM/C is led by the Population Council, Nairobi in partnership with the Africa Coordinating Centre for the Abandonment of Female Genital Mutilation/Cutting (ACCAF), Kenya; the Gender and Reproductive Health & Rights Resource Center (GRACE), Sudan; the Global Research and Advocacy Group (GRAG), Senegal; Population Council, Nigeria; Population Council, Egypt; Population Council, Ethiopia; MannionDaniels, Ltd. (MD); Population Reference Bureau (PRB); University of California, San Diego (Dr. Gerry Mackie); and University of Washington, Seattle (Prof. Bettina Shell-Duncan).

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ACCAF is based at the University of Nairobi, College of Health Sciences, a premier institution for training of health care professionals, and a leader in health research and community services. Our goals and objectives are to: strengthen capacity for FGM/C research in Africa, implement FGM/C interventions, and improve care for women and girls who have undergone FGM/C, monitor progress in the abandonment of FGM/C, and inform policy programming on FGM/C issues.

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# ACRONYMS

| | |
|---|---|
| ACCAF | Africa Coordinating Centre for Abandonment of Female Genital Mutilation/Cutting |
| AJOL | Africa Journals Online |
| ARP | Alternative Rite of Passage |
| CBO | Community-Based Organisation |
| CEEP | Community Education Empowerment Programme |
| CEP | Community Empowerment Programme |
| CSO | Civil Society Organisation |
| DFID | Department of International Development |
| DHS | Demographic Health Survey |
| EBSCO Host | Academic Search Complete database |
| EXP | Experimental study |
| FBO | Faith Based Organisation |
| FGM/C | Female Genital Mutilation/Cutting |
| JSTOR | Journals Storage |
| MICS | Multiple Indicator Cluster Survey |
| NGO | Non-Governmental Organisation |
| NORAD | Norwegian Agency for Development Cooperation |
| OBS | Observational study |
| PS | Primary study |
| Pubmed | MEDLINE database of references and abstracts on life sciences and biomedical topics |
| QA | Quality assurance |
| QEX | Quasi-experimental study |
| REA | Rapid Evidence Assessment |
| SS | Secondary Study |
| UK | United Kingdom |
| UN | United Nations |
| UNFPA | United Nations Population Fund |
| UNICEF | United Nations Children's Fund |
| USA | United States of America |
| USAID | United States Agency for International Development |
| WHO | World Health Organisation |
| ↑ | High-quality evidence |
| → | Moderate-quality evidence |
| ↓ | Low-quality evidence |

# EXECUTIVE SUMMARY

Globally, female genital mutilation/cutting (FGM/C) is recognized as harmful to women's and girls' physical and psychological health. The last decade has seen increased focus and investment in interventions to eliminate FGM/C, along with need to accelerate its abandonment:

- A growing number of women and girls undergo FGM/C; globally, over 200 million girls and women are cut, including 44 million girls under 15 years of age (UNICEF 2016).
- There is increased attention towards accelerating abandonment of the practice, as reaffirmed by the December 2016 United Nations General Assembly (UNGA) global resolution to end FGM/C.
- While global prevalence is falling, rates of decline are highly variable, across and within geographies, and population growth is outpacing prevalence declines, resulting in increasing numbers of women and girls at risk.
- More progress towards FGM/C abandonment is desperately required, and this study is intended to help understand which interventions have worked best, and under what conditions, to change both attitudes and FGM/C practice.
- As many studies reviewed are of low quality, this Rapid Evidence Assessment (REA) begins by reviewing the evidence and screening based on quality, taking the highest quality studies to explore the evidence for intervention impact to inform future FGM/C policy and programming. This REA is crucial, as it begins to shed light on what interventions have worked and in which contexts.

The UK Department for International Development (DFID) commissioned the Evidence to End FGM/C: Research to Help Girls and Women Thrive project to: i) assess the quality of studies that have evaluated different interventions for the prevention of FGM/C and ii) describe the FGM/C interventions that were evaluated by high quality studies.

## What does the evidence tell us about effectiveness?

Seventy studies, mostly from Africa (10 high quality, 35 of moderate quality, and 25 low quality), met the inclusion criteria, describing interventions including mass media campaigns, training of health care providers to address FGM/C through complications prevention and management, advocacy, and community education empowerment interventions, among others.

This Rapid Evidence Assessment (REA) focuses on interventions evaluated by high quality studies—seven primary research studies and three secondary research studies.

Of the seven studies representing high quality primary research, three explore the effectiveness of Alternative Rites of Passage (ARP) in Kenya, a programme offering an alternative form of transition from childhood to adulthood in communities where FGM/C signifies entry of a girl into mature adulthood. These studies show significant increases in knowledge of FGM/C's health effects and, subsequently, long-term abandonment of the practice by communities embracing ARP. This success is attributed to strategies involving community awareness through working with schools, health providers, and religious and community leaders. Community involvement seems to facilitate community investment in the programme, in addition to the existence of child protection laws prohibiting FGM/C along with community readiness and goodwill to accept the programme.

Three additional studies evaluate the impact of wider Community Education Empowerment Programmes (CEEP) by the non-governmental organisation (NGO) TOSTAN in Senegal, Ethiopia, and Somalia. TOSTAN programmes take a holistic approach, enabling the community to obtain formal and informal education on human rights, problem solving, basic hygiene, and women's health, among other empowerment strategies. These studies report a significant increase in awareness of FGM/C consequences, reduction in the proportion seeing FGM/C as a necessity, and increased proportions of girls under 10 years of age not cut.

The studies attribute the TOSTAN programme's success to its multipronged approach, using advocacy and awareness strategies before introducing the programme's community participation and dialogue, as well as passive diffusion of messages to people outside the programme in the countries where it was implemented.

One study evaluates the impact of legislation in Burkina Faso, and reveals that the legislation likely led to a 25 to 30 percent reduction in the probability of a girl's being cut before the age of five. This success was attributed to the sustained awareness and community education initiatives that started in 1975, creating fertile ground for sensitisation about the law banning FGM/C and political goodwill ensuring implementation of the law.

## What do we still need to better understand?

The quality of evidence on the effectiveness and impact of FGM/C interventions is generally moderate to low. This is not for a lack of robust interventions, but rather a lack of robust studies evaluating these interventions. In addition, few baseline surveys are conducted prior to implementing interventions, making assessment of effect and generalisability difficult.

Despite a high concentration of studies evaluating anti-FGM/C interventions from sub-Saharan Africa, few emphasise adequate reporting on cultural sensitivity and contexts during the design stage, or interpretation of findings for local policy.

This REA provides valuable methodological lessons for the design of future high quality assessments or evaluations of FGM/C interventions:

1. There is a need for designing high quality studies to evaluate interventions in the regions where FGM/C-practicing people have immigrated, which will be crucial to build a picture of FGM/C interventions in communities or countries that do not commonly practice FGM/C.
2. Many published reports assessing or evaluating FGM/C interventions describe the interventions poorly, so readers are unable to fully understand what was implemented, why, and for what effect, limiting their abilities to replicate or adapt these interventions. These challenges are becoming apparent in other areas of reporting evaluations of health and behaviour change interventions.
3. There is a need for guidelines for documenting and reporting FGM/C intervention design and implementation processes, to improve the scientific reporting of FGM/C interventions drawing from the recommendations of the Work Group for Intervention Development and Evaluation Research (WIDER).

4. Research designs need to be strengthened so they consider both interventions' intermediate outcomes and overall impacts, with more robust methodologies with comparable case selections, longitudinal research, and baseline surveys.
5. Triangulation of findings using multiple methodologies to address the same research question should be encouraged, to address concerns of internal validity. A strong evidence base is required to accelerate the abandonment of FGM/C.

# INTRODUCTION

Female genital mutilation/cutting (FGM/C) is any procedure that cuts or harms a female's genitalia without any medical indication[1]. The practice affects over 200 million girls and women worldwide[2]. Although there has been a global decline in the prevalence of FGM/C, it continues to occur disproportionately in some African countries. This decline has been gradual given the increased investments in the design and implementation of interventions to support the abandonment of FGM/C by governments, the United Nations (UN), and NGOs, among others, in the last three decades[3]. Even if the worldwide decline in FGM/C is maintained at current rates, population growth means that about a further 200 million girls will be cut by 2050[4].

In December 2014, a global campaign that leveraged political commitments and favourable social dynamics to accelerate the elimination of FGM/C was begun, with the adoption of the UNGA Resolution 69/150 on 'Intensifying global efforts to eliminate female genital mutilations', especially in the post-2015 development agenda. This call for intensification of the anti-FGM/C agenda globally sets the backdrop of this research study.

# PURPOSE AND SCOPE OF STUDY

There has been a lack of high quality studies investigating the effect and impact of FGM/C interventions in reducing FGM/C's prevalence. Few authors have attempted to collate evidence on evaluations of interventions to reduce FGM/C through systematic, or other, review. Berg and Denison's (2012, 2013)[5] syntheses of controlled studies to determine the effectiveness of interventions to prevent genital cutting of girls found a limited effectiveness of interventions, mainly attributed to poor quality of the reporting and evaluation of interventions reviewed. In their realist review, Berg and Denison included only a few studies (eight studies); their inclusion criteria required a control group, which is partly the reason why the number of included studies is relatively few.

In their paper, Johansen *et al* (2013) discuss what does and what does not work to reduce FGM/C and emphasise the common approaches used by organisations in FGM/C elimination[6]. Although they did not investigate the quality of studies on FGM/C interventions, their work describes approaches that have been applied by various organizations, their advantages and challenges. A World Health Organisation (WHO) non-systematic review of FGM/C programmatic approaches and evaluations of programmes presented successful efforts, mostly from Africa[7].

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1 WHO. 2008. Eliminating Female genital mutilation. An interagency statement, (OHCRH, UNAIDS, UNDP, UNECA, UNESCO, UNFPA, UNHCR, UNICEF, UNIFEM, WHO).

2 UNICEF. 2016. Female Genital Mutilation/Cutting: A Global Concern. www.unicef.org/media/files/FGM/C_2016_brochure_final_UNICEF_SPREAD.pdf

3 UNICEF. 2014. UNFPA-UNICEF Joint Programme on Female Genital Mutilation/Cutting: Accelerating Change Phase II Provisional Highlights of Progress in 2014.

4 Female genital mutilation/cutting: What might the future hold? [Internet]. 2014. http://reliefweb.int/sites/reliefweb.int/files/resources/ FGM-C_Report_7_15_Final_LR.pdf

5 UNICEF. 2014. op cit; UNICEF 2016 op cit

6 Johansen, R.E.B. et al. 2013. What Works and What Does Not: A Discussion of Popular Approaches for the Abandonment of Female Genital Mutilation.

