

**Iranian midwives' knowledge of and attitudes toward female genital mutilation/cutting (FGM/C)**Zahra Bostani khalesi<sup>1</sup>, Soheila Pirdadeh Beiranvand<sup>2</sup>, Fariba Ebtekar<sup>3</sup>

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**Abstract**

**Introduction:** Female genital mutilation/cutting (FGM/C) is globally recognized as a violation of the human rights of females. It has no health benefits and harms those who undergo the procedure. Midwives are therefore expected to be aware of how to manage these consequences and play a key role in the prevention of the practice. The aim of the present study was to evaluate the level of Iranian midwives' knowledge of and attitudes toward FGM/C.

**Methods:** A total of 168 midwives were enrolled in our descriptive study. The data were collected using a researcher-made questionnaire whose validity was confirmed by specialists. The data were analyzed by SPSS 21.0 software using descriptive statistics and Pearson correlation coefficient.

**Results:** Only 20.23% of participants had good knowledge about FGM/C, and knowledge of 3.58% of participants was weak. There was no correlation between knowledge and demographic characteristics of participants.

**Conclusions:** The average level of participants' knowledge and mixed attitudes toward FGM/C indicate a need to develop effective strategies to increase knowledge of midwives and improving their attitude toward FGM/C.

**Keywords:** Knowledge; Attitude; Female genital mutilation; Iran

**1. Introduction**

FGM/C is the incomplete or complete removal of female external genital organs for nontherapeutic reasons (1). At least 140 million females today are estimated to have suffered FGM/C (2), and approximately 3 million women, including young females, every year are at risk of undergoing this procedure (3). WHO, UNICEF, and ICPD explicitly condemn FGM/C as a human rights violation (4). However, several countries are still involved in the practice, despite struggles by the World Health Organization and other agencies to discourage it (5). Reasons for performing FGM/C include preserving virginity and protecting against pre-marital sexual activity (6). In fact, it is mostly done to preserve virginity (7). The majority of girls are cut by traditional therapists (8). FGM/C is performed only in a handful of countries by doctors and certified midwives (9). The health, psychological, and sexual complications of FGM/C depend on the type of procedure that is performed, sterility during the process, and the understanding of the operator (10). Consequences may include hemorrhage, infection, and impaired sexual function (11). Additional risks of complications, particularly from type III include the need for later surgery (12), urinary and menstrual complications, dyspareunia, and sterility (13, 14). However, FGM/C in Iran is an ancient traditional procedure, but, due to the lack of adequate data, it is practically imperceptible for researchers to uncover facts about its presence (7). For example, there are no reliable data on the extent of FGM/C in Rasht and Tehran. The results of

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Ahmady et al.'s study (2015) showed that the highest rates of FGM/C can be found in the province of Hormozgan, Kurdistan, Kermanshah, and West Azerbaijan (15). But since midwives, as reproductive health practitioners, are in a strategic position to mitigate FGM/C (5), they must be aware of the health complications of FGM/C and apply safeguarding principles (14). On the other hand, no study has been conducted to evaluate the level of Iranian midwives' knowledge of and attitudes toward FGM/C. The level of Iranian midwives' knowledge is little when encountering FGM/C, and these may be influenced by women's readiness to reveal their experiences (15). The study has enabled midwives to identify the gaps while empowering them to stop the practice of FGM/C in Iran. Thus, the current study aimed to evaluate the level of Iranian midwives' knowledge of, attitudes towards FGM/C.

## **2. Material and Methods**

### **2.1. Research design and sampling**

This study was a cross-sectional descriptive study carried out from July to October 2015 among 168 midwives working in public hospitals in Rasht and Tehran, Iran. Hospitals were selected as the sampling frame of the study to have access to all midwives employed in public hospitals in Rasht and Tehran. Multistage sampling was used, and one hospital in Rasht and five hospitals in Tehran were randomly selected, which were affiliated with Gillan and Tehran University of Medical Sciences. Then, in each selected hospital, stratified random sampling was performed in a way that each stratum represented one hospital. Then, convenience sampling was used to select the required number of participants from each stratum.

### **2.2. Inclusion criteria**

The inclusion criteria were as follows: 1) written consent to participate in the study; 2) having a midwifery certificate for at least two years; 3) no psychological disorders over the last year; and 4) been employed in one of the hospitals affiliated with Gillan and Tehran University of Medical Sciences.

