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Call for Change Enhancement Upper Egyptian Females' Knowledge Regarding Effect of Female Genital Mutilation

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Abstract **Background:** Female genital mutilation/cutting has complicated social and cultural foundations that outweigh the requirements and ideas of individuals. FGM/C is seen as a normal part of female socialization in societies that practice it. The reasons for continuing FGM/C in these societies include religious obligations, beauty in the form of smooth and small genitalia, delighting future families and sexual partners, having social significance, and being accepted for marriage. **Aim:** the study was conducted to assess Upper Egyptian females' knowledge about FGM/C. **Subject & Methods:** A descriptive cross-sectional study was used. The study population consisted of 2837 females in family health centers (FHCs) in different sitting at Beni-Suef. A Structured Interviewing Questionnaire sheet was used to collect data. **Results:** The mean age of the studied participants was 22.6±5, 77.2% knew that FGM/C has other names, 76.9% of females knew that FGM/C practice is illegal and 79.1% knew that the government makes an effort to reduce FGM/C practice. Most (87.3%) of participant females knew that FGM/C complications and health problems. Concerning immediate health consequences, 59.5% mentioned bleeding, 49.2% and 16.1% mentioned severe pain and psychological trauma, respectively. As regards, long-term health consequences, 48.8% and 51.9% of females mentioned psychiatric consequences and sexual consequences, respectively, while almost all did not know that labor problems are among the long-term consequences of FGM/C. **Conclusion:** Most females did not know that FGM/C has more than one type and almost all did not know that FGM/C has four types. Most of females knew that FGM/C practice is illegal and knew that the government makes an effort to reduce FGM/C practice. Most of participant females knew that FGM/C causes complications and health problems. **Recommendations:** Development of an educational programs and brochures for mothers about FGM is required to increase their awareness.

Keywords: *enhancement, upper Egyptian females, knowledge, female genital mutilation*

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1. Introduction

Female genital mutilation/cutting has complicated social and cultural foundations that outweigh the requirements and ideas of individuals. FGM/C is seen as a normal part of female socialization in societies that practice it. The reasons for continuing FGM/C in these societies include religious obligations, beauty in the form of smooth and small genitalia, delighting future families and sexual partners, having social significance, and being accepted for marriage [1-7].

Female genital mutilation/cutting is extensively done in societies where it is believed to promote marriageability. As a result, the practice of FGM/C will continue because parents believe it will provide a better future for their daughters, and some girls may even desire to be mutilated to find a husband. The hypothesis also suggests that in places where FGM/C is a part of the culture, no one will want to stop doing it because families are afraid of deviating from community norms [8-15].

The understanding of females, males, midwives, and health care practitioners regarding FGM/C was the subject of much of the research, which was largely conducted in African countries. They intended to look at their participants' basic knowledge and attitudes about FGM/C, as well as its determinants, to see whether any intervention strategies could assist abolish the practice [16-21]. Other research was conducted in the Eastern Mediterranean region, Europe, and the United States [22-27].

Several nations, including Sudan, Ethiopia, and Nigeria, have conducted studies on females' knowledge of FGM. FGM is viewed differently by girls and women in different countries. Mali, Sierra Leone, Guinea, and Somalia had the highest levels of support for FGM, with more than half of the female population believing the practice should continue [28-31].

2. Aim of the Study

The present study was carried out to:

1. Assess females' Knowledge Related to the Spreading, Type, and Procedure of FGM
2. Assess females' Knowledge about Egyptian Law about FGM
3. Assess females' Knowledge Related to Complications of FGM

2.1. Research Questions

1. What is females' Knowledge Related to the Spreading, Type, and Procedure of FGM
2. What is females' Knowledge about Egyptian Law about FGM
3. What is females' Knowledge Related to Complications of FGM

3. Subjects and Methods

3.1. Research Design

A Descriptive Cross-sectional study was used to achieve the aim of the current study.

3.2. Subjects & Setting

3.2.1. Setting

The study was conducted in family health centers (FHCs) in different sitting at Beni-Suef Governorate. Beni-Suef governorate is divided into seven sectors. From every sector the MCH was randomly selected to geographically represent the sector.

3.2.2. Sample

3.2.2.1. Sample Type

A Convenient sample was used.

3.2.2.2. Sample Size

The study population consisted of all females who were accepted to participate in the study at the time of data collection (A period of six months from the start of data collection) and will be included in the study.