7 WHO. 1999. Female genital mutilation programmes to date : what works and what doesn't : a review Geneva.

These studies highlight the dearth of high quality studies that have investigated the effects and impacts of FGM/C interventions. The objective of this study is to:

- Assess the quality of studies that have evaluated different interventions for abandonment or prevention of FGM/C;
- Describe the FGM/C interventions evaluated by high quality studies.

In assessing the global evidence of interventions for the reduction of FGM/C, and given the timeframe, we used the REA approach to synthesize the dearth of studies investigating FGM/C interventions globally. Using the REA approach, the study team reviewed assessments or evaluations of interventions published between January 1, 2000 to August 31, 2016. The search of studies was limited to what was available online, using hand searching and snowballing from bibliographies. This REA aims to provide a rigorous assessment on the quality of studies investigating the impact of FGM/C interventions that can, in turn, inform strategic investors, programme managers, policy makers, public officials, and community organisations to the direction of future research and strategies for FGM/C intervention programmes.

This REA therefore explores the following research questions:

- Which high quality studies have evaluated interventions on the abandonment or prevention of FGM/C?
- Which were the FGM/C interventions evaluated?

# METHODOLOGY

This study uses the REA approach to assess the quality of studies investigating FGM/C interventions. We define an 'FGM/C intervention' as any form of action or process of intervening, a deliberate process to interfere with, modify or change people's thoughts, feelings, or behaviours to reduce the prevalence, led to abandonment of FGM/C, or offer health care to girls, women, and those indirectly affected by the practice. FGM/C interventions have historically been grouped by: health risk approaches; conversion of excisors; training health professionals to be change agents; alternative rituals; community-led approaches; public statements; and legal measures[8,9,10]. These constitute some of the commonest and mostly evaluated forms of interventions aimed at the abandonment of FGM/C.

## Developing Search Design

To achieve a systematic search and hence retrieve all empirical evidence, all types of literature were assessed, ranging from assessments and evaluations to peer-reviewed literature on the impact of interventions aimed at reducing FGM/C. The inclusion and exclusion criteria, key words, search terms, and data sources were defined from the beginning. The literature search covers the

[8] Berg et al. 2012. Effectiveness of Interventions Designed to Prevent Female Genital Mutilation/Cutting: A Systematic Review.

[9] Muteshi J, Sass J. 2005. Female Genital Mutilation in Africa: An Analysis of Current Abandonment Approaches. Nairobi: PATH.

[10] R. Elise B. Johansen et al. 2013. What Works and What Does Not: A Discussion of Popular Approaches for the Abandonment of Female Genital Mutilation. *Obstetrics and Gynecology International*

duration between January 2000 and August 2016, and the quality of evidence was not used as an exclusion criterion[11].

**Table 1 Inclusion and Exclusion Criteria**

| Item | Inclusion criteria | Exclusion criteria |
|---|---|---|
| **Geographical Location** | Studies investigating FGM/C interventions globally | Any other studies not looking at FGM/C interventions |
| **Language** | English | Non-English literature |
| **Publication date** | 1 January 2000 – 31 August 2016 | Pre-2000 literature[12] |
| **Publication format** | Evaluation, research studies and student thesis. | Theoretical notes |
| **Aim of study** | The studies must have focused on assessing the impact of FGM/C interventions | Studies that assessed consequences of FGM/C |
| **Study design** | All study types, designs, and methodologies including primary and secondary studies with clear methodologies to enable an assessment of quality | Studies without a clear methodology to enable assessment of the study design |

## Key words

The key words used for this REA were 'female genital mutilation', 'female genital cutting', 'female genital mutilation/cutting', 'FGM', 'FGC', 'FGM/C', 'female circumcision' 'clitoridectomy', 'excision', 'infibulation', 'sunna', 'FGM/C Interventions', and 'FGM/C Programme'. From these key words, search strings compatible with various databases and search engines were developed.

## Identifying Data Sources

Search strings were developed for specific data sources and the titles were then searched. Data sources included:

- Publisher platforms including Wiley, SCOPUS, EBSCO, JSTOR, and SAGE
- Search engines Pubmed, Google, and Google Scholar
- Institutional websites of community, faith-based organisations and civil society organisations, bilateral organisations such as DFID, and multilateral organisations such as UNICEF, UNFPA, and WHO
- Academic institution websites for academic theses and dissertations.

Hand searching utilised references of retrieved material to ensure key literature was not missed. To ensure transparency of the search process, the search strings used and the databases accessed were recorded. EndNote was used to track all bibliographic references.

[11] Low quality evidence was not excluded as this REA also serves as a mapping exercise so that we can tell the geographical distribution of the interventions that are aimed at combating FGM/C.

[12] Due to the massive amount of work conducted in the last 15 years, the search was limited to 2000 and after.

### Step 1: Classification of the literature retrieved

Literature retrieved that fit in the inclusion criteria was categorized based on the type of research, either primary or secondary[13] and study design applied, as shown in Table 2 (page 13). The classification of all studies is presented as part of the quality assessment as shown in Appendix 1.

**Table 2 Framework for General Descriptive and Study Categorization**

| Author, Year | Location | Study Type | Study design | Study method |
|---|---|---|---|---|
| | | Primary (PS) | Experimental (EXP) | Qualitative; Quantitative; Mixed methods |
| | | | Quasi-experimental (QEX) | Qualitative; Quantitative; Mixed methods |
| | | | Observational (OBS) | Qualitative; Quantitative; Mixed methods |
| | | Secondary (SS) | Systematic Review (SR) | |
| | | | Other reviews (OR) | |

### Step 2: Assessment of quality of individual studies

Studies that met the inclusion criteria were assessed for quality using the 2014 DFID "How to Note" on assessing strength of evidence[14]. Experimental study designs (i.e. with a control group for the intervention, to assess whether a given outcome is due to the intervention(s) under study) are the gold standard for assessing interventions, due to their rigor. The DFID tool is useful for assessing experimental and quasi-experimental research but can lead to lower scoring of observational studies.

FGM/C has significant cultural underpinnings, and most available literature on interventions to reduce it are qualitative or of mixed methodologies. Studies combining qualitative and quantitative methodologies, either in sequence or in parallel, offer a good understanding of ethnographic research work. Therefore, to apply the DFID approach in this strict sense for this REA would be inappropriate. We have, therefore, applied the DFID tool using a flexible approach and not used all indicators for all the different kinds of evidence.

Six criteria or principles (Table 3) were adapted from the "How to Note" for assessing research quality and were applied to both quantitative and qualitative studies. While it is expected that some studies score higher than others due to research method, this does not indicate that low quality studies are poorly conducted. Such studies may not have provided sufficient information to allow a thorough assessment of the indicators in the DFID tool.

[13] Primary studies consist of studies which observe a phenomenon first hand, collecting, analysing or presenting raw data. On the other hand, secondary studies are those that interrogate primary research studies, summarizing and interrogating their data and findings (DFID 2014).

[14] DFID How To Note: Assessing The Strength of Evidence. March 2014.

**Table 3 Quality Assessment for Primary Studies**

| Principles of quality | Indicators | Score |
|---|---|---|
| **Conceptual framing** | Does the study acknowledge existing research? | 0=Major issues<br>1=Some issues<br>2=No issues |
| | Does the study pose a research question or outline a hypothesis? | |
| **Transparency** | Does the study present or link to the raw data it analyses? | 0=Major issues<br>1=Some issues<br>2=No issues |
| | Does the study declare sources of support/funding? | |
| **Appropriateness** | Does the study identify a research design, methods and analysis approach? | 0=Major issues<br>1=Some issues<br>2=No issues |
| | Does the study demonstrate why the chosen design and method are well suited to the research question? | |
| **Cultural/Context sensitivity** | What is the geography/context in which the study was conducted? | 0=Major issues<br>1=Some issues<br>2=No issues |
| | Does the study explicitly consider any context-specific cultural factors that may bias the analysis/findings? | |
| **Validity**[15] | To what extent is the study internally valid? | 0=Major issues<br>1=Some issues<br>2=No issues |
| | To what extent is the study externally valid? How representative is the sample used in the study? | |
| **Reliability** | To what extent are the measures used in the study stable? (What measures were put in place to ensure consistency of data collection?) | 0=Major issues<br>1=Some issues<br>2=No issues |
| | To what extent are the measures used in the study internally reliable? | |
| **Score (sum)** | 0-4 (Low Quality), 5-8 (Moderate Quality), 9-12 (High Quality) | 0-12 |

For each study, a score of 0 to 2 was given for each quality principle based on the extent the question is 'Yes' (1) or 'No' (0). A score of 2 indicates 'No issues' (all questions answered yes); 1 stands for 'some issues' where one question answered 'Yes' and the other answered 'No'; and 0 for 'major issues' (all questions answered 'No'). Each study was then assigned an aggregate score assuming equal weighting for each principle. Each team member reviewed all studies and recorded notes on each study they assessed, to provide justification for the scores, and to facilitate quality assurance. All scores were compared and discussed to resolve any discrepancies between reviewers.

For secondary studies, three questions assessed the quality of each study, shown in the assessment framework in Table 4. Each question was assigned a score of 2 if 'Yes', 1 if 'Unclear', which means there may have been a mention of some sort of inclusion criteria, for example, but it is not shown explicitly what it entailed, and 0 if 'No'. Each study was given an aggregate score ranging from 0 to 6 based on the extent to which it abided with the principles of research quality as outlined in the DFID "How to Note". A secondary study was graded high if it scored 5 to 6, moderate if it scored 3 to 4, and low if it scored 0 to 2.

[15] For qualitative research, assess whether the authors considered 'reflexivity', i.e. an attempt to explain to what extent a research could have been biased by the researchers own perceptions or opinions.

**Table 4 Quality Assessment for Secondary Studies**

| Quality Principle | Question | Scoring |
|---|---|---|
| **Transparency** | Does the study describe where and how studies were selected for inclusion? | No = 0<br>Unclear=1<br>Yes = 2 |
| **Validity** | Does the study assess the quality of the studies included? | No = 0<br>Unclear=1<br>Yes = 2 |
| **Reliability** | Does the study draw conclusions based on the reviews conducted? | No = 0<br>Unclear=1<br>Yes = 2 |
| | Score | 0 - 6 |
| | Scoring: 0–2 low, 3-4 moderate and 5-6 High | |

### Step 3: Describing and assessing the overall strength of body of research

This REA describes studies using the format '<Author Name Year>, <study type>';'<Quality of evidence>'. The summary arrow descriptors (↑ (High), → (Moderate), ↓ (Low) summary arrows) are used to summarize the quality of evidence[16]. For example: John 2015, EXP; →.

