

Do Attitude, Awareness and Intention to Perform Female Genital Mutilation or Cutting for Their Daughters of Women Healthcare Providers Differ from Mothers in Somalia?

Derya Suluhan¹, Esra Keles², Rahma Yusuf Haji Mohamud³, Hasan Hüseyin Eker⁴, Sertac Cimen⁵, Neşe Yakşi⁶, Dilek Yıldız⁷

¹Department of Nursing, Somalia Mogadishu Recep Tayyip Erdoğan Faculty of Health Sciences, Mogadishu, Somalia; ²Department of Gynecologic Oncology, University of Health Sciences Turkey, Kartal Lütfi Kırdar City Hospital, Istanbul, Türkiye; ³Department of Education, Mogadishu Somalia-Turkey Recep Tayyip Erdoğan Training and Research Hospital, Mogadishu, Somalia; ⁴Department of Public Health, Somalia Mogadishu Recep Tayyip Erdoğan Faculty of Health Sciences, Mogadishu, Somalia; ⁵Mogadishu Somalia Turkish Training and Research Hospital, Mogadishu, Somalia; ⁶Department of Public Health, Amasya University School of Medicine, Amasya, Türkiye; ⁷Department of Pediatric Nursing, Gulhane Faculty of Nursing, University of Health Sciences Turkey, Ankara, Türkiye

Correspondence: Rahma Yusuf Haji Mohamud, Department of Education, Mogadishu Somalia-Turkey Recep Tayyip Erdoğan Training and Research Hospital, Mogadishu, Somalia, Tel +252615216313, Email Samiihayusuf@gmail.com

Aim: This study aimed to determine whether there were differences in attitude, awareness, and intention to perform female genital mutilation or cutting for their daughters in the future between female healthcare providers and mothers.

Methods: A comparative cross-sectional study design was used.

Results: A total of 508 women were included in the study. Of the participants, 68.7% (n = 349) were mothers (Group I) who visited the hospital and 31.3% (n = 159) were women healthcare professionals (Group II) [27% (n = 137) nurses and 4.3% (n = 22) doctors]. It was found that 8 (1.6%) of the participants did not have FGM/C and the FGM/C ratio was lower in group II (95%) than in group I (100%) (p < 0.001). In group I, 99.7% (n = 299) of the participants and 30.6% (n = 19) of those in group II reported intending to perform FGM for their daughters in the future (p < 0.001). The reasons for FGM/C most cited by participants were a traditional rite of passage into womanhood (78%), religious requirement (69.3%), and preservation of their virginity until marriage (59.3%). “Stop FGM” was given as a message on FGM/C by 60% of the participants (n = 79) who answered (n = 127, 100%) to open-ended questions.

Conclusion: The results of this study show that female health professionals with higher education and monthly income had less positive perception of their FGM/C and less intention to allow their daughters to undergo FGM/C.

Keywords: female genital mutilation, mothers, nurse, doctor, attitude, intention

Introduction

Female Genital Mutilation or cutting (FGM/C) is defined as “all procedures that involve the partial or total removal of the external genitalia or another injury to the female genital organs (such as stitching of the labia majora or pricking of the clitoris) for non-medical reasons” according to care of women and girls living with female genital mutilation: a clinical handbook based on the World Health Organization (WHO) Guidelines on the management of health complications from female genital mutilation.¹ The prevalence report estimated that over 200 million girls and women are living with FGM/C.^{2,3} Although FGM/C was prohibited by many countries in the Middle East and Africa, this procedure is still too common in several countries such as Somalia, Guinea, Mali, Djibouti, and Sudan in Africa.^{1,2,4,5} Somali Health and Demographic Survey (2020) reported that almost every Somali woman aged 15–49 has undergone female circumcision.⁶

UNFPA and UNICEF have jointly led the largest global program to accelerate the elimination of female genital mutilation (FGM) since 2008 because FGM/C violates basic human rights.⁷ Legal and policy frameworks banning female genital mutilation have been implicated in 14 of the 17 countries supported by the UNFPA-UNICEF Joint Programme. However, FGM/C is practiced for a variety of sociocultural reasons, including respect for tradition, rite of passage, social convention, enhancing fertility, marriageability, ensuring virginity, chastity and faithfulness, cleanliness and beauty, femininity, religion in regions and ethnic groups in which it is practiced common.^{1,8} The most common reason for FGM/C was reported in a study as a religion by Kaplan et al⁹ and cultural reasons by Ali.¹⁰

