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Six aspects of female genital mutilation education (SAFE) model: findings from a qualitative study

Susan Waigwa ,[1] Caroline Bradbury-Jones,[1] Lucy Doos,[2,3] Julie Taylor [4,5]

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[1]University of Birmingham, Birmingham, UK
[2]Public Health, Epidemiology and Biostatistics, University of Birmingham, Birmingham, UK
[3]Health Services Research Unit, Keele University, UK
[4]School of Nursing, College of Medical and Dental Sciences, University of Birmingham, Birmingham, UK
[5]Birmingham Women's and Children's Hospital NHS Foundation Trust, Birmingham, UK

Correspondence to
Dr Susan Waigwa;
s.m.waigwa@bham.ac.uk

ABSTRACT

Objectives Recent figures show that over 200 million women and girls, globally, live with the consequences of female genital mutilation (FGM). Complex debilitating physical, psychological and social problems result from the practice. Health education interventions have proven to be essential in both preventing the practice and informing support of survivors. In this study, we aimed to explore factors that affect the effectiveness of health education interventions.

Design A generic qualitative approach was applied using semistructured individual and focus group interviews with women and men from communities with a history of FGM in Birmingham, UK. Framework analysis was used to group recurring themes from the data. Intersectionality was used as a theoretical lens to synthesise findings.

Participants Twenty-one individuals (18 women and 3 men) participated in semistructured individual and focus group interviews about their views and experiences of health and well-being intervention programmes related to FGM.

Results Six themes emerged from the data and were developed into a model of issues relating to FGM education. These six themes are (1) active communication, (2) attitudes and beliefs, (3) knowledge about FGM, (4) social structures, (5) programme approach and (6) the better future. A combined discussion of all these issues was compressed into three groupings: social structures, culture and media.

Conclusion The results of this study depict aspects associated with FGM education that should be considered by future interventions aiming to prevent the practice and inform support services for survivors in a holistic way.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ This study benefited from engaging prominent people within affected communities who facilitated recruitment despite the sensitive nature of female genital mutilation (FGM).
⇒ The study adopted a patient/public-focused approach and included a lay advisory group that piloted and advised interview materials and process.
⇒ The qualitative approach facilitated an in-depth and detailed interpretation of the experience of engaging in FGM health education interventions.
⇒ The individual interviews and focus groups involved different genders and professions enriching the available data that culminated in the development of the six aspects of female genital mutilation education model.
⇒ The use of self-reporting items alone to assess knowledge about FGM may have led to deflated reports, which could be mitigated by the use of multiple methods of assessing knowledge.

INTRODUCTION

Female genital mutilation (FGM) is a harmful practice that affects more than 200 million women and girls around the globe.[1] In the UK, it is estimated that the prevalence of FGM among women aged 15–49 in England and Wales was 103 000 in 2015.[2] National Health Service England recorded 30 335 new cases of FGM between April 2015 and March 2022.[3] The practice imposes substantial physical (including difficulties in child birth, pregnancy, menstruation, dyspareunia), psychological (including flashbacks, depression, anxiety, post-traumatic stress disorder), social (including ostracisation) and economic challenges (including increased health cost).[4 5] These challenges directly affect individuals subjected to the practice and indirectly affect their families and society at large.[4–6] FGM interventions have included medical, legal and health education, the latter of which has been recognised as the most preventative intervention.[7 8]

Health education involves different learning experiences designed to help improve health, by increasing knowledge and motivating aspects that influence attitudes.[9] Improved health literacy can reduce the burden of disease by increasing people's understanding of harmful practices.[10] This has been successful in altering a variety of unhealthy behaviours including reduction of FGM in various communities such as Senegal and Kenya.[8] However, different aspects that contribute to the effectiveness of these interventions have not been empirically explored. This research, therefore, aimed to further understand the elements of FGM health education interventions in order to

illuminate which aspects contribute to preventing FGM. The main research question was:

What are the views and experiences of communities with a history of FGM regarding FGM health education interventions?

The rationale for the study was that a better understanding of the different aspects that determine the success of FGM education interventions will help to inform and equip patients, service users and also provide professionals with the information they need to educate and care for FGM-affected communities.