The following attributes were considered for the description of the overall strength of evidence:

- Quality of the body of evidence
- Size of the body of evidence (number of studies found)
- Consistency of the findings (do the studies have similar, mixed, or inconsistent findings?), and
- Context of the evidence, (global, regional or context-specific).

Studies coded "low quality" are not poor in substance or merit, but are categorized as such because they do not meet the principles of research quality set out for this specific study in relation to the research question above and based on DFID's "How To Note" (2014).

## Quality assurance

Quality assurance was part of every step. Two reviewers at the retrieval and application of the inclusion and exclusion criteria oversaw the data clerks, to minimize selection bias. Quality checks were by random sampling of retrieved articles, and any identified error in coding was corrected immediately.

Evidence assessment was the most vulnerable to researcher bias. This risk was minimized through several quality controls:

- At the start of the quality assessment phase, a team meeting clarified any doubts and developed a shared understanding of the DFID tool, specifically elucidating the six principles.
- While there was no double-blind quality assessment, by at least two reviewers, one reviewer did the quality assessment, while the second reviewer assessed the quality scores daily. When there was ambiguity in score allocation, a call was made or a meeting held to clarify any doubts and settle the score issue. Both reviewers maintained notes of what informed their judgment

[16] *High:* comprehensively addresses multiple principles of quality. *Moderate:* Some deficiencies in attention to principles of quality. *Low:* Major deficiencies in attention to principles of quality.

call on any quality scoring. There were, thus, no instances of complete disagreement among the reviewers.

- As part of the quality assessment, the team adapted the DFID tool to have a three-point score per criterion (0, major issue), (1, some issue), and (2, no issue) as previously explained. Given that prior REAs have not used this approach, an external, third reviewer (not a member of this REA team) informed the quality assurance process, and his suggestions were incorporated for improvement.

## Evidence analysis and presentation

Due to the included studies' methodological variations, a narrative synthesis approach, relying primarily on words and text to summarise and explain the findings,[17] was used. Narrative synthesis is appropriate in exploring the effectiveness of a programme and the reasons for its effectiveness, or lack thereof. It may also be used to describe the range and types of FGM/C interventions evaluated by high quality studies. In some instances, moderate and low quality studies have also corroborated the findings of the high quality studies.

***Working Definitions on Magnitude of Effects***

***Significant effect*** *where there is a fivefold increase or decrease on an outcome*

***Some effect*** *where there is a two-fold increase or decrease on an outcome*

***No effect*** *where confidence intervals around an effect estimate cross the line of no effect.*

Using this approach, single or combination of intervention(s), which are working or seem to be working, are described. Evidence from high quality studies is presented, and interventions evaluated in these studies are reported in terms of their effects on FGM/C reduction and any intermediate outcomes[18], in terms of significant effects, some effects, or no effects[19].

The complexity in the combinations of interventions in these studies is reported, and probable reasons that may have led to an intervention's observed effects are presented in Table 3. Evidence from moderate and low quality studies also evaluating interventions described in the high quality studies are briefly described as part of an explanation for the rationale for a given intervention.

## Study Limitations

The search protocol applied a structured purposive method of data retrieval. Search strings and search words were used during the first phase to retrieve data from publishing platforms and websites of implementing organisations. The team then used a snowball approach by reviewing the references of relevant studies to identify those meeting the inclusion criteria. A subsequent hand search was used for relevant publications, and this process may have diminished the replicability of the search protocol. Although the research team has deemed the search comprehensive, some studies produced during the defined period may have been missed due to challenges accessing some databases, limited snowballing, and hand searching.

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[17] Popay, J. et al. 2006. Guidance on the Conduct of Narrative Synthesis in Systematic Reviews. Final Report. Swindon: ESRC Methods Programme.

[18] Some intermediate outcomes include for instance, safe protection of girls, change in knowledge, attitude and perception about FGM.

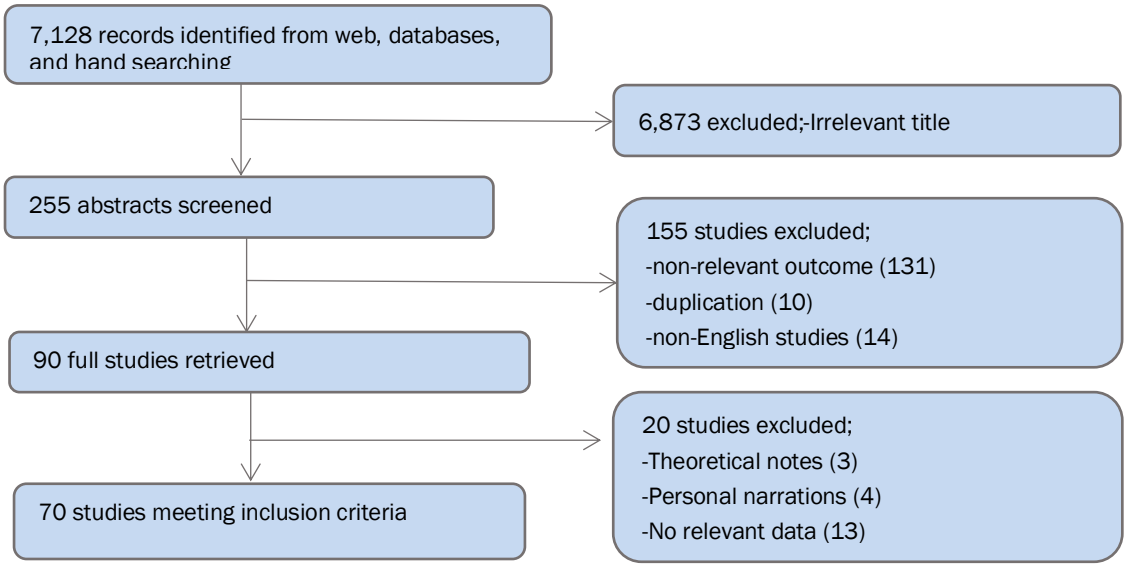
[19] These are adopted from the GRADE system of classifying effect estimates (*www.gradeworkinggroup.org).*

The search was limited to the years 2000 through 2016. It is possible some papers were missed, both from before January 1, 2000 as well as between the last search date of 31 August 2016 and publication of this paper. Non-English articles were excluded, and pertinent work on the impact of FGM/C interventions from non-English countries may have been missed. In addition, most studies report the 'effectiveness of outcomes' rather than 'overall impact' on FGM/C, and some of these outcomes are what would be considered intermediate outcomes, such as changes in knowledge, perception, or beliefs, which can at best be used as proxy indicators. Finally, the available study publications tended to be too brief, possibly due to publishing requirements and page limits, to allow for adequate methodological assessments. Bearing in mind these limitations, it is possible that this REA's findings could have included more studies, e.g. earlier work albeit of varying quality, on the impact of FGM/C interventions.

# GENERAL FINDINGS

In total, 70 studies of 7,128 retrieved published met the inclusion criteria, shown in the prisma diagram (Figure 1). The majority, 55 of the 70 (78.6%) studies, were in Africa, and a few, six of the 70 (8.6%), were in Europe, two (2.8%) were in Asia, with one (1.4%) each in Australia and Canada. The remaining 7.1 percent of the review studies (SR and/or OR) were inter-regional and reviewed interventions across the globe.

**Figure 1 Studies Assessed**




## Description of the interventions covered by the studies retrieved

The 70 studies captured a number of FGM/C interventions with various themes such as mass media campaigns to create awareness of FGM/C consequences and any laws against FGM/C, ARP, legal and policy measures, training of health care providers to manage FGM/C complications, educational sessions for girls, excisors and parents or caregivers, advocacy and empowerment interventions such as the training in non-formal skills to enhance women's and girls' independence, or the conversion of excisors, as shown in Table 5 (page 18). Most (44/70) studies assess multiple interventions, while 26 of the 70 assess a single intervention. Some intervention

classifications of 'single interventions' may not indicate that only one activity in a study: Studies may report on a single intervention theme such as human rights, but in practice such an approach uses various communication strategies to reach target groups,. Advocacy, awareness raising, and community empowerment were the most common interventions reported by the studies. A full description of the studies is provided in Appendix 1.

**Table 5 Type and Number of FGM/C Interventions reported by studies retrieved**

| Types of FGM/C interventions reported by studies | Number of interventions n = 180* |
|---|---|
| Human rights – interventions focusing on how FGM/C violates the rights of the girls and women | 13 |
| Legal/legislation – any law/policy criminalizing FGM/C or banning it | 18 |
| Health services provision and psychosocial support – Any medical, psychosexual and social support service that is offered to those affected by FGM/C | 3 |
| Health care professionals training – all health care workers training on management, counselling and recognition of FGM/C | 13 |
| Training and conversion of excisors – capacity building and alternative incomes for the excisors/circumcisers | 16 |
| Alternative rites of passage – any form of alternative rites of passage | 14 |
| Capacity building and institutional strengthening – capacity building of people involved in FGM/C like teachers, policemen, lawyers, religious leaders etc. | 15 |
| Positive deviance – any respectable member of the community who has resisted FGM/C and acts as a champion/role model | 4 |
| Advocacy and awareness raising - communication interventions | 43 |
| Community change and development – education/empowerment of the girl child, community trainings, mass media campaigns | 35 |
| Safe houses – any centres set up to offer refuge to those running away from FGM/C including education and rehabilitation centres. | 6 |

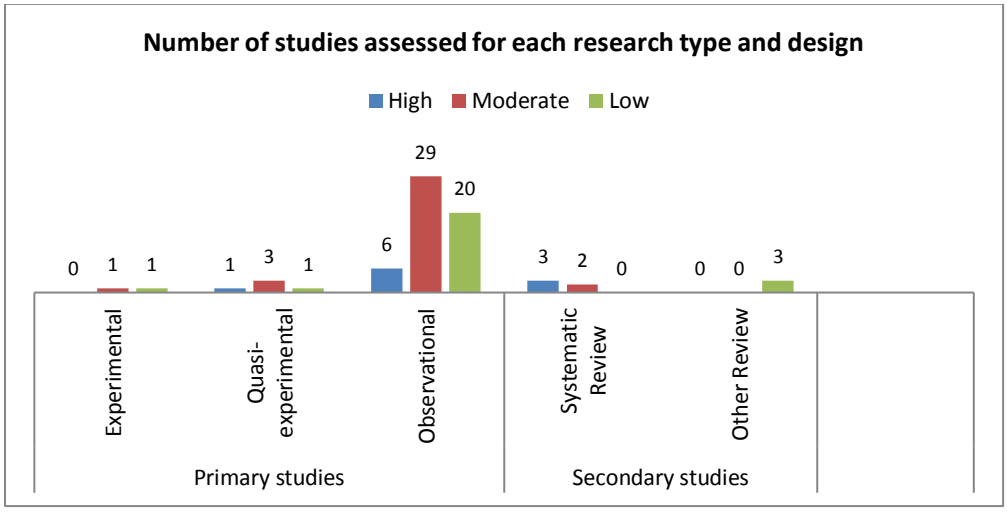
**The total number of interventions is 180 because most studies (44/77) reported on multiple interventions.*

## Assessment of quality of studies

Of the 70 studies retrieved, eight were secondary studies (five systematic reviews and three non-systematic/other reviews[20]), and the rest were primary studies. Seventeen studies were published in peer-reviewed journals, eight were student theses, and the remainder were evaluations and non-peer reviewed reports.