### **2.3. Instrument**

The data were collected using a researcher-made questionnaire. A three-part questionnaire was used in this study. The first part included questions about demographic characteristics, including age, workplace, and work experience. The second part of the instrument (12 items) assessed midwives' knowledge about FGM/C, and the third part evaluated the 5-point Likert scale (ranging from strongly agree, agree, neutral, disagree, or strongly disagree) midwives' attitude (eight items) toward FGM/C. Responses to these questions were rated at percentage score, which was calculated as the total of 100; they were categorized into groups of 20: 0-20 (extremely weak), 21-40 (weak), 41-60 (medium), 61-80 (good), and 81-100 (very good). The content validity of the instrument was confirmed by 15 midwifery faculty members and experts in the scale's content validity index (S-CVI), which was 0.93. In order to measure the reliability of the instrument, the interclass correlation coefficient (ICC) and Cronbach's alpha were used to evaluate the stability and internal consistency of the tool, respectively, which showed favorable results (knowledge:  $\alpha = 0.83$  and ICC = 0.89 and attitude:  $\alpha = 0.81$  and ICC = 0.91). The overall Cronbach's alpha of this questionnaire was 0.81. The participants completed informed consent forms.

### **2.4. Ethics of research**

Anonymity of participants was insured, and a completed questionnaire was obtained after oral informed consent and clear description of study objectives. Then, the questionnaires were distributed among the study, which they completed.

### **2.5. Statistical analysis**

Data were analyzed using IBM® SPSS® Statistics version 21 (IBM® Corp., Armonk, NY, USA) with descriptive statistics (frequency, percentage, mean, and standard deviation) and Pearson correlation coefficient. A p-value of  $\leq 0.05$  was considered to be statistically significant.

## **3. Results**

The number of participants in this study was 168, most of whom were 35–39 years of age. In addition, 54.6% of the participants had 11–15 years of work experience, and their mean work experience was 13.6 years. More than 90 participants believed that FGM/C could increase the risk for transmission of HIV infection. Out of 168 participants, 22 (13.09%) thought there are laws against FGM/C in Iran. A majority of the participants (76.78%) knew that FGM/C may cause severe bleeding; some of the participants (36.9%) knew that FGM/C is dangerous and can result in lethal complications. Most participants knew that circumcised women are more likely to suffer from sexual disorders. Seventy participants wrongly believed that circumcised women are not at increased risk of dermoid cysts

compared with uncircumcised. Some participants claimed that FGM/C can prolong labor; also 39.88% thought that circumcised women are less likely to have seriously infected episiotomies. Table 1 presents the results from the knowledge section of the questionnaire. Each item is presented with the number of correct and incorrect answers given by the participants. A majority of the participants agreed that FGM/C should be stopped at all levels. Almost all respondents considered that the government and NGOs are doing enough to fight against FGM; however, 30 participants agreed that midwives should actively participate in eliminating FGM/C. A majority of the participants disagreed that FGM/C prevents premarital sex. All respondents claimed that FGM/C should be voluntary. Table 2 presents the results from the attitude section of the questionnaire. Each item is presented by the number of participants ticking each option. Only 20.23% of participants had good knowledge about FGM/C, and knowledge of 3.58% of the participants was weak. Most of the participants (41.67%) had an attitude score of 21–40. There was no significant positive relationship between the level of knowledge and age and work experience ( $r=0.013$ ,  $p=0.217$ ;  $r=0.029$ ,  $p=0.122$ ). There was also no significant relationship between attitude and age, work experience and workplace ( $r=0.041$ ,  $p=0.0328$ ;  $r=0.033$ ,  $p=0.114$ ;  $r=0.017$ ,  $p=0.616$ ).

**Table 1.** Knowledge of FGM/C among Iranian midwives

Knowledge Scale	Correct answers	Incorrect answers
FGM/C affects the health and welfare of women and girls	113 (67.26)	55 (32.74)
Circumcised women are more likely to suffer from urinary incontinence	87 (51.78)	81 (48.22)
FGM/C could increase the risk for transmission of HIV infection	92 (54.76)	76 (42.24)
FGM/C can cause seriously infected episiotomies	101 (60.12)	67 (39.88)
FGM/C can cause dermoid cysts and abscesses	49 (29.17)	119 (70.83)
FGM/C can prolong labor during childbirth	88 (52.38)	80 (47.62)
FGM/C can give lethal complications	62 (36.9)	106 (63.1)
There are laws against FGM/C in Iran	22 (13.09)	146 (86.91)
FGM/C can lead to sexual disorders	117 (69.64)	51 (30.36)
FGM/C can cause severe bleeding	129 (76.78)	39 (23.22)
There are different types of FGM/C	130 (77.38)	38 (22.62)
FGM/C can lead to infertility	35 (20.84)	133 (79.16)