To encourage holistic comprehension and avoid omitting any dimensions that may be involved in health education interventions, this study used intersectionality theory to develop a deeper understanding of the complex factors that interconnect in relation to FGM. Kimberlé Crenshaw, who coined the term 'intersectionality', highlighted that addressing only certain forms of challenges (while supporting or perpetuating other existing hierarchies) not only marginalises those who experience multiple inequalities but also often leads to disagreement in inequality discourses.[11] With this in mind, using intersectionality as a lens through which to undertake a study enables a broader, more inclusive and meaningful focused analysis. In the context of our study, we argue that it provided more meaningful findings that are relevant to the communities affected by FGM.

METHODS

Study design

This study employed a generic qualitative approach, which does not claim to be aligned to any of the dominant qualitative methodologies such as grounded theory or phenomenology.[12 13] The approach is advocated for use as a robust orientation from which to undertake qualitative research. This approach, as described by Bradbury-Jones *et al*,[14] stands as an orientation to qualitative research, alongside other approaches (eg, phenomenology or grounded theory). It supports research about human experiences from a purposive sample engaged in individual or focus group interviews (which can also include documents and audio-visual materials), from which themes/content of the findings are analysed. The approach facilitates in-depth detailed description and interpretation.[14] We used semistructured interviews to explore the experiences of women and men from communities with a history of FGM.

Patient and public involvement

A group of five independent individuals, who were not included among the participants of this study, voluntarily supported the researchers in developing the semistructured interview guides. Associated with this, they offered advice on the questions before they were used in the interviews. They provided their input based on their expertise in working with affected communities, delivering education or belonging to a community with a history of FGM. Their advice was pivotal in ensuring the relevance and linguistic acceptability of the interview questions so that they were appropriately framed and understood by FGM affected individuals/communities.

Participants and sampling

The target population included women and men from communities affected by FGM who have attended health and well-being programmes relating to FGM. A purposive sampling strategy was used to recruit the participants. Co-ordinators, who were prominent people within the communities, contributed to the recruitment process via word of mouth. Eligible participants were 18 years or older and living in Birmingham, UK. Eighteen women and 3 men participated in the study. The general reference of FGM as an issue concerning women not men[15] contributed to the challenge of recruiting more men. However, the sample size was decided at the attainment of information power.

Setting

All interviews and group discussions were in-person, conducted in different places in Birmingham that were convenient for the participants.

Data collection

Semistructured interview guides were used to collect data in 2018/2019. Similar questions were used in both the 12 individual and 2 focus group meetings. The interview guides contained eight questions each including a question on demographics such as gender and work/occupation. Participants were asked to describe their experiences of engaging in health and well-being education programmes that included FGM. They were asked, among other questions, the take-home message from the education programmes and their opinions on the content and facilitation of the programmes as well as their experience in sharing their knowledge with family, friends and community members. Focus groups were included because they encourage participants to discuss and challenge sensitive issues. Individual interviews were an option for participants who did not feel comfortable talking about FGM in the presence of other people.[16] Prior to the interviews, each participant was provided with an information sheet that described the nature and processes of the study. They decided before the interview which of the options (individual interview or focus group) they would be more comfortable with in discussing FGM. Confidentiality, anonymity of personal data and the right to withdraw from the study were explained. Each participant was required to provide written consent before participating. Focus groups, comprising women only, lasted about 50 min while individual interviews were for about 30 min each. In one of the focus groups, two moderators (SW and LD) were present, one facilitating the discussion and the other as an observer and taking notes. Both moderators were women, trained in qualitative researcher methods with knowledge and experience

of interacting with different communities with a history of FGM. SW took notes and facilitated discussions of the second focus group and all individual interviews. All the focus groups and individual interviews, with the permission of the participants, were audio-recorded and transcribed verbatim, thus facilitating researcher's immersion in qualitative data.[10] The transcripts and field notes were uploaded on NVivo software V.11. Data were collected until information power was achieved, such that no new information was generated.[17]