[20] These are the so called other reviews in the DFID tool and Table 2 (framework of evidence classification).

**Figure 2: Number of studies assessed for each research type and design**




Ten studies were of high quality, 35 were of moderate quality, with 25 of low quality (Figure 2 and Appendix 1). High quality was defined by an aggregate score of 9 to 12, reflecting a score of up to 2 for each of the six principles identified for this review. A score of 2 for a principle indicates 'no issues' to challenge that principle. Moderate is indicated by a score of 5 to 8, with a low score of 0 to 4. The principles of validity and reliability were poorly scored, except for the one high quality thesis. Evaluation reports scored highly on the principle of transparency, which was not the case for peer-reviewed journals.

Most studies did not have baseline data to make claims of effectiveness or impact. Only two studies of moderate quality had presented baseline data. Most evaluation reports used self-reported qualitative data to support claims of effectiveness. Studies mainly reported on changes in knowledge, attitude, perception, and intentions to abandon FGM/C. There was a general lack of studies reporting on actual impacts on reduction or abandonment of FGM/C, and when they did, they relied upon Demographic Health Surveys (DHS) and multiple indicator cluster surveys (MICS), suggesting cause and effect relationships without accurately linking the impact to FGM/C.

High, moderate, and low quality ratings do not necessarily reflect the qualities of the interventions themselves, but the extent to which the study describing it provides sufficient information to enable an assessment of criteria of the study's quality.

The following section focuses on providing further descriptions of the high quality studies that investigated the impact of FGM/C interventions. The findings of moderate and low quality studies have been used to support the narrative synthesis of FGM/C interventions described as high quality studies analysed in this REA.

## High quality studies

This REA found 10 high quality studies (seven primary and three secondary) that investigated the impact of FGM/C interventions. To avoid a duplication of already reviewed studies, the study team did not consider any secondary studies (n=3) in this part of the analysis. These were subsequently used to support the FGM/C intervention narrative of the high quality studies described in Table 6 (page 20).

The most interesting finding is that the remaining seven high quality studies applied varied study methodologies: two quantitative (Diop and Askew 2009, P; QEX↑, Crisman et al. 2016, P; OBS↑), two qualitative (Mepukori 2016, P; OBS↑, Oloo 2011, P; OBS↑), and three of mixed methodologies, two of which are TOSTAN studies from Ethiopia (UNICEF 2012a, P; OBS↑) and Somalia (UNICEF 2012b, P; OBS↑), as well as the study on ARP in Kenya (Chege et al., P; OBS↑).

**Table 6 Description of High Quality Studies**

| Study | Core intervention | Complementing intervention | Effect on FGM/C | Underlying reason for success/failure |
|---|---|---|---|---|
| **1. Diop N. & Askew I. (2009)**<br><br>Senegal<br>28% FGM/C prevalence national but vary with region<br><br>(Kolda -94%) and ethnicity<br><br>FGM/C outlawed in 1999 | Community-based Education programme (TOSTAN programmes)<br><br>Focused on;<br>▪ Human rights<br>▪ Problem solving<br>▪ Basic hygiene<br>▪ Women's health | There was a law prohibiting FGM /C since 1999 | Significant increase in awareness on FGM/C consequences; 7 times more (from 11% to 80%)<br><br>More than 4 times reduction in the proportion seeing FGM/C as a necessity; 15% increase in proportion of girls under 10 years not cut | The project involved community participation and dialogue which ensured sustainability<br><br>Adopt-a-friend approach helped to spread the message<br><br>Passive diffusion where every member who had undergone the programme informed others not in the programme<br><br>Some of these success factors have been replicated in another region, Somali Tostan Programme (UNICEF 2012)<br><br>The success of this TOSTAN programme could also be attributed to multipronged approaches which were implemented in this country |
| **2. Oloo, H., et al. (2011)** | Alternative Rites of Passage (ARP)<br><br>Focused on;<br>▪ Community sensitization about ARPs<br>▪ Training on family life education<br>▪ Public graduation ceremony | Community education<br><br>Public communication for social norms change | Long term abandonment of FGM/C<br><br>Establishment of rescue centres which offer safe spaces for girls under threat of FGM/C, among other harmful practices | Implemented as part of a programme involving community awareness raising, working with schools, health providers, religious and community leaders<br><br>Success among the Kisii was that ARPs were integrated with girls' empowerment programmes.<br><br>Residential ARP camps were supported by intensive community awareness activities, which encourage the local community to recognize the ARP graduation ceremony as an alternative to FGM/C<br><br>On the other hand, ARPs in Kuria did not record similar success as in Kisii as the concept of ARP was less well articulated. The emphasis had been placed on rescuing girls from FGM/C, with camps organised during the FGM/C season.<br><br>Although these camps also include an ARP graduation ceremony, as well as training on the health risks of FGM /C and the violation of the rights of girls and women, the local community recognises these elements only to a limited extent |
| **3. Chege et al. (2001)**<br><br>Kenya National FGM prevalence at 38% (KDHS 1998) but differed by ethnicity from as high as 93% in Gucha to a low of 12% among Kambas<br><br>Reasons for FGM included preservation of traditions and improving chances of marriageability | Alternative Rites of Passage (ARP)<br><br>Focused on;<br>▪ Community sensitization about ARP<br>▪ Training on family life education<br>▪ Public graduation ceremony | Health education<br>Human rights sensitization | There was an increase in the knowledge health effects of FGM/C, mainly bleeding, septicemia and difficult labour<br><br>There was a difference (statistically significant) where those in ARP would like to see FGM/C discontinued | Child protection laws which prohibit FGM/C on children came into force in 1999 and may have led to the respondents give "socially acceptable answers"<br><br>Exhaustive understanding of the reasons why people do FGM/C is crucial to designing an appropriate ARP<br><br>ARP should mimic the /C as much as possible but without the cut<br><br>Community involvement seems to have facilitated community buy-in into the programme and hence acceptability |

| Study | Core intervention | Complementing intervention | Effect on FGM/C | Underlying reason for success/failure |
|---|---|---|---|---|
| **4. Mepukori (2016)**<br><br>Kenya 21% FGM/C prevalence (almost 100% among Samburu)<br><br>FGM/C conducted between 9-14 years for marriage purposes<br>Highly patriarchal | Alternative Rite of Passage (ARP)<br><br>Focused on;<br>▪ Training by peer educators<br>▪ All inclusive<br>▪ Support community dialogue days | Community education on ARP and FGM/C health effects | There is a shift towards less harmful forms of cutting to maintain the social status<br><br>There is some change in attitude towards FGM/C however not quantifiable<br><br>Not much change can be inferred directly on the ARP for reduction of FGM/C. | FGM law was passed in 2011<br><br>The "outsiders" view of a patriarchal society may have limited the effectiveness off the intervention |
| **5. Crisman et al (2016)**<br><br>Burkina Faso >70% FGM/C prevalence as at 2010<br><br>Age of cutting mainly <5 years | Legislation criminalizing FGM/C | Awareness raising and community education initiatives (started in 1975) | Legislation led to a 25-30% reduction in the likelihood of being cut by the age of 5 years. | Awareness raising about FGM/C had been ongoing for decades leading to people questioning its usefulness<br><br>There was great sensitization on the law banning FGM/C |
| **6. UNICEF (2012)**<br><br>Ethiopia FGM/C prevalence at 74% | TOSTAN Programme Community-based education programme<br><br>Focused on;<br>▪ Community conversations<br>▪ Religious dialogues<br>▪ Legislation<br>▪ Community education on health effects of FGM/C | Use of existing community structures like churches, mosques, other | Increased awareness and understanding of the adverse health effects of FGM/C<br><br>Some type of justice is used to punish perpetrators of FGM/C<br><br>FGM/C is now understood as a crime and people may fear punishment if they practice it | The involvement of prominent members of society makes the community more receptive to the message<br><br>Having formal and informal means of enforcing the legislation helped women realize that they can get justice. |
| **7. UNICEF (2012)**<br><br>Somalia >90% prevalence of FGM/C in the communities, almost 100% in the rural communities. | TOSTAN Programme Community based education programme<br><br>Focused on;<br>▪ Human rights<br>▪ Problem solving<br>▪ Basic hygiene<br>▪ Women's health | Establishment of community participation and committees, community outreach | No effect on FGM/C practice over 70% of the women still practice FGM/C<br><br>There was, however, a change in perceptions and attitudes towards FGM/C | Having the community management committees may have led to the change in attitudes in these communities<br><br>Advocacy and awareness raising of the communities before the introduction of the programme may have eased the introduction of the TOSTAN Programme and led to better findings.<br><br>Passive diffusion where every member who had undergone the programme was expected to inform others not in the programme |

## Types of FGM/C Interventions covered by High Quality Studies

### a) Community Education and Empowerment Programmes

Using a holistic approach, community education and empowerment programmes (CEEPs) enable communities to receive formal and informal education on human rights, problem solving, basic hygiene, and women's health. The most commonly known CEEP is TOSTAN, which began in Senegal in the 1980s and has been implemented in six African countries including Burkina Faso, Ethiopia, Mali, and Somalia.

#### How it might work

CEEPs create a platform for internal community discussions on harmful traditional practices including FGM/C. Through these conversations, people start to question the role of some practices, especially those deemed as having negative consequences, enabling a change in social norms.

#### Key Findings: Community Education and Empowerment Programmes

Three high quality studies assess CEEP interventions, each assessing the TOSTAN programme, in different contexts. In Senegal (Diop and Askew 2009, P; QEX↑), TOSTAN was found to have a significant effect on changing community FGM/C attitudes and perceptions, with a 15 percent increase in the proportion of girls under 10 years old who were not cut. Other anti-FGM/C activities implemented in Senegal during the same period included passage of an anti-FGM law, which may have resulted in under-reporting of being cut and a subsequent an over-estimate of the CEEP intervention's effect, given that the evaluation depended on FGM/C status self-reports. Prior work by NGOs in Senegal on FGM/C may have contributed to awareness in the community: By the time TOSTAN was introduced, communities may have already begun to question FGM/C practice and were more likely to be receptive to changing their behaviours. In Ethiopia, UNICEF (2012, P; OBS↑) reported that the involvement of prominent members of the society made their communities more receptive to the message of FGM/C abandonment, which positively affected the TOSTAN programme's success in Ethiopia's Woredas administrative district.