Besides genital mutilation has no health benefits and the practice can cause physical, mental, and sexual health problems in female children's and women's lives, such as severe pain, bleeding, infection, urinary problems, mental distress, and gynecological and childbirth complications.^{2,3,6,11} In a study, 41% of health professionals reported that they had seen female children with complications of FGM/C in Gambia.⁹ Another study from Australia and New Zealand by Moeed et al indicated that 47% of obstetricians and gynecologists and trainees had seen at least one woman or girl with complications related to FGM/C "most commonly" urinary problems, problems in labour and dyspareunia.¹²

According to the WHO, "healthcare providers should provide girls and women with the best clinical care while avoiding further harm to them. Health professionals have a key role to influence and change attitudes about FGM/C and women's bodies and rights.¹ In addition, they could also consult in the decision-making process about whether a girl or a woman needs to seek further care. As a health-care provider, every contact with a girl or woman who has experienced FGM/C represents an opportunity to provide her with accurate information about her body and health. "In a community in which FGM/C is still common practice, it is important to be aware of the knowledge, attitude, and practice regarding FGM/C of health professionals. Although there are many studies on the determination of FGM/C knowledge, attitudes, and practice (KAP) of health professionals^{8,9} and mothers,^{13–15} there is a scarcity of research on KAP of comparison of the outcomes of both two groups.¹⁶ This study aimed to determine whether there were differences in terms of attitude, awareness, and intention to perform female genital mutilation or cutting for their daughters in the future between women healthcare providers and mothers. The outcomes of the present study could provide insight into the views of women with or without health education.

Methods

Study Design

A comparative cross-sectional study design was used.

Study Setting

This comparative cross-sectional study was conducted in Mogadishu, Somalia Turkey Recep Tayyip Erdoğan Training and Research Hospital between October 2022 and January 2023. The hospital is one of the largest tertiary referral healthcare facilities in Mogadishu, East Africa. The hospital serves pediatric patients in the newborn intensive care unit with 18 beds and a pediatric intensive care unit with eight beds. The hospital also provides service with 54 beds and three pediatric outpatient clinics since 2015.

Participants

The participants in this study were women health professionals and mothers. A total of 508 women were included in the study, of which 68.7% (349) were women admitted to the hospital and 31.3% (159) were healthcare professionals. In post hoc power analysis using G-Power software, the power of the study was found to be 98.7% with 508 participants (Group I: 349 and Group II: 159), 0.05 alpha error, the 100% and 95% incidence rate of the event (having FGM/C) for Group I and Group II, respectively ([Supplementary Figure 1](#)).

Group I (Mothers)

The population of this group included 8236 mothers admitted for acute health conditions of their children to the pediatric outpatient clinics of the hospital between October 7, 2022, and January 15, 2023. Of those, 349 (%4.3) mothers agreed to take part in this study. Inclusion criteria for group I were (i) being mothers, (ii) aged over 18 years, (iii) being able to give informed consent, and (iv) applying to the pediatric outpatient clinics of the hospital. Exclusion criteria included fathers in the present study.

Group II (Female Health Professionals)

Between October 2022 and January 2023, 159 women health professionals in group II filled out the questionnaire, including 27% (n = 137) nurses and 4.3% (n = 22) doctors. Inclusion criteria for female health professionals were (i) being a women health professional and (ii) voluntary participation in the study. Inclusion criteria for mothers were (i) visiting the pediatric outpatient clinic of the hospital for acute health conditions of her child and (ii) voluntarily participating in the study. Exclusion Criteria for both women health professionals and mothers included (i) being male participants.

Data Collection Form

The form content was developed based on a handbook by the WHO (2018) entitled “Care of Girls & Women Living with Female Genital Mutilation: A Clinical Handbook”.¹ This form consisted of both open-ended and closed questions addressing sociodemographic characteristics, types of FGM/C, perceptions, and attitudes towards FGM/C, complications related to FGM/C, and intention to practice FGM/C for their daughters ([Supplementary Data Collection Form](#)).