Data analysis

We used framework analysis as the guiding analytical approach because of its ability to allow a robust and structured cross analysis of the interview transcripts. The framework matrix facilitated regrouping of recurring themes, which allowed comprehensive reporting.[18] Data analysis was concurrent with data collection to allow familiarisation and judgement of information power. By this, we mean that our analysis and understandings were incremental and iterative and developed alongside the generation of data. A coding framework was developed, which allowed coding and development of a matrix. This was completed on NVivo software to provide an overview of all data under the main themes while showing the corresponding parts of the transcripts. This also enabled a checking and verification of the analysis by the three other members of the author team. The analysis, therefore, involved SW independently conducting the preliminary analysis of all the interviews, which were then distributed to LD, CB-J and JT for the important verification checks. The team met regularly at this stage to discuss any disagreements in the analysis, which were discussed and resolved by consensus. Such disagreements were few and were linked to nuanced understandings about FGM, rather than any analytical problems/inconsistencies.

Having noticed the interlinkage of the developing themes during analysis, we drew on intersectionality to synthesise the results. As an underpinning theory, it enabled a pragmatic approach for evaluating and formulating a discussion that abridges the complexities of the subject and interventions.

RESULTS

Eighteen women and 3 men agreed to take part and met the eligibility criteria. Twelve individual interviews and 2 focus groups (comprising 5 women in one and 4 in the other) were conducted. After 21 participants had been interviewed, we ceased data collection because we stopped finding new themes, ideas, opinions or patterns.[17] Table 1 shows the demographic characteristics of the participants.

Participants provided in-depth views and opinions about health and well-being programmes relating to FGM. The findings revealed six important themes that are pertinent to health education about FGM. These themes are (1) active communication, (2) attitudes and beliefs, (3) knowledge about FGM, (4) social structures, (5) programme approach and (6) a better future. In the following sections, these themes are described in detail with supporting quotations extracted from transcripts of different participants, referenced using their gender and mode of participation (individual or focus group interviews).

Table 1 Demographic characteristics of 21 participants

Item	Categories	Number of participants
Age	18–50	7
	51+	1
	Not provided	13
Gender	Male	3
	Female	18
Occupation	Health/social care	6
	Educator	6
	Business	2
	Student	7
Region of origin	Southern Africa	1
	East Africa	10
	West Africa	8
	Middle East	2

Active communication: preferred techniques to ensure active communication

Active communication seemed to be one of the most endorsed aspects due to the sensitive nature of the subject:

Media

As a mode of communication, media was reported to play a big part in tackling FGM. Participants, however, emphasised a need to provide various forms of media that are accessible to a wider audience, considering, for example, internet and technology poverty or illiteracy. They suggested that this can be achieved by ensuring that media resources can be easily used by audiences from different backgrounds and generations. Accuracy of messages should be regularly checked to avoid misinformation. Publications should be limited to safe materials that are non-(re)traumatising. A male participant argues that some media approaches to FGM can be ethically ambiguous:

> So, on one hand there is appeal for you to be part of the fight against the practice and on the other hand you also see the moral aspect of it, whether it's right to even film such a thing, you know. (Male, Individual interview 1)

Use of illustrations and language applications

The use of illustrations was specifically emphasised with respect to careful considerations of the mode in which they should be presented, whether real or animated. Participants highlighted that graphical illustrations and

the use of native language should only be applied where the audience has agreed. This is because some words may sound rude in native languages. Polite conversations and utterances were recommended to dilute some of the strong language used in line with FGM, however, it should not be too euphemistic. The use of medical terminology should be avoided as it can be difficult to be understood by a lay person. Being genuine and reflective can encourage positive discourses, which can be hindered by unintentional biases and beliefs expressed in body language. One female participant gives examples of illustrations that she found inappropriate and another female participant illustrates the importance of using polite language and being sensitive to what is acceptable in the communities:

> And because we are very community centred, we have decided not to have any blades on the leaflets or knives. Nothing like that…that is not acceptable to have such kind of things because it can bring back trauma. (Female, Individual interview 2)