A separate UNICEF study (2012, P; OBS↑) determined that following the implementation of TOSTAN in Somalia, no effect could be attributed in FGM/C reduction given that over 70 percent of people still practiced it. Perceptions and attitudes towards FGM/C did change, however, with a larger proportion of those in the intervention arms reporting opposition to FGM/C. This evaluation did not have access to baseline data, making it hard to accurately measure any effect attributable to TOSTAN. Moreover, social change takes time, and this intervention was only present for three years. The TOSTAN programme in Mali (Monkman 2007, P; OBS→) also reported some effects on change in attitudes and perception of FGM/C, but it is difficult to determine the effect on FGM/C abandonment.

CEEPs are useful, as they often provide a target community with unintended positive effects such as an increased skills for income earning or better understanding of reproductive health issues (Abeje 2011, P; OBS↓). Improving the livelihoods of community members seems to correlate positively with FGM/C abandonment. Bø Nesje (2014, P; OBS→), in his secondary analysis using DHS data from Kenya, reports that educating a girl child as part of CEEP has an effect of reduced FGM/C. This results was found to necessitate concurrent awareness-raising among other community members, however.

This finding should be interpreted with caution, as the study is a retrospective analysis of DHS data and involved data reconstruction. Adongo (2004, P; QEX↓) reports significant effects on FGM/C reduction (93%) in Ghana due to FGM/C-focused CEEPs. These findings, however, must be interpreted considering the limitations of the article, which was too brief to allow for a good methodological critique and provides no link to data to confirm the results. Furthermore, low quality evaluation studies of other programmes, such as those in Egypt (Abdel-Tawab 2000, P; OBS↓), Somaliland (Kisamwa 2014, P; OBS↓), Sudan (Sudan Council of Churches 2004, P; OBS↓), and Canada (Simret 2013, P; OBS↓), all report that this intervention may have effects in changing FGM/C attitudes and knowledge.

### b) Alternative rites of passage

Interventions involving ARP have been used to offer an alternative form of transition from childhood to adulthood—without cutting—in communities where FGM/C signifies entry of a girl into mature womanhood. This intervention was reported by three high quality studies (Chege et al, P; OBS↑, Oloo 2011, P; OBS↑, Mepukori 2016, P; OBS↑). It had been widely adopted in Kenya since the 1990s and continues to be widely emulated (e.g. The Gambia and Uganda), with mixed or uncertain results (Chege et al, P; OBS↑). ARP programmes include community values deliberations (where girls are educated on family life and culture of womanhood) and community education (to ensure investment resulting in less community stigmatisation of girls once they leave the ARP programme) to precede a public declaration to end FGM/C. In some instances, a combined model is used, when an alternative rite intervention is preceded by participatory education and deliberation among the whole community. Participating girls are educated on a range of topics to equip them for adulthood, to become mentors and role models for their peers, and to participate in the development process in their homes, schools, and community. Given the sustained interest in ARP, it remains important to understand how they work, and their effectiveness. It is also crucial to have it replicated and evaluated in other cultural contexts.

#### How it may work

ARP may help reduce FGM/C in communities where FGM/C is practiced as a rite of passage from childhood to adulthood. This approach seeks to provide immediate and long-term outcomes for girls with changes in knowledge, attitudes, and behaviour, and an end to cutting. ARP is unlikely to be effective in communities where FGM/C is practiced for purposes other than as a rite of passage into adulthood.

#### Key Findings: ARP interventions

Fourteen studies (three high, six moderate, and five of low quality) report ARP interventions. Three high quality qualitative studies found ARPs to have significant changes in FGM/C knowledge, attitudes, and perceptions, but there were no significant reductions in the practice (Chege et al, P; OBS↑, Oloo 2011, P; OBS↑).

A student thesis from Kenya examines the effectiveness of ARPs implemented as discrete interventions (Mepukori 2016, P; OBS↑) within the Samburu community, and finds that ARP has no effect on reducing FGM/C when implemented this way. The study recommends that ARP should be used in combination with other intervention approaches such as community awareness-raising. Similar reports (Oloo 2011, P; OBS↑) state that ARPs were found effective in one community (Abagusii)

in Kenya and not in another (Abakuria), suggesting that cultural context and engagement of communities as stakeholders in this process is crucial.

Five low quality studies from Nigeria (Adeniran 2014, P; OBS↓), Kenya (Nambisia 2014, P; OBS↓, Masas 2009, P; OBS↓), and Tanzania (Waritay 2009, P; OBS↓, NORAD, P; OBS↓) report on ARP effectiveness. All five studies report that ARP can be useful in reducing FGM/C. The findings from these studies should be interpreted with caution, however, as ARP is most effective where FGM/C is practiced and celebrated as a rite of passage to adulthood, and not within communities practicing FGM/C on young children. If the cultural underpinnings of FGM/C are not assessed before evaluation and communities are not involved the development of an ARP intervention, its effectiveness is found to be diminished (Oloo 2011, P; OBS↑).

This REA reveals that ARP in Kenya positively affect changes in FGM/C knowledge, attitude, and practice. Even within Kenya, however, mixed findings are reported, depending upon specific ethnic groups. This variation is attributed to a lack of an integrated or comprehensive approach to addressing specific FGM/C cultural contexts. Community awareness needs to be raised before ARP's implementation, to ensure community investment and participation.

### c) Legal/legislative interventions

Due to the growing recognition of FGM/C as a violation of human rights, countries have passed laws to support its abandonment. In 2012, the UN adopted a resolution banning FGM/C among other traditional harmful practices. High, low and middle income countries, such as the UK, Belgium, Sweden, Spain, France, Egypt, Kenya, Nigeria, Burkina Faso, Ghana, Senegal, Tanzania, Togo, Niger, Guinea, Benin, Central African Republic, Chad, Cote d'Ivoire, and Djibouti, among others [21], have formulated legislation banning this practice. This intervention was reported by Crisman et al. (2016, P; OBS↑) whose study focused on the Burkina Faso context.

Legislation to combat FGM/C is controversial due to the proliferation of unintended consequences such as the practice being driven underground, under-reporting of FGM/C in national surveys, as well as community opposition to the laws[22] when the underlying causes of FGM/C are not addressed. This section covers the assessment of studies that reported on legal measures that prohibit, ban, or criminalise FGM/C by providing a legal platform for action and protection of girls and women from the practice.

#### How it may work

When legislation bans FGM/C, it is assumed that, if properly enforced, it can immediately lead to FGM/C abandonment due to punitive consequences. This is a 'top-down' approach, since laws are made at the national and international levels, and it is assumed that both families and local legal authorities are aware of laws and associated sanctions.

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[21] Leye E. and Deblonde J. 2008. Legislation in Europe regarding female genital mutilation and the implementation of the law in Belgium, France, Spain, Sweden and the UK. *Female Genital Mutilation: Legal Prohibitions Worldwide*. New York: Center for Reproductive Rights. www.reproductiverights.org/pub_fac_fgmicpd.html

[22] Mackie, Gerry. 2010. Ending Foot binding and Infibulation: A Convention Account. American Sociological Review.

### Key Findings: Legal interventions

One high quality study evaluated the effects of national laws on FGM/C practice. A regression analysis by Crisman *et al* (2016, P; OBS↑) assessed the effect of a law passed in Burkina Faso in 1996 banning FGM/C. A 30 percent reduction in FGM/C followed the law's passage, after interventions against FGM/C had been ongoing in Burkina Faso for a long time (since the 1970s), and it is possible the reduction was due to multipronged intervention approaches such as advocacy and community awareness, and thus cannot only be attributed to the law.

Legislation offers a framework within which other interventions can be implemented. As such, this approach is rarely implemented as a standalone intervention. For example, in Ethiopia (UNICEF 2012, P; OBS↑) community conversations and religious dialogues, legislation, and community education about the harmful effects of FGM/C were implemented concurrently, resulting in changes in attitudes and perceptions of FGM/C, which could, in turn, lead to a reduction of FGM/C.

All studies focusing on legal measures note that any real effect is difficult to assess among communities where the practice may have gone underground because of criminalisation. Studies also show that legislation may lead to FGM/C's medicalisation. In Egypt (Ibrahim MA 2012, P; OBS →), a law criminalising FGM/C led to a shift towards medicalisation despite an existing law banning medical practitioners from performing FGM/C. This raises issues about the extent to which legislation is useful in combating FGM/C, especially among communities with strong cultural norms that sustain the practice. These communities will rarely enforce the law and may only offer nominal adherence to it.

The difficulties of legislative approaches involve their implementation and limited enforcement. Litigation of cases has been slow or wanting. Legal measures need to be carefully considered as governments develop these laws: Any enforcement must be culturally sensitive so community members are sufficiently empowered to support the law's implementation. Overall, this study found limited evidence on legal measures and relatively limited findings on the effectiveness of this type of intervention.

## DISCUSSION

Substantial effort and resources have been put into combating FGM/C, as evidenced by the number of ongoing or completed interventions published during the period under review, January 2000 through August 2016. Using the DFID tool to assess quality in this REA provided the opportunity to assess both qualitative and quantitative studies, which greatly informed the REA's rich understanding of perspectives of studies that investigated the impacts of FGM/C interventions. This REA finds that the quality of evidence on studies assessing or evaluating FGM/C interventions is generally moderate to low, not for lack of robust interventions, but rather lack of robust studies that have evaluated these interventions, and a lack of baseline surveys prior to implementation, making assessment of interventions' effects and generalisability difficult.

Most studies that evaluate anti-FGM/C interventions concentrate on Africa, specifically sub-Saharan Africa, which is not surprising given that the prevalence of FGM/C is highest in these countries. An

increasing number of studies, however, are in Europe, reflecting the emergence of immigrant communities that practice FGM/C. Berg and Denison (2012 and 2013, S; SR↑) paint a similar picture of a high proportion of FGM/C intervention studies from Africa.

