Review

To what extent does education disparity affect the prevalence of female genital mutilation in Sudan?

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Abstract

Female genital mutilation (FGM) is the act of partially or totally removing the external female genitalia for non-medical reasons. This work aimed to define and provide an overview of FGM, summarise the prevalence, identify some key reasons as to why it is practiced and explore the methods that can be utilised to correct education disparities amongst the population. A review of the literature was conducted using systematic searches of the PubMed database and of the United Nations International Children's Emergency Fund (UNICEF) website, with supplementary Google searches to obtain information regarding the Saleema Initiative. The Saleema Initiative, set up by UNICEF, aims to change the attitudes of Sudanese society and ultimately reduce the prevalence of FGM by introducing community pledges against FGM and dispelling myths regarding the practice. Available data demonstrates that the higher a person's level of education, the less likely they are to support or carry out FGM. However, it remains unclear as to what extent education influences the prevalence of FGM within populations. Sexual and reproductive health education and comprehensive sexual education both have positive impacts on perceptions of FGM. Recent re-criminalisation of the practice in Sudan may also reduce prevalence; however implementation must be firmer than with previous legislations.

Abbreviations

CSE - Comprehensive sexual education
FGM - Female genital mutilation
FGM/C - Female genital mutilation/cutting
MICS - Multiple indicator cluster surveys
NCCW - National Council of Child Welfare
PTSD - Post traumatic stress disorder
SRHE - Sexual and reproductive health education
UNFPA - United Nations Population Fund
UNICEF - United Nations International Children's Emergency Fund
WHO - World Health Organization

Introduction

Female genital mutilation (FGM) is defined by the World Health Organization (WHO) as "all procedures that involve partial or total removal of the external female genitalia, or other injury to the female genital organs for non-medical reasons".[1] It is one of the most detrimental non-medical procedures carried out in the modern day, and causes significant harm to individuals, as well as lifelong physical and psychological complications. The practice is very controversial across the world and is seen as a human rights violation by many. However, it is still carried out in some areas of the world, largely in Africa.[2]

The different types of FGM are:

- Type I: clitoridectomy - the partial or total removal of the clitoris
- Type II: excision - the partial or total removal of the clitoris and labia minora
- Type III: infibulation - the narrowing of the vaginal opening through the creation of a covering seal.[3]

> *The practice is dangerous and is usually carried out by a traditional practitioner using unsterile equipment and without sedation.[4]*

As a result of the procedure, there are significant short- and long-term issues. Short-term sequalae which have been reported include bleeding, shock, infection, problems with urination and wound healing.[5] Long-term sequalae include recurrent genitourinary infections, painful sex, obstetric complications (e.g. tears, lacerations, intrapartum death and post-partum haemorrhage), and mental health disorders, which are commonly overlooked, including post-traumatic stress disorder (PTSD), anxiety and depression.[5,6]

In Sudan, a total of 12.1 million girls and women have been subject to FGM.[1] Sudan also has the 4th highest prevalence of FGM in the world, with the rate amongst 15-49 year olds being 86.6%.[7] FGM is deeply rooted within Sudanese culture and tradition and it is still justified by some as a religious practice. The Sudanese government and international organisations have attempted various interventions to decrease the rates of FGM in Sudan. Unfortunately, most of these have been unsuccessful, prompting the need for a different approach.[1]

Within the Sudanese community, information regarding the practice comes primarily from family and friends, resulting in skewed knowledge regarding the harmful effects of FGM.[8] This, combined with the lack of teaching in schools on the matter allows misinformation to spread easily to the next generation, preventing any positive change in people's lives. In-school education by teachers and out-of-school teaching by the Saleema Initiative could be used to influence society. Specifically, the Saleema Initiative strives to start discussion around the practice and prompt changes; this is discussed in more detail below.

On the 22nd of April 2020, the Sovereignty Council of Sudan (the provisional government created after the Sudanese revolutions) recriminalised FGM and instated 3 years imprisonment or monetary fines as penalties for it.[6] However, Sudan has a poor history of implementing FGM laws and so enforcing such sanctions may be difficult.[4]

Prevalence

The prevalence of the different types of FGM varies throughout Sudan, with most sufferers having type III carried out.[9] 77.0% of those circumcised have had their genital area sewed closed.[1] The prevalence of infibulation varies greatly by state, from 36.7% in Central Darfur to 94.6% in Sinnar.[1]

Sudan was the first country in Africa to legislate against FGM. Infibulation was made illegal in 1946 after an amendment to the Penal Code.[5] However, under this code, type I and type II FGM were still permitted and in some areas legislation was not enforced.[5] A further amendment to the code in 1991 did not mention FGM ruling and so, until its recriminalisation in 2020, there were no laws against the practice. Despite this, the rate of infibulation in Sudan has decreased from 81.9% in 1980 to 72.1% in 2014.[2] This shows signs of a shift in societal attitudes against the practice; however, there is still a lot of work left to be done.