> Use simple understandable and polite language, as that's when they will listen to you. This is because it is a sensitive topic and you need to understand that you cannot just go in to the point. (Female, Focus group 1)

Sharing knowledge and professional duties

Sharing knowledge that is acquired in FGM education interventions is rarely facilitated or evaluated. Professionals in social and healthcare are encouraged to build confidence to discuss the subject and have good knowledge about the topic, which will facilitate good communication and intervention. Participants also noted that the sensitive nature of the topic demands special skills to approach and discuss with different audiences including taking note of favourable timing and opportune places where discussions around FGM are likely to arise. Normalising conversations about FGM and including everyone within populations in these discussions might encourage the sharing of knowledge while also combatting disguised compliance. A female participant provided an example of social workers' duties in communicating information about FGM:

> …when a mother goes to give birth and they pick up that she was—it has been done to her, then they need to alert us, social services so that we know… (Female, Focus group 2)

Attitudes and beliefs: reasons to embrace FGM education interventions

This theme captured participants' diverse perceptions and experiences:

Attitudes towards the practice of FGM and education inventions

Participants expressed that they were shocked and surprised when they learnt at the education programmes details about the practice of FGM and the impact that it has on victims and communities. However, participants reported that some audiences in the education programmes may lack interest because they either have normalised the practice or they have dissociated because it does not have direct effect on them. These attitudes would determine acceptance of education interventions. They can also determine how embarrassing or sensitive the audience finds the subject to be. A female participant partially remembers:

> …they put PowerPoint in it and that's it. It was not a teacher especially from our school. But I don't remember I forgot what it was all about…The subject that's it, I don't like the subject. (Female, Individual interview 3)

Religious beliefs and rationale for attending interventions

Being one of the misconceived attributed reasons for practising FGM, participants reported that religion can make it more difficult for interventions to be successful. For example, if a facilitator's religious beliefs conflict with those of the audience, this may be a barrier that affects engagement within interventions. Cultural beliefs impose that religion plays a role in the practice, despite the practice being condemned by mainstream religions. To combat these challenges, motivating personal interests and promoting media advertisements, inclusion of activities such as quizzes and encouraging word of mouth through friends, community members/leaders and professionals were reported to be the main factors that attract engagement of participants in education interventions. However, many participants seem to attend because it is required in their profession:

> Someone wanted us to know about FGM…it was mainly (our country) women and it was to increase our awareness because we don't know much about FGM. (Female, Focus group 2)

Sex education

A few participants reported tension in sex education which often is incorporated into FGM education interventions or vice versa. Although most participants approved of the importance of such education, concerns were raised about the age appropriateness of FGM and sex education materials:

> If FGM can be incorporated in sex education and be taught at an appropriate age. Then that would help. (Female, Focus group 1)

Knowledge about FGM: importance of assessing prior knowledge

This theme highlights participants' views regarding knowledge relating to FGM:

Knowledge and confidence levels

Participants reported the need for professionals, individuals and communities to be aware of FGM. Finding out the knowledge levels of the general public and the target