## Gaps in the body of evidence on high quality studies on FGM/C interventions

Of the 70 identified studies evaluating anti-FGM/C interventions, only a handful were high quality: seven primary and three secondary. Several factors could explain this result. First, a majority (five of the seven primary high quality studies) designed as experimental or quasi-experimental studies lacked baseline statistics before the intervention was implemented, which made it difficult for their reviewers to be confident about their studies' findings. Although these studies reported on interventions' effectiveness, those findings' validity and reliability are questionable because they do not demonstrate the presence and size of causal links with a high degree of confidence. Secondly, some peer-reviewed studies did not score well on the quality assessment of the 2014 DFID "How to Note". This was attributed to publication types that may have dictated length restrictions, and thus levels of detail could have been inadequate to enable reviewers' judgment of studies' quality, potentially leading to some peer-reviewed articles grades of low quality that may not reflect the actual study's quality. Some studies, such as evaluation reports or an academic thesis, however, have the advantage of scoring higher due to their methodologies' described comprehensiveness. Third, most publications did not receive a score on the transparency domain. One aspect of transparency as a measure of quality considers the disclosure of funding amounts and sources. This information was not provided for many studies. Moreover, some studies had challenges on the validity and reliability domains of the quality assessment, contributing to a lower overall quality scoring. Finally, given that FGM/C is a highly culturally embedded issue in practicing communities (Berg and Denison 2013, S; SR↑ and Varol 2015, S; SR↑), it is surprising that a good number of studies had issues with the domain of context, and studies did not emphasise adequate reporting on cultural sensitivity and social contexts during the design and analysis stages and interpretation of findings. Cultural sensitivity and context are important in the effort to end FGM/C because they shed light on how interventions should be fashioned to achieve maximum impact, when considering various cultural contexts. Not all interventions can be expected to work in the same way or have the same impacts in varied contexts.

## Effects of interventions in the high quality studies on FGM/C

The analysis of high quality studies highlighted in Table 5 indicates that ARPs (evaluated by three studies), legislation (one study), and CEEPs (three studies) influenced FGM/C knowledge, perception, and attitudes. These studies reveal that those interventions have led to more awareness of FGM/C's injurious effects on the overall health of girls and women. At the same time, these interventions create a platform, or a safe space, where people are comfortable discussing FGM/C, questioning their beliefs and practices, and making conscious intentions for abandoning FGM/C.

A review of postulated reasons found that:

- Integrated or multifaceted approaches to FGM/C interventions need to be at the core of these interventions strategies.
- It is important to involve local community members and leaders in the design of the intervention to enhance ownership, including the creation of community management committees; use of

local facilitators in the educational programmes; and engaging communities in ARP designs to ensure no stigmatisation for those who choose not be cut and participate in the ARP.

- One must have an appropriate understanding of the context in which FGM/C is practiced to design contextually appropriate interventions not seen as imposed on the community and, at the same, preserving the cultural identity of the community that practices FGM/C.

This REA is unable to draw a strong conclusion of the extent to which these interventions led to a reduction in FGM/C. Rarely was one intervention implemented as an independent intervention. In fact, in almost all FGM/C interventions evaluated, a communication strategy for raising awareness was central to sensitising communities about FGM/C and overcoming taboos. It is hard to determine causal relationships, especially because none of the study designs were randomised trials, the gold standard for effectiveness studies. Second, the practice of FGM/C is heavily entrenched within cultures, and a change in this practice requires a change in social norms. Such social and behavioural changes usually take time, and the lengths of follow ups of these studies may not have been sufficient to observe changes in the practice. Third, it is hard to tell from the study descriptions how changes in FGM/C practice or attitudes were measured. Measuring social change is a difficult task, and is a challenge both within the field of FGM/C and the wider context of social science. Developing clear indicators for effective measurement of change can be challenging, and this, in turn, affects the validity and reliability of findings.

## CONCLUSIONS

In general, the body of evidence from January 1, 2000 through August 31, 2016 produced by studies investigating the impact of interventions to end FGM/C is of low quality. This REA was conducted quickly so its findings can inform contemporaneous policy debates on the effectiveness of intervention programmes and provide a foundation for future research. This REA provides valuable methodological lessons for high quality studies along with beginning the understanding of 'what works', by highlighting interventions reported by high quality studies that have resulted in significant impacts for FGM/C prevention and abandonment.

The implications of this REA are:

1. There is need for designing high quality studies to evaluate interventions in regions where FGM/C practicing communities have immigrated, which will be crucial for building a picture of FGM/C interventions in communities or countries where FGM/C has not historically been practiced.
2. Many published reports assessing or evaluating FGM/C interventions describe those interventions poorly so readers are unable to fully understand what was implemented, why, and for what effect, limiting their ability to replicate or adapt interventions. This problem is becoming

apparent in other areas of reporting on the evaluations of health and behaviour change interventions[23].

3. There is a need for guidelines for documenting and reporting FGM/C intervention design and implementation processes, which will improve the scientific reporting of FGM/C interventions drawing from WIDER's recommendations[24].
4. There is a need for strengthening research designs, considering not just intermediate outcomes but interventions' impacts as well, with more robust methodologies with comparable case selections, longitudinal research studies with baseline surveys, and where feasible, randomised control trials.
5. The triangulation of findings using multiple methodologies to address the same research question should be encouraged, to address concerns of internal validity. A strong evidence base is required to accelerate FGM/C's abandonment.

## COMMUNICATION AND DISSEMINATION

The goal of this prorgramme's communication and dissemination efforts is to improve access to evidence of high quality studies to end FGM/C. Plans proposed for follow up for this report are:

- REA evidence synthesis, policy briefs, fact sheets, and key messages will be designed and developed from this REA, targeting specific cohorts of interested groups such as FGM/C policy makers, programmers, and relevant research communities.
- To complement these digital documents, a variety of communication tools and mechanisms will be used, including creating or making use of partnerships, venues, and opportunities for knowledge sharing such as FGM/C donor meetings, FGM/C workshops and conferences, and partner meetings, to promote awareness of this REA's findings.
- The fact sheet (translated into French and Arabic) and REA synthesis will also be formatted and disseminated on Population Council's online information technology platforms and the FGM/C intervention's database.
- A peer-reviewed journal publication is planned for November 2017.

[23] Davidoff, F et al. 2008. Publication guidelines for quality improvement in health care: Evolution of the SQUIRE project. *Quality & Safety in Health Care* 17: i3-i9.

[24] Michie S et al. 2009. Specifying and reporting complex behavior change interventions: the need for a scientific method. *Implementation Science* 4:40.

# APPENDIX 1: CLASSIFICATION OF THE LITERATURE RETRIEVED

| Study | Theme | Study method | Quality |
|---|---|---|---|
| 1. Abdel-Tawab N., & Hegazi S. (2000). Critical Analysis of Interventions against FGC in Egypt. *Population Council: Cairo, Egypt*. Available at https://pdfs.semanticscholar.org/6a50/43a64bf03f9a31e49605441f4ec57f8fba6a.pdf | Positive deviance, communication interventions and community change and development | Qualitative | ↓ |
| 2. Abdi M. S. (2007). A Religious Oriented Approach to Addressing FGM/C among the Somali Community of Wajir, Kenya. *Population Council,* Available at http://pdf.usaid.gov/pdf_docs/Pnado630.pdf | Community change and development | Qualitative | ↓ |
| 3. Abeje M., Wakjirra K., & Bekele K. (2011). Report on Final Evaluation of the "Afar Women and Girls' Sexual Reproductive Health, Livelihood and Right Project" in Afar Regional State. Available at www.careevaluations.org/Evaluations/Final%20Evaluation%20of%20Afar%20Women%20and%20Girls%E2%80%99%20Sexual%20Reproductive%20Health,%20Livelihood%20and%20Right%20Project%20in%20Afar%20Regional%20State.pdf | Legal, health services provision and psychosocial support, training and conversion of excisors, capacity building & institutional strengthening, communication interventions and community change and development | Mixed | ↓ |
| 4. Abreua W., & Abreu M. (2014). Community education matters: representations of female genital mutilation in Guineans immigrant women. *Procedia-Social and Behavioral Sciences, 171*, 620-628. | ARP | Qualitative | → |
| 5. Abuzeid A. (2005). Female Genital Mutilation (FGM) Program. Available at www.norad.no/globalassets/import-2162015-80434-am/www.norad.no-ny/filarkiv/ngo-evaluations/female-genital-mutilation-fgm-program.pdf | Human rights and communication interventions | Qualitative | → |
| 6. Adam Z. (2012). Behavior change with regard to Female Genital Mutilation/Cutting in Koulikoro (Rep of Mali). Available at www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwi_hbrDqtjSAhULD8AKHaIxBJoQFggbMAA&url=http%3A%2F%2Fwww.sas.upenn.edu%2Fppe%2FEvents%2Funiconf_2012%2Fdocuments%2FAdam.Zakari_Final.Paper.doc&usg=AFQjCNHfdyGncu_6E5Ik_jfJxaXEcW6laQ&sig2=uv7sySFem_o4xml__gatGA | Communication interventions | Mixed | → |
| 7. Addis continental Institute of Public Health (2009). Women's And Girls' Empowerment Project Ongoing Monitoring & Evaluation Final Report. Available at www.addiscontinental.edu.et/files/aciph_wag_endline.pdf | Communication interventions and Community change and development | Mixed | → |
| 8. Adeniran, A., Aboyeji, A., Balogun, O., & Ijaiyai, M. (2014). Eradicating Female Genital Mutilation: Case Series Evaluating the Effect of the Interventions. *University of Mauritius Research Journal, 20*, 248-254. | Communication interventions | Qualitative | ↓ |
| 9. Adongo P. B., et al. (2014). Community-based interventions can change detrimental social norms: Experience from the Navrongo Female Genital Mutilation Experiment. Available at http://paa2005.princeton.edu/papers/51279 | Community change and development | Qualitative | ↓ |