Procedure

The data of female health professionals and mothers were collected by four data collectors. Data collectors who were third-year nursing students who volunteered to be data collectors in this study were trained by the same researcher (DS) for three days on the familiarization of the questionnaire, interview techniques, and data collection procedure, and they delivered the questionnaire to female health professionals and mothers. Data were collected through face-to-face interviews using a structured questionnaire. The principal investigator checked the filled questionnaires daily for completeness, accuracy, and consistency.

Ethical Permissions

The study was approved by the Non-Interventional Clinical Research Ethics Committee of XX (Approval number: MSTH -12,097, Date: October 17, 2022). All participants were informed about the purpose of the study and were assured of anonymity and confidentiality of the data. Written and verbal informed consent was obtained from all participants.

Statistical Analysis

Collected data were analyzed using the Epi info 7.2 software. Descriptive data were expressed with numbers (n), percentages (%), median, minimum (min), and maximum (max) values. The distribution property of the continuous data was evaluated with the Kolmogorov–Smirnov test. The χ^2 test or Fisher’s exact test was used to compare two categorical variables, and Mann–Whitney *U*-tests were used for two-group comparisons. Statistical significance was accepted as $p < 0.05$.

Results

The sociodemographic characteristics of the participants are shown in [Table 1](#). A total of 508 women were included in the study. Of the participants, 68.7% (n = 349) were mothers (Group I) admitted to the hospital and 31.3% (n = 159) were female healthcare professionals (Group II) [27% (n = 137) nurses and 4.3% (n = 22) doctors]. It was

Table 1 Comparison Sociodemographic Characteristics, FGM/C-Related Characteristics and FGM/C Complications of Participants According to Groups (n = 508)

Variable	Group I	Group II	Total	Test Statistics	p value
Age , year, median (min-max)	25 (19–33)	25 (22–31)	25 (19–33)	24,770.50 ^a	0.052
Marital status , n (%)					
Married	349 (100.0)	88 (55.3)	437 (86.0)	181.16 ^b	<0.001*
Single	0 (0.0)	71 (44.7)	71 (14.0)		
Educational status , n (%)					
Primary	129 (37.0)	0 (0.0)	129 (25.4)	498.81 ^b	<0.001*
Secondary	216 (61.9)	0 (0.0)	216 (42.5)		
High School	2 (0.6)	0 (0.0)	2 (0.4)		
University	2 (0.6)	159 (100.0)	161 (31.7)		
Monthly income , median (min-max) (\$)	300 (100–400)	500 (500–1600)	300 (100–1600)	50,829.00 ^a	<0.001*
Number of children , n (%)	3 (1–10)	1 (0–4)	2 (0–10)	7698.00 ^a	<0.001*
Having of female child , n (%)					
Yes	300 (86.4)	62 (39)	362 (71.3)	117.65 ^b	<0.001*
No	49 (14)	97 (61)	146 (28.7)		
Age for FGM/C , (n=500), year, median (min-max)	8 (6–10)	8 (6–11)	8 (6–11)	29,926.00 ^a	0.013*
The person who made the decision on the participant's FGM/C (n=500), n (%)					
Mother	301 (86.2)	131 (82.4)	432 (85.0)	2.42 ^b	0.298
Grandmother	48 (13.8)	19 (11.9)	67 (13.2)		
Neighbour	0 (0.0)	1 (0.6)	1 (0.2)		
Type of FGM/C (n=500), n (%)					
Type 1	8 (2.3)	4 (2.5)	12 (2.4)	2.24 ^b	0.325
Type 2	330 (94.6)	138 (86.8)	468 (92.1)		
Type 3	11 (3.2)	9 (5.7)	20 (3.9)		
Satisfying for performed FGM/C (n=500), yes, n (%)	348 (99.7)	6 (3.8)	354 (69.7)	467.30 ^b	<0.001*
Recall experiencing health problems at the time of FGM/C , (n=500), yes, n (%)	266 (76.2)	121 (80.1)	387 (77.4)	0.92 ^b	0.337
Experience on physical health problem related FGM/C (n=500), yes, n (%)	265 (75.9)	112 (74.2)	377 (75.4)	0.17 ^b	0.675
Physical health problem related FGM/C , (n=500), yes, n (%)					
Severe pain and injury to tissues	345 (98.9)	115 (76.2)	460 (92.0)	73.75 ^b	<0.001*
Hemorrhage	348 (99.7)	110 (72.8)	458 (91.6)	98.86 ^b	<0.001*
Infection	107 (30.7)	10 (6.6)	117 (23.4)	33.97 ^b	<0.001*
Swelling in genital area	149 (42.7)	35 (23.2)	184 (36.8)	17.25 ^b	<0.001*
Acute urine retention	318 (91.1)	54 (35.8)	372 (74.4)	169.56 ^b	<0.001*
Painful or difficult urination	337 (96.6)	84 (55.6)	421 (84.2)	132.73 ^b	<0.001*
Experience on psychological health problem related FGM/C (n=500), yes, n (%)	0 (0.0)	5 (3.3)	5 (1.0)	11.67 ^c	0.002*