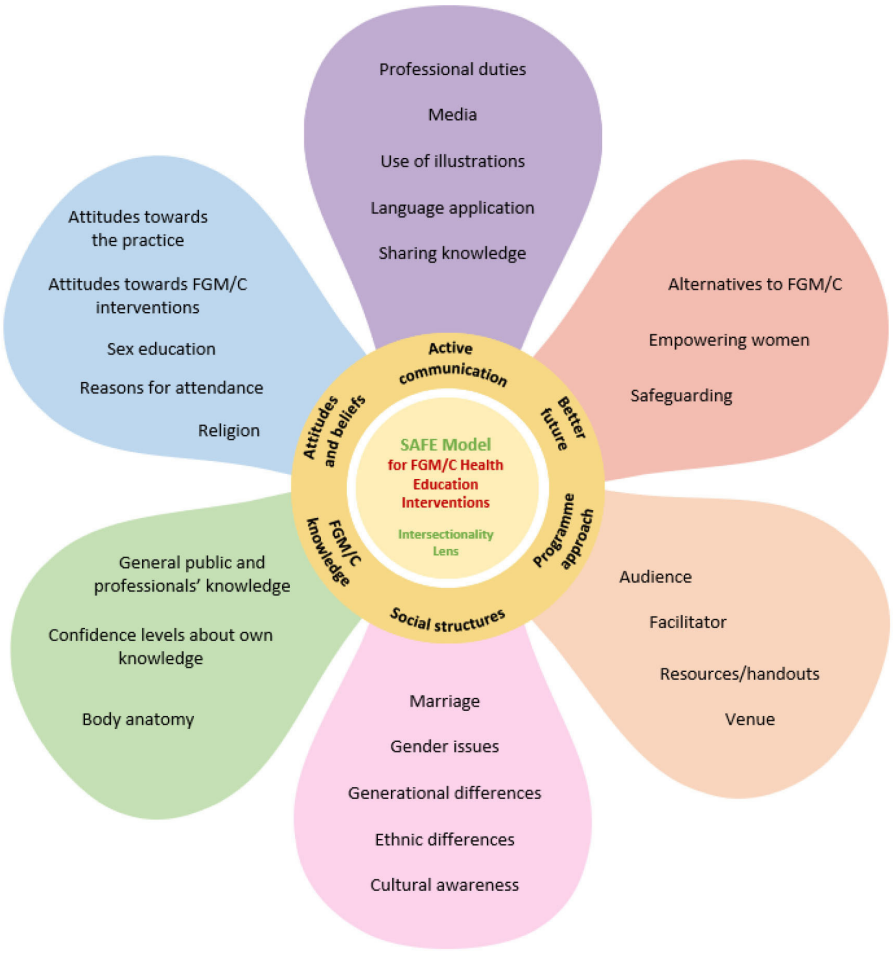

Figure 1 'Six aspects of FGM education' (SAFE) model: preliminary model for FGM health education interventions. FGM, female genital mutilation.

population before commencement of education interventions would benefit tailoring of the interventions, putting emphasis on aspects that are misconstrued or alien to the individuals or communities. A correlation between the confidence levels of professionals, individuals or communities and their own knowledge relating to FGM was reported to determine the readiness of individuals to attend education interventions and to share acquired knowledge. A female participant provided an example of feeling inadequate to share information about FGM:

> I don't like talking at people. It can make people feel intimidated and you know I am not a teacher; I am just someone who just wants to educate people rather than… (Female, Individual interview 4)

Knowledge of body anatomy

Participants reported that the less the audiences know about body anatomy, the more challenging it would be to discuss the subject. A female participant explained why women are unaware of their genital anatomy:

> I think women don't know their anatomy and they don't know how they are supposed to look obviously. Coz they've looked this way their entire lives. (Female, Individual interview 2)

Social structures: the impact of existing social structures

This subtheme captured participants' reports that involve the hierarchical organisation of societies:

Gender issues and marriage

Participants described their frustrations about inequality of decision-making, especially because men in most of the practising communities overrule most affairs. Sometimes older women are included in decision-making of some of the main issues in families and communities including FGM and marriage, which is the main reason for FGM. These gender issues are likely to provide grounds for conflicts and unsafe learning/intervention environments where female facilitators are mainly preferred to male facilitators in mixed audiences as well as all-female audiences. Participants highlighted particular concerns relating to cross-cultural marriages, especially where different forms of FGM are performed and where one party in the marriage is from a non-practising community. Early intervention with children about marriage and FGM was emphasised:

Table 2 Descriptive chart for the 'six aspects of FGM education' (SAFE) model: preliminary model for FGM health education interventions