| Study | Theme | Study method | Quality |
|---|---|---|---|
| 10. Ahmed A. (2012). Evaluation of Norwegian Church Aid's (NCA) support to GBV projects implemented by SNCTP in Mayo Farm (2004-2010). Available at www.kirkensnodhjelp.no/contentassets/6bb63d724adf49e2ad68b607d648ab51/sudan-gender-evaluation-final-report.pdf | Human rights, legal, communication interventions and Community change and development | Mixed | → |
| 11. Anis M., Adwai I., & Kamel M. (2008). Think Twice Project Final Evaluation. Available at www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwjI9P-bq9jSAhXLL8AKHYGFB9wQFggbMAA&url=https%3A%2F%2Ferc.undp.org%2Fevaluation%2Fdocuments%2Fdownload%2F2135&usg=AFQjCNFvyXOz5C8xdG4CVDd9FZOOGJc_Xg&sig2=KeE41lpJE7z1w7neHvvntw | Legal and communication interventions | Mixed | ↓ |
| 12. Asekun-Olarinmoye, E. O., & Amusan, O. A. (2008). The impact of health education on attitudes towards female genital mutilation (FGM) in a rural Nigerian community. The European Journal of Contraception & Reproductive Health Care, 13(3), 289-297. | Training and conversion of excisors and Community change and development | Mixed | ↓ |
| 13. Babalola, S., Brasington, A., Agbasimalo, A., Helland, A., Nwanguma, E., & Onah, N. (2006). Impact of a communication programme on female genital cutting in eastern Nigeria. *Tropical Medicine & International Health, 11*(10), 1594-1603. | Communication interventions | Quantitative | → |
| 14. Bale Zone Finance and Economic Development Office (2010). EECMY-WBS-DASSC Terminal Evaluation of FGM Elimination project. Available at www.norad.no/globalassets/import-2162015-80434-am/www.norad.no-ny/filarkiv/ngo-evaluations/sinana-female-genital-mutilation-elimination-project-fgmep-ethiopia.pdf | Health Care Professionals Training, Training and conversion of excisors, Capacity building & institutional strengthening and communication interventions | Qualitative | ↓ |
| 15. Balfour, J., Abdulcadir, J., Say, L., & Hindin, M. J. (2016). Interventions for healthcare providers to improve treatment and prevention of female genital mutilation: a systematic review. *BMC Health Services Research, 16*(1), 409. | Health Care Professionals Training | Systematic Review | → |
| 16. Barsoum, G., Rifaat, N., El-Gibaly, O., Elwan, N., & Forcier, N. (2011). Poverty, Gender, and Youth. National Efforts Toward FGM-Free Villages in Egypt: The Evidence of Impact. *Population Council.* Available at www.popcouncil.org/uploads/pdfs/wp/pgy/022.pdf | Communication interventions and Community change and development | Mixed | → |
| 17. Berg, R. C., & Denison, E. (2013). A tradition in transition: factors perpetuating and hindering the continuance of female genital mutilation/cutting (FGM/C) summarized in a systematic review. *Health care for women international*, *34*(10), 837-859 | Human rights and Legal | Systematic Review | ↑ |
| 18. Berg, R. C., & Denison, E. M. (2013). A realist synthesis of controlled studies to determine the effectiveness of interventions to prevent genital cutting of girls. Paed & I Child H, 33(4), 322-333. | Health Care Professionals Training, communication interventions and Community change and development | Systematic Review | ↑ |

| Study | Theme | Study method | Quality |
|---|---|---|---|
| 19. Bø Nesje F.H. (2014). Effects of Schooling on Female Genital Cutting: The Case of Kenya. Available at www.duo.uio.no/bitstream/handle/10852/41004/nesje-frikk.pdf?sequence=1 | Community change and development | Quantitative | → |
| 20. Brown E. (2013). The FGM Initiative Summary of PEER Research Endline Phase 1. Available at www.trustforlondon.org.uk/wp-content/uploads/2013/06/FGM-report-PEER-Summary-Report_070513.pdf | Communication interventions and Community change and development and Rescue centres | Qualitative | → |
| 21. Brown E. & Porter C. (2016). Tackling FGM Initiative: An Evaluation of the Second Phase. Available at www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwje9MbmndjSAhUiIMAKHSA0AH8QFggbMAA&url=http%3A%2F%2Fesmeefairbairn.org.uk%2Fuploads%2Fdocuments%2FPublications%2FTackling_FGM_Initiative_Final_Evaluation_Report-_Phase_2_-_2016.pdf&usg=AFQjCNGAvYmPoZDJozEnki82X68vptKrPA&sig2=kDR1UJpNd_cZkw0pwXdzdg | Human rights, legal, Health services provision and psychosocial support, Health Care Professionals Training, Capacity building and institutional strengthening, Capacity building & institutional strengthening, communication interventions and community change and development | Qualitative | → |
| 22. Buttia C. (2015). Investigation of Successful Interventions in Mitigation of Female Genital Mutilation/Cutting (FGM/C) Among Selected Kenyan Communities: Maasai, Kisii and Kuria. Available at http://edoc.sub.uni-hamburg.de/haw/volltexte/2015/3185/pdf/Chepkoech_Buttia_MA.pdf | Human rights, legal, training and conversion of excisors and ARP, capacity building and institutional strengthening, communication interventions, community change and development and rescue centres | Review | → |
| 23. Chege, J. N., Askew, I., & Liku, J. (2001). An Assessment of the Alternative Rites Approach for Encouraging Abandonment of Female Genital Mutilation in Kenya. New York, USA: Population Council. | ARP and communication interventions | Mixed | ↑ |
| 24. Chege, J., Askew, I., Igras, S., & Mutesh, J. K. (2004). Testing the effectiveness of integrating community-based approaches for encouraging abandonment of female genital cutting into CARE's reproductive health programs in Ethiopia and Kenya. *Washington, DC: Population Council*. | Communication interventions and Community change and development | Mixed | → |
| 25. Cooke S. & Montgomery P. (2013). END FGM Campaign 2009-2013. Available at http://human-dignity-foundation.org/wp-content/uploads/2014/02/Evaluation-report-END-FGM-Campaign.pdf | Health Care Professionals Training, Capacity building & institutional strengthening and communication interventions | Qualitative | → |
| 26. Crisman B., et al. (2016). The Impact of Legislation on the Hazard of Female Genital Mutilation/Cutting: Regression Discontinuity Evidence from Burkina Faso. Available at www.cgdev.org/sites/default/files/impact-legislation-hazard-female-genital-mutilationcutting-regression-discontinuity.pdf | Legal | Quantitative | ↑ |
| 27. Diawara A., & Kouyaté A.D (2009). Evaluation of Gender Based Violence Program. Available at www.norad.no/globalassets/import-2162015-80434-am/www.norad.no-ny/filarkiv/evaluation--of-gender-based-violence-program-mali-final-report-2009.pdf | Human rights | Qualitative | ↓ |

| Study | Theme | Study method | Quality |
|---|---|---|---|
| 28. Diop, N. J., & Askew, I. (2009). The effectiveness of a community-based education program on abandoning female genital mutilation/cutting in Senegal. Studies in Family Planning, 40(4), 307-318. | Training and conversion of excisors and Community change and development | Quantitative | ↑ |
| 29. Döcker, M. (2001). Overcoming Female Genital Cutting. *Theory and Practice: World Vision Institute for Research and Innovation*, *8*, 1-20. | Human rights | Review | ↓ |
| 30. Ethiopian Evangelical Church Mekane Yesus Development and Social Service Commission (2012) Final-term Evaluation Report of Sinana Female Genital Mutilation Elimination Project. Available at www.norad.no/globalassets/import-2162015-80434-am/www.norad.no-ny/filarkiv/ngo-evaluations/ethiopia-fgm-terminal-evaluation-report-2012.pdf | Training and conversion of excisors, Capacity building & institutional strengthening and communication interventions | Qualitative | → |
| 31. Egbuonu, A. I., Ifeoma. (2000). The prevalence and practice of female genital mutilation in Nnewi, Nigeria: the impact of female education. Journal of Obstetrics and Gynaecology, 20(5), 520-522. | Community change and development | Quantitative | ↓ |
| 32. Feed the Minds and Orchid Project (2016). Final Evaluation of an FGM/C abandonment project in Kuria, Western Kenya. https://orchidproject.org/wp-content/uploads/2016/04/Final-ECAW-Evaluation-plain-front-page.pdf | Capacity building & institutional strengthening, communication interventions and Community change | Mixed | → |
| 33. Galukande, M., Kamara, J., Ndabwire, V., Leistey, E., Valla, C., & Luboga, S. (2015). Eradicating female genital mutilation and cutting in Tanzania: an observational study. *BMC public health, 15*(1), 1147. doi:10.1186/s12889-015-2439-1 | Legal, Training and conversion of excisors, Alternative rites of passage and communication interventions | Mixed | → |
| 34. Hailu Y. (2010). Securing the Future of Afar Pastoralist Women through Ending Female Genital Mutilation. Available at www.fokuskvinner.no/PageFiles/5228/APDA_FGM_evaluation_final.pdf | Training and conversion of excisors and communication interventions | Qualitative | → |
| 35. Hassanin, I. M., & Shaaban, O. M. (2013). Impact of the complete ban on female genital cutting on the attitude of educated women from Upper Egypt toward the practice. International Journal of Gynecology & Obstetrics, 120(3), 275-278 | Legal | Quantitative | → |
| 36. Hernlund Y. (2009). Training and Information Campaign on the Eradication of FGM, the Gambia (GAMCOTRAP). Available at www.fokuskvinner.no/PageFiles/5228/Evaluation%20report%20-%20TRAINING%20AND%20INFORMATION%20CAMPAIGN%20ON%20THE%20ERADICATION%20OF%20FGM%20-%20Gambia.pdf | Communication interventions and Community change and development | Mixed | → |
| 37. Ingdal N., Umbima J. & Tysse A.L. (2008). Practice Reduction and Awareness on Female Genital Mutilation (FGM). Available at www.fokuskvinner.no/PageFiles/5228/Final%20FGM-REPORT,%20KFUK%20Kenya.pdf | Training and conversion of excisors, Alternative rites of passage, Capacity building & institutional strengthening, Community change and development and Rescue centres | Qualitative | → |

| Study | Theme | Study method | Quality |
|---|---|---|---|
| 38. Jafrani N., et al. (2015). An Evaluation Of The FGM Project & Proposed Methods For Improvement. Available at www.publichealth.northwestern.edu/docs/nphr-docs/workingpaper-FGMproject.pdf | Training and conversion of excisors, communication interventions and Community change and development and Rescue centres | Mixed | → |
| 39. Johansen, R. E. B., Diop, N. J., Laverack, G., & Leye, E. (2013). What Works and What Does Not: A Discussion of Popular Approaches for the Abandonment of Female Genital Mutilation. Obstetrics and Gynecology International, 2013, 10. doi:10.1155/2013/348248 | Legal, Health Care Professionals Training, Training and conversion of excisors, Alternative rites of passage, Capacity building and institutional strengthening, communication interventions and Community change and development | Review | ↓ |
| 40. Kaunga S. (2014). Media Strategies And Their Influence In Communicating Information On Female Genital Mutilation: A Case Of Meru Community In Tharaka District. Available at http://erepository.uonbi.ac.ke/bitstream/handle/11295/77056/Kaunga_Media%20Strategies%20And%20Their%20Influence%20In%20Communicating%20Information%20On%20Female%20Genital%20Mutilation%20A%20Case%20Of%20Meru%20Community%20In%20Tharaka%20District.pdf?sequence=4&isAllowed=y | Communication interventions | Mixed | → |
| 41. Keita K., Cissé E. & Konaté A. (2010). Report of the Qualitative Research on the Radio Serial Drama Jigi ma Tignè. Available at www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwjBnMPwpNjSAhVBJsAKHXEZADcQFggbMAA&url=http%3A%2F%2Fwww.populationmedia.org%2Fwp-content%2Fuploads%2F2010%2F04%2FPMC-Mali-Qualitative-Research-Report-05-01-2010.doc&usg=AFQjCNFBAcoUzDM0lQyXZ8QnGF-MlyGFiQ&sig2=gmhd_CZzgfwFeph6ACOcUw | Communication interventions | Qualitative | → |
| 42. Kisamwa F. L. (2014). Final Evaluation Report of FGM/C Reduction through Capacity Building, Awareness Raising and Advocacy in 15 Villages in Garowe District of Puntland State of Somalia. Available at www.folkehjaelp.dk/wp/wp-content/uploads/KAALO-DPA-FGM-Project-Final-Evaluation-1402.pdf | Communication interventions and Community change and development and Rescue centres | Qualitative | ↓ |
| 43. Latham, S. (2016). The campaign against Female Genital Cutting: empowering women or reinforcing global inequity? *Ethics and Social Welfare, 10*(2), 108-121. doi:10.1080/17496535.2016.1167227 | Positive Deviance | Qualitative | ↓ |
| 44. Lokurosia J. C. (2006). An assessment of the impact of health campaigns against female genital mutilation in West Pokot district, Kenya. Available at http://ir-library.ku.ac.ke/handle/123456789/1944 | Alternative rites of passage and communication interventions | Mixed | → |
| 45. Masas J. (2009). Evaluation Report for the Anti Female Genital Evaluation Report for the Anti Female Genital Mutilation Maasai (FGM) Project. Available at www.norad.no/globalassets/import-2162015-80434-am/www.norad.no-ny/filarkiv/ken_10584_anti-fgm-among-maasai_evaluation-report_june-2009_from-project.pdf | Human rights, Alternative rites of passage, Capacity building and institutional strengthening and communication interventions and Community change and development | Qualitative | ↓ |