Notes: Group I: Mother; Group II: Female health professionals. *Significant at significance criteria of 0.05. ^aMann Whitney U-test, ^bChi-square test, ^cFisher exact test.

Abbreviations: FGM/C, female genital mutilation or cutting; min, minimum; max, maximum.

found that 8 (1.6%) of the participants did not have FGM/C and the FGM/C ratio was lower in group II (95%) than in group I (100%) ($p < 0.001$). Type 2 FGM/C was most commonly performed in both groups ($p < 0.001$). Although the frequency of FGM/C is high in healthcare workers, it was observed that positive perception of their FGM/C was significantly lower in healthcare workers (3.8%) than in mothers (99.7%) ($p < 0.001$). While pain, bleeding, infection, swelling in the genital area, and painful or difficult urination were more common in the mother group ($p < 0.001$), psychological conditions were more common in the healthcare worker group according to self-reported ($p = 0.003$).

Ninety-nine percent ($n = 299$) of the participants in group I and 30.6% ($n = 19$) of participants in group II group reported that they intended to perform the FGM/C for their daughters in the future in Table 2 ($p < 0.001$). Fifty-three percent of the participants in group I and 22.6% in group II had daughters with FGM/C ($p < 0.001$), with Type 2 being the most prevalent FGM/C type in both groups ($p < 0.001$). In terms of complications, physical problems, pain, hemorrhage, swelling in the genital area, acute urine retention, and acute urine retention were reported as more common physical health conditions in the daughters of participants in group I ($p < 0.05$) than in the daughters of participants in group II ($p < 0.05$) (Table 2).

Female health professionals had less positive perception for their FGM/C and had less intention to allow their daughters to undergo FGM/C. The number of children with FGM/C of participants in Group I was more than those of Group II (Table 3).

In the comparison of FGM/C status and the participants' sociodemographic characteristics, FGM/C was more common in those who were married ($p = 0.016$), had a low-income level ($p < 0.001$), and had more children ($p = 0.003$) (Table 4). Positive perception for their FGM/C was higher in married participants than single participants, primary school graduates compared to those with secondary school or higher education graduates ($p < 0.001$), those with lower income than those with higher income ($p < 0.001$), those with more children than those with fewer children ($p < 0.001$), and those with daughters than those without daughters ($p < 0.001$) (Table 4).

Table 2 Comparison of the Distributions of Participants' FGM/C Intention for Their Daughters, FGM-Related Complications, and Characteristics of FGM/C Practice