According to the Human Rights Watch, the following are reasons for people practicing FGM:

- Societal pressures: there is pressure to conform with those around you, otherwise you face being rejected by your family.
- Hygiene and aesthetic reasons: some women think that FGM makes a girl more attractive and appealing.
- Rooted in tradition: as something that has occurred for decades, girls know that if they question or don't uphold the tradition, they will face stigmatisation and familial rejection. Therefore, girls feel as if they must preserve their cultural identity by undergoing the practice.[6]

> *The lack of knowledge regarding the harmful effects means that girls are unable to oppose those who carry out the practice on them.*

They know no better and, therefore, are subject to this inhumane act. One way of combatting this is by utilising various forms of education.

Education and FGM

Generally, there is a low societal awareness of the importance of education within Sudan.[10] The Sudanese education system has suffered greatly due to chronic resource and monetary insufficiency and both of these factors have contributed to low school attendance rates. Despite government policy mandating that primary and secondary education is free, some schools still charge tuition fees, thereby denying the poorest children access to school. Therefore, these children miss out on the opportunity to have a foothold in society.

An in-depth analysis conducted on behalf of the Sudan Free of FGC programme, a joint programme between UNICEF, the United Nations Population Fund (UNFPA) and WHO Sudan, found that the higher the level of one's education, the less likely they are to practice FGM and the less likely they are to support the practice.[1,2] Additionally, it was found that the lower the level of education, the less aware one is of the practice.[2] For example, if a mother has undertaken no formal education, their daughter has a 33.6% chance of undergoing FGM. This is compared with a 15.2% chance of FGM in daughters whose mothers have completed higher education.[2] This shows a positive impact between a mother's level of education and FGM prevalence. Education rates vary across Sudan, the national average of primary school age children out of school is 29.8%, ranging from 46.8% to 7.9% in the Blue Nile and Northern states, respectively; this figure decreases to 23.4% in secondary school age children.[11] The disparity in education between states could be due to factors including ease of accessibility, familial pressure or different life aspirations. For example, those from the Northern state have low non-attendance rates, with parents pushing their children to gain qualifications, better their lives and leave the country.[12]

This review aimed to define and give an overview of the practice of FGM, summarise prevalence statistics, identify some of the key reasons why it is practiced and explore methods of education that can be used to make positive changes in society.

Literature search

A search strategy was employed using the PubMed and Primo electronic databases. Search terms are detailed in **Table 1**. All literature analysing statistics is dated from the year 2000 onwards, as this was when the first multiple cluster indicator survey (MICS) was conducted, providing the bases for subsequent statistical reports. Prior to this, there had not been systematic data collection, resulting in fragmented data. Exclusion criteria were used to filter out resources which referenced Nigeria, due to it not being the focus of the review. As can be seen in **Table 1**, few retrieved articles referred to the Saleema Initiative. Therefore, the organisation was contacted directly to request further information and resources. Other resources were obtained from verified contacts who work for the WHO and Saleema organisations in Sudan. UNICEF and UNFPA provided information regarding Saleema. The news article that was used from the Guardian was cross referenced with a government resource.

Sexual and reproductive health education

A recent study determined that sexual and reproductive health education (SRHE) at secondary school level, with a focus on FGM and its complications, has been linked to students thinking more negatively about the practice. Post-SRHE, the percentages of students who considered FGM a human rights violation, would actively discourage FGM and support legislation against the practice increased by 14.7%, 12.7% and 13.5%, respectively.[3] Additionally, the percentage of students who supported the discontinuation of the practice increased by 11.6%, with 79% of students saying they wouldn't circumcise their daughters.[13] This example shows that

school-based SRHE has a positive impact on the attitudes of students, allowing them to understand the practice fully and empowering them to change their future for the better. To decrease the prevalence of FGM nationwide, the findings of this research must be implemented into Sudanese society via the curricula of secondary schools and SRHE should be carried out by competent teachers. Unfortunately, the stigma sex and FGM carry prevents in-school SRHE, with some preaching that sex is a sin and that talking about it is prohibited.[14] When SRHE sessions are present, they are skipped by teachers who feel uncomfortable or not adept enough to talk on the matter.[15] There is no mention of FGM or SRHE within the curriculum, showing the disregard of the importance of such matters.

Table 1. The details of the literature review process.

Search term	Filter	Items found	
		PubMed	Primo
FGM in Sudan	None	37	462
	AND education	14	322
	AND education NOT sexually transmitted diseases	13	299
	AND education AND Saleema	1	5
FGM prevalence in Sudan	None	156	289
	NOT Nigeria	72	136
	AND effect of education	82	128
	AND effect of secondary school education	45	50
	AND effect of education AND Saleema Initiative	2	3

Through initial searches, 944 articles were retrieved. After applying exclusion criteria, a total of 106 articles remained. The relevance of each article was determined, and 10 articles were finally included for qualitative analysis.