| Study | Theme | Study method | Quality |
|---|---|---|---|
| 46. Memon A. (2014). Female Genital Cutting: A community based approach to behaviour change. Available at www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwj5kc-CqNjSAhWIJsAKHfBTC88QFggbMAA&url=http%3A%2F%2Fwww.pc.rhul.ac.uk%2Fsites%2Frheg%2Fwp-content%2Fuploads%2F2011%2F05%2Freview-of-fgm-literature-october-14-10-14.docx&usg=AFQjCNH7b4iVBWNZR6_G5HoBj_F0ub-NUA&sig2=gf14YRbs8ERZFcbirUm3Ig | Review | Mixed | ↓ |
| 47. Mepukori D.N. (2016). Is Alternative Rite of Passage the Key to Abandonment of Female Genital Cutting? A case study of the Samburu of Kenya. Available at http://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/11858/Mepukori%20Honors%20Thesis.pdf?sequence=1 | Alternative rites of passage | Qualitative | ↑ |
| 48. Monkman, K., Miles, R., & Easton, P. (2007, December). The transformatory potential of a village empowerment program: The Tostan replication in Mali. In *Women's Studies International Forum* (Vol. 30, No. 6, pp. 451-464). Pergamon. | Community change and development | Mixed | → |
| 49. Nambisia E. M. (2014). Measures Influencing Eradication Of Female Genital Mutilation Practices Among The Maasai Community In Maparasha Constituency Kajiado County, Kenya. Available at http://erepository.uonbi.ac.ke/bitstream/handle/11295/71807/Nambisia_Measures%20influencing%20eradication%20of%20female%20genital%20mutilation%20practices%20among%20the%20Maasai%20community.pdf?sequence=3&isAllowed=y | Human rights, legal, training and conversion of excisors and Alternative rites of passage | Quantitative | ↓ |
| 50. Nielssen H., & Coulibaly S. (2014). The Development Program Of The Region Of Mopti (PDRM). Available at www.norad.no/globalassets/import-2162015-80434-am/www.norad.no-ny/filarkiv/ngo-evaluations/the-development-program-of-the-region-of-mopti-pdrm-mission-evangelique-lutherienne-au-mali-melm-final-report.pdf | Training and conversion of excisors and communication interventions | Qualitative | → |
| 51. NORAD (2007). External Project Evaluation on NCA/NUEYS Female Genital Mutilation Program at Sawa (2004 – 2007). Available at www.norad.no/globalassets/import-2162015-80434-am/www.norad.no-ny/filarkiv/ngo-evaluations/external-project-evaluation-on-nueys_nca-female-genital-mutilation-program-at-sawa-2004-_-2007.pdf | Communication interventions | Mixed | ↓ |
| 52. NORAD (2011). Evangelical Lutheran Church of Kenya: Chesta girls Secondary School. Available at www.norad.no/globalassets/import-2162015-80434-am/www.norad.no-ny/filarkiv/ngo-evaluations/kenya-chesta-gss-final-evaluation-report-2008-til-norad.pdf | Rescue centres | Mixed | ↓ |

| Study | Theme | Study method | Quality |
|---|---|---|---|
| 53. NORAD (2011). FoKUS –Women's Front of Norway – Dodoma Inter-African Committee: Elimination of Female Genital Mutilation, Dodoma. Available at www.fokuskvinner.no/PageFiles/5228/FGM-support-thematic%20evaluation.pdf | Alternative rites of passage, Capacity building and institutional strengthening, communication interventions, Community change and development and rescue centres | Mixed | ↓ |
| 54. NORAD (2011). Norwegian Church Aid Kenya – Habiba International Women and Youth Affairs: Female Genital Mutilation Awareness Creation and Mobilisation. *NORAD*. Available at www.oecd.org/countries/uganda/48484991.pdf | Communication interventions | Mixed | ↓ |
| 55. Ogalleh S.A. (2014). Final Evaluation of Community Education on Female Genital Mutilation (FGM) in Somaliland. *The International Solidarity Foundation*. Available at www.solidaarisuus.fi/wp/wp-content/uploads/2016/06/FINAL-EVALUATION-OF-FGM-EDUCATION-IN-SOMALILAND-Final-Report-Tiedote.pdf | Human rights, Legal, and Community change and development | Mixed | → |
| 56. Oloo, H., Wanjiru, M., Newell-Jones, K., & Minds, F. t. (2011). Female Genital Mutilation Practices in Kenya: The Role of Alternative Rites of Passage: a Case Study of Kisii and Kuria Districts. *Feed the Minds UK*. Available at www.popline.org/node/566482 | Alternative rites of passage | Qualitative | ↑ |
| 57. Ormizyari G. B. (2013). Combating FGM & Gender-Related Violence program/ June 2011-June 2012. Available at http://en.wadi-online.de/images/pdf/wadi%20evaluation%20report-av.pdf | Legal, Health Care Professionals Training, communication interventions and rescue centres | Mixed | → |
| 58. Ouoba, D., Congo, Z., Diop, N. J., Melching, M., & Banza, B. (2004). Experience from a community-based education program in Burkina Faso the Tostan Program. Available at www.popline.org/node/240227 | Community change and development and Rescue centres | Mixed | → |
| 59. Population Council (2008). Evaluation Summary Report of the Female Genital Mutilation Abandonment Program. Available at www.unicef.org/evaldatabase/files/EGY_FGM_AP_report.pdf | Positive Deviance and communication interventions | Qualitative | → |
| 60. Sekajja, J.B. and R. Nsimbi (2014) Rising up for Reproductive Health and Gender Rights, End of Project Evaluation Report, Available at www.rhu.or.ug/wp-content/uploads/2014/06/RISE-UP-END-OF-PROJECT-EVALUATION-REPORT.pdf | Communication interventions | Quantitative | → |
| 61. Simret D. (2013). Community-Based Education and Engagement Addressing Female Genital Cutting (FGC) with Refugee and Immigrant African Women in Winnipeg 2012-13. Available at www.serc.mb.ca/sites/default/files/resources/Our%20Selves%20Our%20Daughters%202012-13%20Final%20Report.pdf | Health Care Professionals Training and Community change and development | Qualitative | ↓ |
| 62. Smith M. B. & Smith K. (2012). Final Evaluation Report FORWARD Bristol FGM Community Development Project. Available at www.bava.org.uk/wp-content/uploads/Bristol-FGM-Community-Development-Report-Feb12-v1-0.pdf | Health Care Professionals Training and Community change and development | Qualitative | → |
| 63. Sudan Council of Churches (2004). Internal Evaluation Report MAYO FARM Project. *Norwegian Church Aid (NORAD).* Available at www.norad.no/globalassets/import-2162015-80434- | Health Care Professionals Training and Community change and development | Qualitative | ↓ |

| Study | Theme | Study method | Quality |
|---|---|---|---|
| am/www.norad.no-ny/filarkiv/ngo-evaluations/snctp_-internal-evaluation-report-mayo-farm-project-.pdf | | | |
| 64. Ugwu I, & Ashaver A. N. (2011). TFD And Community Education On Female Genital Mutilation In Igede Land Of Benue State: Ugengen Community Experience. *Creative Artist: A Journal of Theatre and Media Studies*, *8*(2), 74-96. | Training and conversion of excisors and communication interventions | Qualitative | → |
| 65. UNICEF (2012). Progress In Abandoning Female Genital Mutilation / Cutting And Child Marriage In Self-Declared Woredas, in Ethiopia, available at www.itacaddis.org/docs/2013_09_24_08_09_26_Ethiopia_FGM_Final.pdf | Legal, Health services provision and psychosocial support, Training and conversion of excisors and communication interventions | Mixed | ↑ |
| 66. UNICEF (2012). Tostan's Project "Ending Female Genital Mutilation/Cutting (FGM/C) in Somalia. Available at www.unicef.org/evaldatabase/index_69957.html | Community change and development | Mixed | ↑ |
| 67. Varol N., et al. (2015). The role of men in abandonment of female genital mutilation: a systematic review. *BMC public health, 15(1), p.1034.* | Community change and development | Systematic review | ↑ |
| 68. Waritay J., & Wilson A. M. (2014). Working to end female genital mutilation and cutting in Tanzania: The role and response of the church. Network, Anti Female Genital Mutilation. Available at https://jliflc.com/wp-content/uploads/2014/06/Tanzania-FGM-Report-FINAL-VERSION-Low-Res-1.pdf | Alternative rites of passage, communication interventions, Community change and development and Rescue centres | Mixed | ↓ |
| 69. West R., & Fullwood D. (2011). Female Genital Mutilation Education Program Evaluation. Available at www.norad.no/globalassets/import-2162015-80434-am/www.norad.no-ny/filarkiv/ngo-evaluations/female-genital-mutilation-fgm-program.pdf | Health services provision and psychosocial support, Health Care Professionals Training, communication interventions and Community change and development | Mixed | → |
| 70. World Health Organization (1999). Female Genital Mutilation programmes to date: What works and what doesn't. *Geneva, Switzerland.* Available at http://apps.who.int/iris/bitstream/10665/65857/1/WHO_CHS_WMH_99.5.pdf | Health Care Professionals Training, Training and conversion of excisors, Alternative rites of passage, Capacity building & institutional strengthening, communication interventions and Community change and development | Quantitative | ↓ |