Variable	Group I	Group II	Total	Test Statistics	p value
Intention to FGM/C for her child ($n=362$)	299 (99.7)	19 (30.6)	318 (87.8)	229.25 ^a	<0.001*
Type of FGM/C ($n=173$), n %					
Type 1	1 (0.6)	0 (0.0)	1 (0.6)	0.09 ^c	1.000
Type 2	158 (99.4)	14 (100.0)	172 (99.4)		
Age of child at FGM/C , ($n=173$), year, median (min-max)	8 (6–11)	6 (5–8)	8 (5–11)	515.50 ^b	0.001*
Experience on physical health problem related FGM/C , ($n=173$), yes, n (%)	159 (100.0)	10 (71.4)	169 (97.7)	46.50 ^c	<0.001*
Physical health conditions ($n=173$), yes, n %					
Pain	141 (88.7)	6 (42.9)	147 (85.5)	21.15 ^c	<0.00*
Hemorrhage	156 (98.1)	6 (42.9)	162 (93.6)	65.98 ^c	<0.00*
Infection	2 (1.3)	3 (21.4)	5 (2.9)	18.65 ^c	0.004*
Swelling in genital area	2 (1.3)	2 (14.3)	4 (2.3)	9.66 ^c	0.033*
Acute urine retention	78 (49.0)	3 (21.4)	81 (47.1)	3.94 ^a	0.047*
Painful or difficult urination	47 (29.5)	4 (28.6)	51 (29.5)	0.01 ^c	1.000
Experience on psychological health problem related FGM/C , ($n=173$), yes, n (%)	2 (1.3)	1 (7.1)	3 (1.7)	2.61 ^c	0.225

Notes: Group I: Mother, Group II: Female health professionals. *Significant at significance criteria of 0.05. ^aChi-square test, ^bMann Whitney U-test, ^cFisher exact test.

Abbreviations: FGM/C, female genital mutilation or cutting; min, minimum; max, maximum.

Table 3 Comparison of Having FGM/C, Positive Perception for Their FGM/C and Intention to FGM/C for Her Child

Variable		Group I		Group II		Test Statistics	p value
		n	%	n	%		
Participant Having FGM/C (n=508)	Yes	349	100.0	151	95.0	17.84	<0.001 ^{a,*}
	No	0	0.0	8	5.0		
Positive perception for their FGM/C (n=500)	Yes	348	99.7	6	4.0	467.30	<0.001 ^{b,*}
	No	1	0.3	145	96.0		
Intention to FGM/C for her child (n=362)	Yes	299	99.7	19	30.6	229.25	<0.001 ^{b,*}
	No	1	0.3	43	69.4		
Child of participant Having undergone FGM/C (n=362)	Yes	159	53.0	14	22.6	19.05	<0.001 ^{b,*}
	No	141	47.0	48	77.4		

Notes: Group I: Mother, Group II: Female health professionals. *Significant at significance criteria of 0.05. ^aFisher Exact test, ^bChi-square test.

Abbreviation: FGM/C, female genital mutilation or cutting.

Table 4 Comparison of Participants' Self-FGM/C Status and Perception with FGM/C According to Characteristics of Participants

Variable	FGM/C Status (n=508)		Test	p value	Perception of Participants with FGM/C (n=500)		Test	p value
	Cut	Uncut			Positive Perception	Negative Perception		
Age, year, median (min-max)	25 (19–33)	27 (25–29)	1140.00	0.172 ^a	25 (19–33)	24 (22–32)	28,875.50	0.038 ^{a,*}
Marital status, n (%) Married Single	433 (99.1) 67 (94.4)	4 (0.9) 4 (5.6)	8.77	0.016 ^{c,*}	352 (81.3) 2 (3.0)	81 (18.7) 65 (97.0)	172.10	<0.001 ^{b,*}
Educational status, n (%) Primary school Secondary school and above	129 (100.0) 371 (97.9)	0 (0.0) 8 (2.1)	2.76	0.212 ^c	129 (100.0) 225 (60.6)	0 (0.0) 146 (39.4)	71.70	<0.001 ^{b,*}
Monthly income (\$), median (min-max)	300 (100–1600)	500 (300–1600)	618.50	<0.001 ^{a,*}	300 (100–1500)	500 (300–1600)	4860.50	<0.001 ^{a,*}
Number of children, median (min-max)	2 (0–10)	0 (0–2)	3205.50	0.003 ^{a,*}	3 (0–10)	1 (0–4)	44,091.50	<0.001 ^{a,*}
Having of female child, n (%) Yes No	358 (98.9) 142 (97.3)	4 (1.1) 4 (2.7)	1.79	0.235 ^c	303 (84.6) 51 (35.9)	55 (15.4) 91 (64.1)	116.74	<0.001 ^{b,*}

Notes: *Significant at significance criteria of 0.05. ^aMann Whitney U-test, ^bChi-square test, ^cFisher exact test.