3.3. Tools of Data Collection

A pre-designed structured questionnaire was used to collect data. Data were collected through personal interviews. The questionnaire is divided into six sections:

Section I: A Structured Interviewing Questionnaire sheet which includes the following parts: age, residence, level of education, marital status, occupation and experience with mutilation, etc……

Section II: Knowledge of females regarding FGM/C: Females' knowledge was assessed using both single-response and multiple-response questions.

a. Single response questions:

They included knowledge of females about the spread, types, and procedures of FGM/C, side effects, and health consequences of FGM/C and FGM/C in Egyptian law.

Scoring system

- It received (0) if the answers were wrong or don't know
- It received (1) if the answers were incomplete correct
- It received (2) if the answers were complete correct

b. Multiple response questions:

They included knowledge of females regarding the immediate and long-term health consequences of FGM/C. Participants were expected to select the right responses and not select the wrong responses.

Scoring system

- It received (0) if less than 25% of the answers were correct.
- It received (1) if ≥25 percent to less than 50% of the responses were correct.
- It received (2) if ≥50% of the answers were correct.

The scores are then turned into percentages, and the overall score is divided into the following categories:

- Good level of knowledge ≥75%.
- A fair level of knowledge is ≥50% to <75 %.
- Poor level of knowledge <50%.

3.4. Validity of the Tool

Content validity will be done through five experts from Faculty Members of the Maternal Health Nursing department and obstetrics medicine Specialty to ascertain relevance and completeness.

3.5. Reliability of the Tool

The study tools were tested for their internal consistency by calculating Cronbach's Alpha, which was (0.405).

3.6. Ethical Considerations

The proposal was approved by the Scientific Research Ethics Committee, faculty of nursing, Beni-Suef University. All ethical issues were taken into consideration during all phases of the study.

3.7. Administrative Considerations

The researcher fulfilled the official steps required to get the approval for carrying out the study. Approval was taken from MCHs' directors before taking up the research. Before starting data collection; ethical issues (anonymity, confidentiality, & voluntary participation) were considered. The aims of the study were explained to

each participant to be familiar with her participation. It was the participants' right to refuse participation.

3.8. Pilot Study

The pilot study included about 10% of the study sample.

3.9. Field Work

Data were gathered over six months beginning in November 2021 and ending in April 2022. The researcher was present at the previously mentioned location until the entire sample size was gathered. Before data collection, the researcher introduced herself to the women and explained the purpose of the study. The sample was taken three days a week; (Saturday, Tuesday and Thursday) from 9 A.m. to 2 P.m.

3.10. Statistical Analysis

All data were collected, tabulated and statistically analyzed using IBM SPSS 25. Data was supplied, and appropriate analysis was performed for each parameter based on the type of data obtained.

3.10.1. Descriptive Statistics

- **Count and percentage:** Used for describing and summarizing categorical data
- **Arithmetic mean (X-), Standard deviation (SD):** Used for normally distributed quantitative data, these are used as measurements of central tendency and dispersion.

3.10.2. Analytical Statistics

- **Cronbach alpha and Spearman-Brown coefficients:** The internal consistency of the generated tools was measured to assess their reliability.

3.10.3. Graphical presentation

- Data visualization was done with Colum chart.

4. Results

Table 1 showed that the mean age of the studied participants was 22.6±5, most of them were rural residents (70.4%), 90.2% were highly educated, 57.5% were single. About two-thirds of the participants were a student (65.4%).

Table 2 presents the distribution of females aged 18-60 years according to their knowledge regarding the spread, types, and procedure of FGM/C. About 77.2% knew that FGM/C has other names, 5.7% knew that the practice of FGM/C is not common in Arab countries and only 61.8% of females knew that FGM/C is an African habit. About 70% of females had a misconception that FGM/C is required by religion and most of them (88.2%) knew that FGM/C is a social habit. Regarding the FGM/C procedure, 53.5% of females correctly stated that unsterilized equipment was sometimes used in FGM/C procedure, and 64.8% acknowledged that suturing of female genitalia could be done during the procedure. Most females (62.1%) did not know that FGM/C has more than one type and almost all (89.5) did not know that FGM/C has four types. About 55.2% did not know that all types of FGM/C are harmful.