**Table 2.** Attitudes of Iranian midwives towards FGM/C

Attitude Scale	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
FGM/C is a traditional practice that should be stopped at all levels	87 (51.8)	32 (19.06)	12 (7.14)	26 (15.46)	11 (0.06)
Government and NGOs are not doing enough to fight against FGM	113 (67.27)	25 (14.88)	19 (11.3)	10 (5.95)	1 (0.6)
Midwives should actively participate in eliminating FGM/C	27 (16.08)	19 (11.3)	21 (12.5)	83 (49.4)	18 (10.72)
FGM/C is a religious requirement that should be done	102 (60.72)	42 (25)	13 (7.73)	8 (4.76)	3 (1.78)
FGM/C prevents premarital sex	14 (8.34)	29 (17.26)	17 (10.11)	96 (57.14)	12 (7.14)
FGM/C reduces the rate of prostitution	12 (7.14)	16 (9.52)	7 (4.16)	118 (70.24)	15 (8.92)
FGM/C should be voluntary	93 (55.36)	49 (29.16)	11 (0.06)	13 (7.73)	2 (1.19)
Media should play an effective role in raising awareness and eliminating FGM/C	98 (58.33)	47 (27.98)	18 (10.72)	3 (1.78)	2 (1.19)

#### 4. Discussion

Mean age of the midwives who participate in this study was 34.12 years, and their mean work experience was 17.22 years. The highest frequency was related to the age group of 35–39 years and work experience of 10–15 years. According to the 2015 study by Ogunsiji on female genital mutilation: Australian midwives’ knowledge and attitudes, the mean age of the participants was 34.2 years (16). On the question of whether circumcised women are more likely to suffer from urinary incontinence only 87 out of 168 (51.78) knew the correct answer. Conversely, one study in Sweden reported that 86.1% of health care providers had a high level of knowledge about FGM/C side effects (17). According to the WHO, it is important that health care professionals know the side effects of FGM/C

(18). The results of the knowledge section showed confusion among participants in regards to whether FGM/C could increase the risk for transmission of HIV infection; out of 168 participants, 76 (42.24) did not know that FGM/C could increase the risk for transmission of HIV infection. Our findings were in agreement with the results of a study conducted by Zaidi et al. (19). The results of the Hess et al.'s (20) study showed that less than one-third of the nurse-midwives respondents was aware of the associated risks between FGM/C and HIV transmission. The finding of this study showed that the majority of the participants did not know that FGM/C can cause dermoid cysts and abscesses. According to Simpson, less than 50% of health care professionals understand the health consequences of FGM/C (21). Some participants also believed that FGM/C does not prolong labor during childbirth. Some participants also had stated that there are laws against FGM/ in Iran. Abdel (22) showed that midwives have had similar results in lacking knowledge of the legal status of FGM/C. On the question of whether an infertility increase in circumcised women, 79.16% of the participants wrongly believed that FGM/C cannot lead to infertility. However, the majority of the nurses in Alexandria knew that FGC may cause infertility, which may be partly due to the fact that this is mentioned in the school literature (23). When asked "Is FGM/C traditional practice that should be stopped at all levels?" a majority of participants agreed. In a recent Nigerian study, 76% of the respondents stated that FGM/C should be stopped (24). Over 80% of participants believed that the government and NGOs are not doing enough to fight against FGM. Some participants also believed that midwives should actively participate in eliminating FGM/C. Also one study in Kenya reported that 96% of the respondents stated that the government should eliminate FGM/C (25).

## 5. Conclusions

The findings of our study showed that the majority of midwives who participate in this study have an average level of information regarding FGM/C. Further, participants seem to have mixed attitudes toward FGM, the majority being a negative attitude toward the practice. These results indicate a need to develop effective strategies to increase knowledge of midwives and improving their attitude toward FGM/C.

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## Conflict of Interest:

There is no conflict of interest to be declared.

## Authors' contributions:

All authors contributed to this project and article equally. All authors read and approved the final manuscript.

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