Six aspects of FGM/C education' (SAFE) model: preliminary model for FGM/C health education interventions Intersectionality lens					
Active communication	**Attitudes and beliefs**	**FGM/C knowledge**	**Social structures**	**Programme approach**	**Better future**
Professional duties: ► Confidence and knowledge levels in discussing FGM/C ► Safeguarding ► Counselling ► Medical intervention (eg, deinfibulation) ► Reporting under 18 cases ► Recording new and attendance cases ► Language interpretation ► Education about FGM/C **Media:** ► Availability (eg, internet videos) ► Information accuracy ► Illustrations and language ► Public safety (media limitations) ► Inclusivity (access to gadgets) ► Convenience (easily used) **Use of illustrations:** ► Type of illustrations (real vs animated) ► Acceptability by target audience **Language application:** ► Acceptability (mother tongue vs English) ► Inclusivity (eg, medical jargons) ► Utterance (eg, polite) ► Body language **Sharing knowledge:** ► Methods of approaching ► Signposting ► Information accuracy ► Conversation normalisation ► Inclusivity (eg, gender, race, cultures) ► Opportune place (eg, work place) ► Early education ► Disguised compliance ► Timing	**Attitudes/feelings towards the practice:** ► Deterring ► Shock ► Surprising ► Disguised compliance ► Lack of interest **Attitudes/feelings towards the interventions:** ► Embarrassing ► Finding it challenging (eg, quizzes) ► Lack of interest ► Interests (eg, acceptable information) **Sex education:** ► Education materials (eg, age appropriate) ► Taboos ► Timely education **Reasons for appointment attendance**: ► Word of mouth ► Work requirements ► Personal interest ► Media advertisements **Religion**: ► Affiliations ► Misconceptions **Cultural awareness:** ► Cultural environment (eg, urbanised cultures) ► Cultural sensitivity ► Education of cultural diversities	**General public and professional knowledge about FGM/C:** ► Reasons for FGM/C ► Consequences of FGM/C ► Legality (local and international) ► Knowledge about religious relations with FGM/C **Confidence/doubts about knowledge levels regarding FGM/C** **Knowledge of body anatomy**	**Ethnic differences:** ► Social structures ► Beliefs ► Acceptability of change ► Knowledge about FGM/C (eg, other practising communities) ► Locality **Gender issues**: ► FGM/C male benefits ► Preferred gender of facilitator ► Decision-making **Generational differences**: ► Respect for elders ► Facilitation (peer) ► Decision-making ► Knowledge about FGM/C **Marriage**: ► Main aim for FGM/C ► Traumatic experiences ► Interventions (eg, deinfibulation) ► Cross-cultural marriages	**Venue:** ► Accessibility ► Safe space ► Inclusivity ► Layout **Resources/handouts:** ► Language ► Illustrations ► Print vs electronic ► Different forms (eg, Bangles) ► Availability **Facilitator:** ► Gender ► Age ► Lived experience ► Conversance with FGM/C matters ► Non-judgemental attitude ► Affiliations with audience **Audience:** ► Gender composition ► Age ► Education levels ► Interest on the subject ► Profession or occupation ► Incentives ► Knowledge about FGM/C ► Locality (rural vs urban)	**Alternative to FGM/C:** ► Empowering women ► Safeguarding ► Support services ► Evaluation (summative vs formulation)

FGM, female genital mutilation.

… (in educating children) my sister was saying that it's for instance if our children that are born here are to marry somebody who comes from Africa or wherever and they try to take your child back home to do this thing… (Female, Focus group 2)

Ethnic and generational differences

A few participants highlighted that education interventions should take note of the hierarchical compositions of societies and distinguished differences between ethnic groups. These differences may cause some ethnic groups to find it challenging to engage in interventions. Differences between generations can also facilitate similar challenges. Overemphasis on the respect of elders, for example, in many communities could impact younger facilitators of FGM education interventions as the older audience may not respect them. Peer facilitation, therefore, was more acceptable among the participants. Generational differences also come with power differences, posing a threat to younger people who may not have power to overrule their family or community with regard to FGM. These differences call for tailoring of education interventions. A female participant emphasised:

…its different if you are talking to a group of young children or school-aged children who have grown up in this country and they know how to talk about… than talking to older women who would mostly still be willing to be conservative… (Female, Focus group 2)

Cultural awareness

Participants commonly reported the central role that culture plays in relation to FGM and effectiveness of interventions. It is, therefore, important to be aware of the various cultures represented in an audience of education interventions even between urbanised and rural cultures within the same country. A female participant explained the importance of integrating cultures in discussions about FGM:

It should be for both whites and black…cos you never know when a black person might get in touch with this person so he might understand the story behind that person's cultural backgrounds. (Female, Individual interview 5)

Programme approach: preferred practice to ensure positive outcomes

Programme approach was the one aspect that directly connected to education programmes:

Audience and facilitators

As all participants had once or more been audiences in FGM education programmes, they discussed from experience. They highlighted the importance of understanding the differences in residence area, gender identification, ages, education levels and professions/occupations, which may require interventions to be tailored. For facilitators, gender and age were the most popular characteristics that participants highlighted for consideration. For example, female-only audiences would most likely prefer a female facilitator of about the average age of the audience or an older person. Facilitators with lived experiences and who understand the audience ways of life were more favourable, however, profound knowledge about the topic and positive non-judgemental attitudes are acceptable. This, as well as availability of incentives, may motivate the audience to attend, participate and share their knowledge.

And in terms of facilitators…I think there is need to be very careful about it…And if you go there as if you are the know it all and you are superior and you are patronising and you want to liberate these women from this practice, they will not take it… (Female, Focus group 2)

Venues and resources

Participants emphasised that venues where FGM education interventions are held should be accessible, safe and inclusive such that to accommodate all people including those with mobility challenges and parents with younger children. The sitting layout should be able to accommodate communication between participants, preferably in small groups considering that FGM is a sensitive topic. Resources should also be both acceptable and accessible to the audience. The language of handouts and illustrations, for instance, should be carefully considered to minimise (re)traumatisation. Preferences between print and electronic versions of the resources should be discussed with the audiences. This may include providing different forms of handouts thus offering choices to the audience and consider inclusiveness, which increases the impact of education interventions. A female participant demonstrates her experience:

…she used to wear lots of bangles and things like that. I even got one… not just like a leaflet to read or something…it was written on it… "help eradicate FGM" … I like displaying things so probably someone sees it and is like "oh what is this?" … it might lead to a chat…. (Female, Individual interview 5)

Better future: methods of challenging traditional norms

This theme highlights the participants' views about best practice that empower women and encourage evaluation of interventions:

Alternatives to FGM

Some participants stressed the need of considering inclusion of discussion about alternatives to FGM in education programmes. This would include deliberations about alternative sources of income for those who make a living from the practice of FGM, incorporating developing of activities and events that are not harmful and yet

educational. Sustainability of these alternative measures is crucial to avoid the communities relapsing to the practice of FGM. A female participant suggests:

> As FGM is done for identity, the cutters earn a lot of money from the procedure. The organisations should stop giving alternatives that are short lived for only two or so years because then the cutters will go back to cutting when the alternative source of money runs out. (Female, Focus group 1)

Six aspects of FGM education model

To make it less challenging to navigate around all the important aspects highlighted in this study, we have developed the 'six aspects of FGM education' (SAFE) model. Models support understanding of issues by highlighting various variable factors that need to be considered in planning and implementation of interventions.[19] In the SAFE model, one can visualise the important aspects to consider (figure 1). Table 2 provides colour-coded details of factors under each of the six aspects.

DISCUSSION

The purpose of this current study was to gain an in-depth understanding of aspects of health education intervention relating to FGM. The ultimate aim was to develop an informative pack showing the different factors that are core to FGM education interventions. This culminated in a colour coded SAFE model. On the model, purple denotes factors connected to active communication relating to the means by which FGM information and messages are communicated. Blue shows factors linking to attitudes and beliefs relating to perception of issues relating to FGM. Green denotes factors associated with knowledge about FGM. Pink denotes factors linked to social structures including hierarchical organisation of societies that influence social differences. Indian-red colour shows factors relating to programme approach including strategies to implement intervention programmes. Brick colour shows factors associated with a better future and applicable to practice and future intervention.

Social structures as observed from the results need to be evaluated in relation to the practice.[20] Patriarchy, for instance, has been associated with various forms of gender-based violence including foot binding, breast ironing, corseting and FGM.[21] With regard to empowering women, inequality persists, tracing back to social structures and gender power imbalance.[22] Our study has reiterated the importance of considering multiple elements relating to social structures such as marriage structures, gender issues, generational differences, ethnic differences, infrastructure (venues), empowering of women and safeguarding pathways. Attention regarding these when delivering FGM education interventions would increase understanding of underlying elements within communities or individuals that could encourage acceptance of the interventions.