The distribution of females according to their knowledge regarding FGM/C in Egyptian law is shown in Table 3. About 76.9% of females knew that FGM/C practice is illegal and 79.1% knew that the government makes an effort to reduce FGM/C practice. About 36.4% had a misconception that FGM/C is a medical practice and physicians are not allowed to perform it under any circumstance. The highest proportion of females (61.7%) did not know that there is a punishment for parents seeking FGM/C, and most of them (70.4%) did not know that prison is the type of punishment for parents in Egyptian law. About 54.9% did not know that there is a punishment for physicians performing FGM/C in Egyptian law and only 24.3% knew that prison is the type of punishment for physicians performing FGM/C in Egyptian law.

The distribution of females aged 18-60 years according to their knowledge regarding side effects and health consequences of FGM/C is shown in Table 4. Most (87.3%) of participant females knew that FGM/C causes complications and health problems. About 64% and 59.6% of females knew that FGM/C causes psychological problems and social problems, respectively, 71.3% knew that FGM/C might cause the girls' death

Figure 1 presents Studied Participants' Knowledge Related to Immediate Complications of FGM. Concerning immediate health consequences, 59.5% mentioned bleeding, 49.2% and 16.1% mentioned severe pain and psychological trauma, respectively. Only 10.7% mentioned death as an immediate health consequence of FGM/C.

Table 1. Socio-Demographic & Personal Characteristics of the Studied Participants

Variables	Values (no=2837)	
	No.	%
Age		
Age (Mean ± SD)	22.6±5	
Residence		
Rural	1997	70.4
Urban	840	29.6
Educational level		
Basic (primary, preparatory)	46	1.6
Secondary or equivalents	231	8.1
High (university, post-graduate)	2560	90.2
Marital status		
Single	1630	57.5
Married	1190	41.9
Divorced	15	0.5
Widow	2	0.1
Occupation		
Student	1854	65.4
Work	720	25.4
Not work	263	9.3

Table 2. Knowledge Related to the Spreading, Type, and Procedure of FGM

Variables	Values (no=2837)	
	No.	%
Is there another name for FGM?		
No	114	4.0
Yes (correct)	2191	77.2
I don't know	532	18.8
Is the practice of FGM widespread in the Arab world?		
No (correct)	161	5.7
Yes	2061	72.6
I don't know	615	21.7
FGM is an African custom		
No	344	12.1
Yes (correct)	1753	61.8
I don't know	740	26.1
FGM is a religious requirement		
No (correct)	372	13.1
Yes	1986	70.0
I don't know	479	16.9
FGM is a custom in society		
No	141	5.0
Yes (correct)	2503	88.2
I don't know	193	6.8
In FGM, non-sterile instruments are sometimes used.		
No	575	20.3
Yes (correct)	1518	53.5
I don't know	744	26.2
In FGM, the female genitals may be sutured closed.		
No	447	15.8
Yes (correct)	1838	64.8
I don't know	552	19.5
Are there types of FGM?		
No	215	7.6
Yes (correct)	859	30.3
I don't know	1763	62.1
If yes, how many types of FGM are there? (no=859)		
Incorrect answer	769	89.5
Correct answer (4 types)	90	10.5
Are all types of FGM harmful?		
No	458	16.1
Yes (correct)	812	28.6
I don't know	1567	55.2

Table 3. Knowledge about Egyptian Law about FGM among the Studied Participants

Variables	Values (no = 2837)	
	No.	%
FGM is illegal		
No	277	9.8
Yes (correct)	2181	76.9
I don't know	379	13.4
The government is making several efforts to curb FGM		
No	146	5.1
Yes (correct)	2243	79.1
I don't know	448	15.8
FGM is a non-medical practice and doctors are not authorized to perform it in any way.		
No	357	12.6
Yes (correct)	1807	63.7
I don't know	673	23.7
There is a punishment for parents asking for FGM/C in Egyptian law		
Correct (yes)	1086	38.3
Incorrect	1751	61.7
Type of the punishment of parents in Egyptian law		
Correct (prison)	321	29.6
Incorrect	765	70.4
There is a punishment for physicians performing FGM/C in Egyptian law?		
Correct (yes)	1281	45.1
Incorrect	1556	54.9
What punishment does Egyptian law impose on the person who performs FGM?		
Correct (prison)	312	24.3
Incorrect	969	75.7

Table 4. Studied Participants' Knowledge Related to Complications of FGM

Variables	Values (no=2837)	
	No.	%
FGM causes complications and health problems		
Yes (correct)	2477	87.3
No	360	12.7
FGM causes psychological problems		
No	505	17.8
Yes (correct)	1816	64.0
I don't know	516	18.2
FGM causes social problems		
No	708	25.0
Yes (correct)	1690	59.6
I don't know	439	15.5
FGM leads to death (immediate effect)		
No	301	10.6
Yes (correct)	2022	71.3
I don't know	514	18.1