Abbreviation: FGM/C, female genital mutilation or cutting.

It was found that those who had their daughters undergo FGM/C were older ($p < 0.001$), had a lower education level ($p < 0.001$), had lower monthly income ($p < 0.001$), and had more children ($p < 0.001$) (Table 5). In addition, participants with low education levels ($p < 0.001$), low income ($p < 0.001$), and those with more children ($p < 0.001$) had a higher intention to allow their children to undergo FGM/C (Table 5).

Table 5 Comparison of the FGM/C Status of the Participants' Daughters and Their Intention to Allow Their Daughters to Undergo FGM/C, and Their Sociodemographic Characteristics

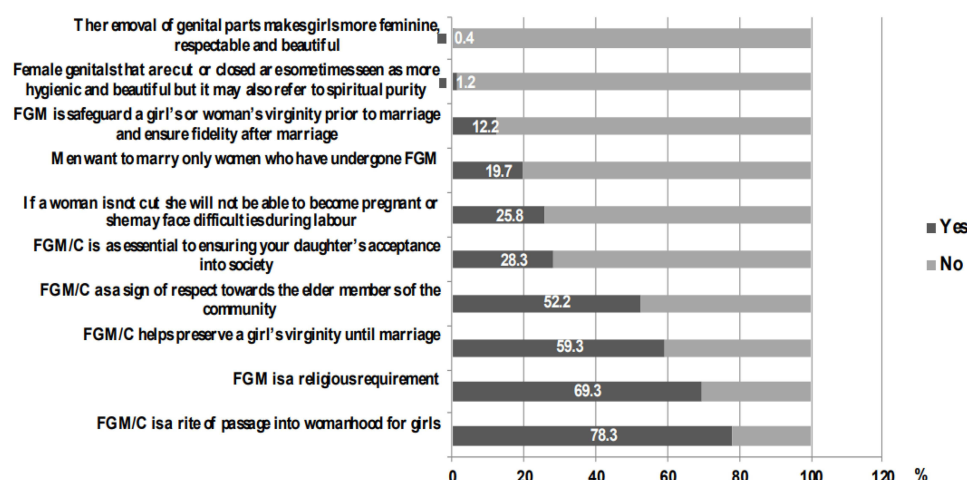
Variable	The FGM/C Status of the Participants' Daughters (n=362)		Test Statistics	p value	The Intention to Allow their Daughters to Undergo FGM/C (n=362)		Test Statistics	p value
	Cut	Uncut			Yes	No		
Age , year, median (min-max)	29 (22–33)	23 (19–32)	30,541.00	<0.001 ^a	25 (19–33)	24 (22–32)	8147.00	0.076 ^a
Marital status , n (%)								
Married	173 (47.9)	188 (52.1)	0.91	1.000 ^c	318 (88.1)	43 (11.9)	7.24	0.122 ^c
Single	0 (0.0)	1 (100.0)			0 (0.0)	1 (100.0)		
Educational status , n (%)								
Primary school	105 (93.8)	7 (6.2)	137.29	<0.001 ^b	112 (100.0)	0 (0.0)	22.43	<0.001 ^b
Secondary school and above	68 (27.2)	182 (72.8)			206 (82.4)	44 (17.6)		
Monthly income (\$), median (min-max)	300 (100–1600)	300 (100–1600)	13,290.05	0.001 ^a	300 (100–1600)	500 (300–1600)	488.00	<0.001 ^a
Number of children , median (min-max)	4 (0–10)	2 (0–8)	28,530.50	<0.001 ^a	3 (0–10)	1 (0–4)	10,362.50	<0.001 ^a

Notes: ^aSignificant at significance criteria of 0.05. ^aMann Whitney U-test, ^bChi-square test, ^cFisher exact test.

Abbreviation: FGM/C, female genital mutilation or cutting.