Comprehensive sexual education

An in-school method of FGM awareness known as comprehensive sexual education (CSE) equips young people with knowledge, skills and attitudes needed to enjoy their sexuality, both physically and emotionally.[16] CSE supports the basic right of adolescents to learn about their bodies, contraceptives, consent, FGM and early marriages, all of which are prevalent and taboo issues in Sudan, which are unlikely to be taught adequately by family or schools. Opening students' eyes to these matters empowers them, giving them confidence in objecting against societal wrongs like FGM.

> *However, to sustain behavioural changes, CSE must be implemented on a long-term basis, by willing and knowledgeable teachers.[17]*

Saleema

The Saleema Initiative, set up by UNICEF and the National Council of Child Welfare (NCCW) in Sudan provides communication tools that invoke discussion between members of the community resulting in changes in social norms, attitudes, and intentions relating to FGM.[18] Instead of discrediting a long-held tradition, the initiative aims to allow new social norms to displace the old ones, instilling a new threshold concept into society. Saleema translates to being "whole, healthy in body and mind, unharmed, intact, pristine, and untouched, in a God-given condition".[19] Those using the word Saleema to describe uncircumcised girls are six times more likely to reject FGM than those using other terms.[1]

The campaign runs sessions with 263 groups across Sudan, with 4 main activities:

- Sufara Saleema Campaign: publicly denouncing FGM
- Saleema Colours Campaign: wearing Saleema colours (mainly orange, red, yellow and green) as a sign of support[20]
- Community dialogue: dialogue amongst communities regarding FGM, its role in society and its need for abandonment
- Born Saleema Project: pledging to not cut new-born daughters.[18]

This approach has shown promise and could be even more effective given the £15m investment provided by the UK government in 2018 to expand the initiative.

A study on the Saleema Initiative's efficacy involved analysing the receptiveness of the campaign amongst those in the 18 states who had been exposed to it.[19] Participants' views were recorded pre-intervention, and twice post-intervention, with the findings summarised in **Table 2**.[18] The study found changes in attitudes regarding cutting within the community, amongst friends and within Sudanese society.[18] One case demonstrated that the Saleema campaign directly affected FGM prevalence, with a village in West Kordofan rejecting the practice entirely and petitioning to change its name to "Saleema".[21] These findings point towards attitude changes caused by the Saleema campaign which has been more effective in FGM abandonment than any intervention or activism in the last 30 years.[21]

Table 2. Attitude changes towards FGM pre and post Saleema exposure.

Overall agreement by wave	Most people in your community practice FGM	Most of my friends practice FGM	It is appropriate for families in my community to practice FGM	Sudanese society in general considers it appropriate to practice FGM
Wave 1 (December 2015): pre-intervention	65.9%	58%	35%	62.9%
Wave 2 (December 2016): post-intervention	56.4%	47.6%	24.3%	48.4%
Wave 3 (December 2017): post-intervention	48.5%	41.9%	26%	44.8%
Total	58.5%	49.2%	28.4%	51.9%

Note, there was a decrease in raw values post vs pre exposure but the differences were not statistically assessed. Table adapted from Evans *et al* (2019).[18]

Conclusion

The lack of studies that specifically assess the implementation and impact of the Saleema Initiative prevents an analysis of its efficacy over time. There were only two studies focussing on the Saleema Initiative and three on CSE, so more research must be done to assess the long-term efficacy of both of these interventions.

A strength of this study is that data regarding prevalence of practice and education rates was cross referenced with similar studies, strengthening the reliability of these results.

Sudan's vast education disparity and discouragement of girls attending school are contributing factors in the prevention of societal progression and changes in attitude regarding FGM. However, the true extent to which Sudan's FGM prevalence has been influenced by the country's education disparity cannot be accurately measured.

In-school methods of teaching FGM awareness, SRHE and CSE to secondary school students have led to positive changes in attitudes. If implemented across the country using the curriculum as a vehicle, such measures could have a major impact on FGM prevalence. These methods, alongside funding and patience, could pave the way for societal changes that will better the lives of millions in the future.

Studies have shown that the work of the Saleema Initiative impacts FGM abandonment by bypassing educational disparities amongst the population and positively influencing people's views.

Cultural and religious beliefs heavily influence attitude towards the practice. For example, some individuals may not be informed of teachings of their religion yet are also told not to question traditions. Therefore, such matters must be approached with great sensitivity as to not cause offence.

The recent progressive political change, including recriminalisation of FGM in Sudan, gives hope to the people of Sudan and to health organisations that positive change will occur. More studies are needed to assess the impact of legislation changes in Sudan on FGM rates.

Contribution statement The author declares that they designed and drafted the work. The author gave final approval of the article to be included by Inspire.

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