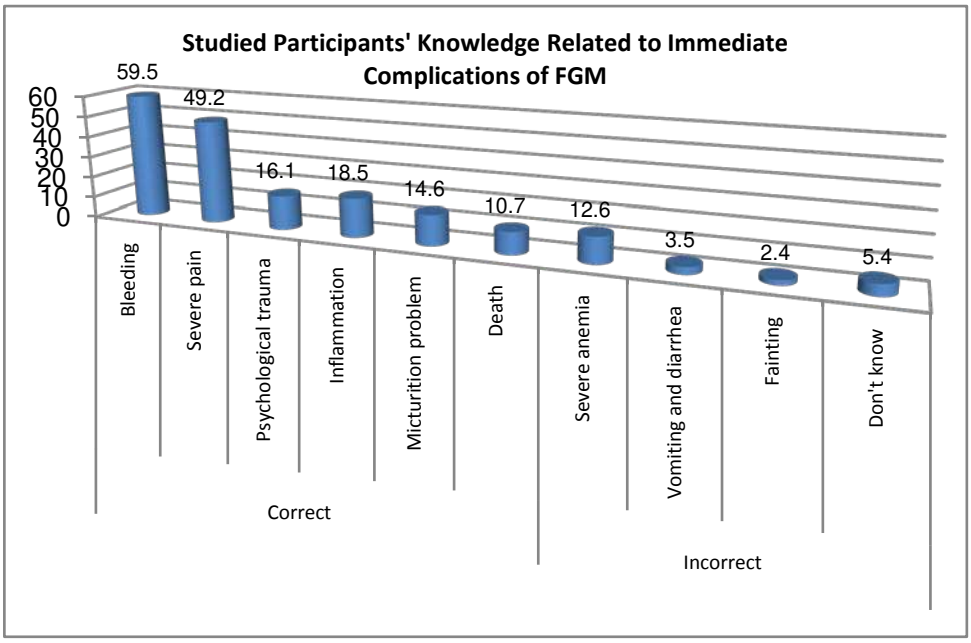

Figure 1. Studied Participants' Knowledge Related to Immediate Complications of FGM

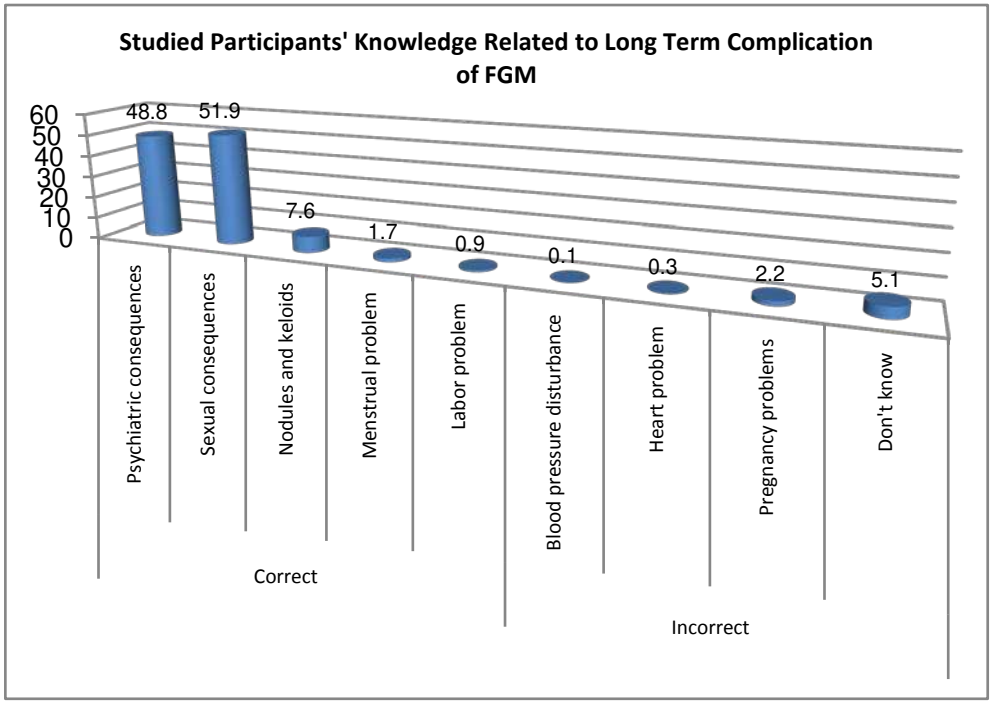

Figure 2. Studied Participants' Knowledge Related to Long Term Complication of FGM