Seventy-eight percent of the participants perceived FGM/C as a rite of passage, 69.3% as a religious requirement, 59.3% as preservation of their virginity until marriage, 0.4% as being more feminine and beautiful, and 1.2% as being more hygienic and more beautiful, as well as provision of spiritual purity. The opinions of the participants about FGM/C are shown in Figure 1.

When participants were asked to describe FGM/C, 60% (n = 76) answered “Stop FGM”, 16% (n = 21) “Biggest problem for women”, 14% (n = 18), “Trouble”, and 13% (n = 17), “No to FGM”. The distribution of participants' perceptions of FGM/C is shown in Figure 2.

**Figure 1** Views of participants on FGM/C (n = 508).

Abbreviation: FGM/C, female genital mutilation/cutting.

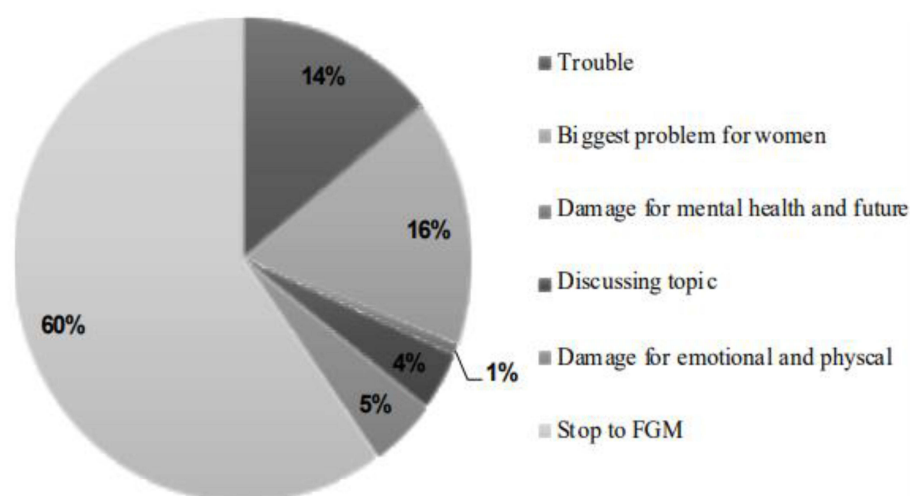


Figure 2 Message of participants on FGM/C (n = 127).
Abbreviation: FGM/C, female genital mutilation/cutting.

Discussion

The International Continence Society (ICS, 2018) has emphasized that FGM/C violates basic human rights. However, FGM/C is a common sociocultural practice in many countries (Payne CK). The prevalence of FGM/C varies from 0.3% to 99.2% in the African region.¹⁷ In a study, the prevalence of FGM/C among women and girls ages 15 to 49 years old in Egypt was 87%,¹⁸ FGM/C is still practiced in Somalia.¹⁹ According to the Somalia Health and Demographic Survey,⁶ 99.2% of women have undergone FGM/C. A systematic review and meta-analysis study showed that the prevalence of FGM/C for both women and girls in 26 countries of Africa region has decreased while the prevalence for women in three countries including Somalia, Guinea-Bissau, Burkina Faso of Africa region has increased.¹⁷ Almost all mothers and female health professionals in this study have undergone FGM/C. This result presents substantial evidence for health policymakers and professionals that there is a need for interventions and policies to prevent performing FGM/C for children and women in Mogadishu.

In this study, the female health professionals stated that they were positively perception for their FGM/C, and they had experienced more physical health problems related to their self-FGM/C than mothers. A study of Keles et al found that educated women were aware of the adverse health effects of FGM/C.¹⁴ One of the associated factors of having FGM/C is socioeconomic status.²⁰ A study conducted by Elduma showed that women from poorer households were more prone to practice FGM/C than those from wealthier households.²⁰ This could show that female health professionals have easier access to knowledge and social media due to their educational and economical status than mothers with low education status.