Culture, which encompasses aspects of life in which human values are enacted, is a core element of FGM.[23] This association of culture and FGM has encouraged disdain for some native cultures,[24] rendering even the positive aspects of such cultures unfavourable. Our study has shed light on the importance of cultural competence and challenging ethnocentrism that promotes false consciousness. This can be done by, for example, understanding the central role that FGM has in defining cultural identity and womanhood as highlighted by Shell-Duncan *et al*.[25] On the other hand, the concept of culture variability, which means that culture is not static, should be acknowledged and expected in all societies. This includes considering global integration of and exposure to different cultures that can influence acculturation. Our study also drew attention that beliefs ingrained in religion and power dynamics associated with ethnicity had capacity to influence attitudes towards FGM and interventions including those of similar sensitive subjects such as domestic abuse. In evaluating such factors, engagement of communities and religious leaders is crucial and highly recommended for successful eradication of the practice of FGM.[26]

Media responsibilities include disseminating information about FGM. This is enabled by its ability to reach masses through analogue or digital means. As observed in other studies, exposure to information against the practice can increase the likelihood to changing cultural attitudes towards FGM and support its ending.[27 28] To avoid discrepancies between what is represented in the media and the reality, involving all people in a population is important,[29] however, emphasising engagement with targeted populations, such as parents of female children, may be necessary to increase accountability.[30] To minimise media inequalities, evaluation of beliefs, cultural values, networks, power supplies and availability is necessary.[31] Our study adds that considerations of preferences relating to language, illustrations and presentation of handouts are important. Education messages need to be guided by the results of baseline evaluations of their target audience as regards their knowledge about FGM and human body anatomy. It is also important to avoid the use of biased FGM education messages and overexaggerating because it can be stigmatising.[32] Finding a balance, as our findings suggests, as well as adding humour to the education messages can promote effective interventions.

We suggest that the SAFE model can be very useful in planning, implementing and evaluating intervention programmes in such a way to inform aims and objectives, guide progress and shape evaluations. The intersectionality approach allows a broad, inclusive and pragmatic analysis. The model can also be used by students in health and social care courses to develop analysis of behaviours, conditions or practices such as FGM, leading to development of knowledge and increased understanding of the problems.

There are a few limitations of this study that are worth highlighting. The use of self-reporting items alone to

assess knowledge about FGM may have led to inaccurate reports. Standardised multiple instruments to measure knowledge and confidence should be considered in future research.

Conclusion

It is evident that tackling FGM is a challenging endeavour because of the complex state of the practice. As depicted in this study and the supporting literature, there are numerous factors that contribute to the complexity and effectiveness of interventions. We have identified imperative aspects that affect the effectiveness of FGM education interventions. These are presented in the SAFE model. The model culminates from our conclusion that failure to consider these aspects is likely to pose a threat to the success of any FGM education intervention.

X Julie Taylor @bulawayojulie

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Contributors SW (the study guarantor) undertook interviews, carried out the analysis and wrote the manuscript. CB-J, LD and JT supervised and participated in the design of the study, advised in the analysis and synthesis of the results. They also revised the manuscript. All authors agreed the final version of the manuscript.

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Patient and public involvement Patients and/or the public were involved in the design, or conduct, or reporting, or dissemination plans of this research. Refer to the Methods section for further details.

Patient consent for publication Not applicable.

Ethics approval This study involves human participants and was approved by Science, Technology, Engineering and Mathematics (STEM) ethics committee, University of Birmingham. Ethics number: ERN_17-1573. Participants gave informed consent to participate in the study before taking part.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data are available on reasonable request. Interested parties can obtain all available data by contacting the corresponding author.

ORCID iDs
Susan Waigwa http://orcid.org/0000-0002-2725-9472
Julie Taylor http://orcid.org/0000-0002-7259-0906

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