Figure 2 presents Studied Participants' Knowledge Related to Long Term Complication of FGM. As regards, long-term health consequences, 48.8% and 51.9% of females mentioned psychiatric consequences and sexual consequences, respectively, while almost all did not know that labor problems are among the long-term consequences of FGM/C.

5. Discussion

According to research conducted in Egypt, even though women are aware of the risks associated with FGM, the number of women who favor the practice remains high [32]. The percentage of those who support the continuation of FGM/C dropped from 62 % to 58 % in 2014 [33].

Regarding studied females' Knowledge about FGM/C, the results of the current study illustrated that; all of the female participants in the current study stated that they had heard of FGM/C and were aware that it was practiced in Egypt. This outcome was similar to the result of the study conducted in Egypt [34,35].

About more than three fourths of females knew that FGM/C practice is illegal. The highest proportion of females did not know that there is a punishment for parents seeking FGM/C; more than half did not know that there is a punishment for physicians performing FGM/C in Egyptian law. This was less than the Ethiopian results, where reported that most of participants knew that FGM/C was illegal and punished for both parents and the mutilator [35]. On the other hand, this result was far better than those in the UAE, which reported that the minority of individuals indicated that FGM/C is illegal in their country [36].

Female genital mutilation/cutting has no benefits; on the contrary, it has several negative health consequences and alters the normal function of women's bodies [37]. FGM has both physiological and psychological consequences, including short- and long-term effects [38]. The approach used to perform the procedure may influence the severity of the short-term consequences [39]. These repercussions may occur immediately or throughout the healing period (during the next eight weeks) as a result of the use of non-surgical, non- sterilized equipment such as razor blades, knives, or broken glass, as well as unsanitary surroundings [40].

Most participants in the current study were aware that FGM/C has health effects, which was consistent with research done among university students in Sohag [41]. Participants in the current study had a higher general level of knowledge about the effects of FGM/C than those who took part in the previous study. Participants in both studies had good knowledge of the problems of FGM/c despite their different ages and educational backgrounds. The present finding, however, disagreed with that of a study conducted in Ethiopia, which revealed more than two third of participants were unaware that FGM/C had negative health effects [42].

Consequences of FGM/C include Excruciating pain and tissue damage, Hemorrhage, Swelling of the genital tissues, Infection, Delayed wound healing, Acute urine retention, and Hemorrhagic shock and death [43-48].

Long-term health consequences of FGM/C include late (chronic) Genito-urinary outcomes attributed to FGM/C Scarring and keloid formation. Infection of the FGM/C wound can cause scarring and keloid formation. Later on, keloids can create a variety of issues during sexual activity, delivery, and surgical treatments, Menstrual problems, Chronic pelvic infections, Urinary tract infections, and infertility [44,46,49,50].

Participants in the current study identified bleeding, sexual repercussions, severe pain, and inflammation as the short- and long-term health effects of FGM/C. Comparable findings were reported from Ethiopia [41,51]. Some participants revealed that FGM can lead to labor and menstrual problems. This finding disagrees with, Ethiopia's result which claimed that FGM might cause difficult labor and menstrual problems, respectively [35]. In a meta-analysis of 44 main studies including 3 million participants that looked at the obstetric effects of FGM, it became clear that the practice was significantly linked to longer labor, obstetric lacerations, instrumental delivery, obstetric hemorrhage, and difficult delivery [48]. Almost half of the females had a misconception that FGM/C does not affect a woman's sexual satisfaction, and more than tenth of the participant stated that the reason for continuing FGM was to decrease the sexual desire of females.

6. Conclusion

Most of participants were rural residents; most of them had acceptable knowledge regarding FGM/C (names, practice, and procedure). Most females did not know that FGM/C has more than one type and almost all did not know that FGM/C has four types. Most of females knew that FGM/C practice is illegal and knew that the government makes an effort to reduce FGM/C practice. Most of participant females knew that FGM/C causes complications and health problems.

7. Recommendations

Development of an educational programs and brochures for mothers about FGM is required to increase their awareness.

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