This study has indicated that mothers and grandmothers were the primary decision makers for FGM/C. Regarding the key role of mothers and grandmothers in FGM/C, the results are similar to those reported by Abathun et al,²¹ Pashaei et al,²² Tag-Eldin et al,²³ Shell-Duncan et al,²⁴ Bjalkander et al²⁵ and Herieka and Dhar.²⁶ According to our findings, there is a need for educational programs for mothers and grandmothers who have a pivotal role as decision-makers on FGM/C of female children.

Beliefs about the reasons for performing FGM/C are cultural, religious requirements, social, medical, economic, and cosmetic.⁸ Muhula showed that girls who did not undergo FGM were considered to be children since they did not have the traditional rite of passage into womanhood. In the same study, a participant stated that

Some of us we are big girls but are going to school. We seat with circumcised girls in class. They under look at us only that they consider themselves as women and we are a girl. They will not dare even seat with you.²⁷

Similar to the study of Muhula, three of the four participants cited as a rite of passage to womanhood for girls as the reason for FGM/C in our study. The second reason cited by 69.3% of participants was a religious requirement. According

to the Somalia Health and Demographic Survey,⁶ 72% believed that female circumcision was a religious requirement. In a study by Gele et al, almost all of the participants believed that FGM/C is a religious requirement for their culture.²⁷

One of the reasons for FGM/C was virginity until marriage in this study. Similarly, in a study conducted in Somalia by Gele et al,²⁷ a participant mentioned that men preferred to marry circumcised women. These reasons show that social pressure, stigmatization toward uncircumcised in society and religious beliefs contribute significantly to the practice of FGM/C.^{28,29} The findings of our study are in line with other studies,³⁰ which point to daughters of participants in mothers have more undergone FGM/C than those in women health professionals and the intention to allow their daughters to undergo FGM/C has been higher in mothers than women health professionals in our study. In addition to higher education, women health professionals with higher monthly income were less likely to perform FGM/C on their daughters. This result was similar to the studies of Muhula et al²⁸ and Setegn et al.²⁹ These studies revealed that women who had higher education level and wealth were less supportive of the continuation of the practice of FGM. In another study conducted by Ameyaw et al,³¹ women with higher education levels had less intentions to perform FGM/C on their daughters. Sabahelzain et al³² indicated that education was critical in influencing mothers' attitudes towards the practice of FGM/C.

Over half of the participants who answered the open-ended question related to the message for readers towards FGM/C practice stated "stop to FGM/C", while only a few participants thought FGM/C was a distinguishing issue. In a study conducted by Adigüzel et al, almost all of the participants thought that FGM/C is a harmful traditional practice that should be stopped.³³ The most highly cited message from both mothers and women health professionals in our study is a clue to the need for help for female children and an increase in interventional educational programs for mothers and older women in Mogadishu.

There are two limitations of the study. First, the results showed the attitudes of only female health professionals towards FGM/C. There is need to studies including male health professionals with high educational status. Second, the outcomes of our study could show the prevalence of FGM/C. Also, the study was limited to a single health center, and a restricted group, which may have been a limitation as well. Hence, the findings of this study should be interpreted with these limitations in mind.

Conclusion

This study compared Somalian mothers and female health professionals in terms of attitude towards FGM/C and intention to allow their daughters to undergo FGM. The results of this study show that female health professionals who have high education and monthly income are aware of the psychological conditions related FGM/C, and they have less intention to allow their daughters to undergo FGM/C. Our study reveals crucial insight about a key role of female health professionals for policy implications. The female health professionals have greater responsibility for empowering women who visit hospitals through educational interventions regarding FGM/C-related complications including physical and psychological health problems of mother and their children. It is recommended that women health professionals who are aware of the complications of FGM/C and they have less intention to allow their daughters to undergo FGM/C should be engage with policymakers to accelerate the elimination of female genital mutilation (FGM) for healthy future of female children.

Data Sharing Statement

The dataset used and/or analyzed in the study is available from the corresponding author on reasonable request.

Ethical Statement

Ethical approval for this study was provided by the Somalia. Mogadishu–Turkey Recep Tayyip Erdogan Training and Research Hospital Ethics Committee (Approval number: MSTH –12097). The database management in accordance with privacy legislation and the presented study in accordance with the ethical principle of the Declaration of Helsinki.

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Disclosure

The authors report no conflicts of interest.

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