

## **Research Article**

## Female Genital Mutilation: Relationship between Upper Egyptian Females' Knowledge and Attitude

Fatima Hosny Abd-ELhakam<sup>1</sup>, Rasha El-Syed Ebrahim<sup>1</sup>, Momen Zakria Mohammed<sup>2</sup> and Hanan Elzeblawy Hassan<sup>1,\*</sup>

<sup>1</sup>Maternal and Newborn Health Nursing, Faculty of Nursing, Beni-Suef University, Egypt <sup>2</sup>Lecturer of Obstetrics & Gynecology Faculty of Medicine, Beni-Suef University

\*Corresponding author: Hanan Elzeblawy Hassan, Maternal and Newborn Health Nursing, Faculty of Nursing, Beni-Suef University, Egypt

Received: May 12, 2023

Published: August 31, 2023

## Abstract

**Background:** Female genital mutilation/cutting is seen as a normal part of female socialization in societies that practice it. According to a representative from the United Nations Population Fund in Cairo, Egypt's rate is so high that it accounts for one-fourth of all cases worldwide.

Aim: Assess Relationship between Upper Egyptian Females' Knowledge and attitudes Female Genital Mutilation. 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:** Only 25.7% of females had good knowledge regarding FGM/C, while 40.5% and 33.8% had poor and fair levels of knowledge. More than one-third of females (35.5%) had an unfavorable attitude towards (supporting) FGM/C and 44.3 % of them had a favorable attitude towards (refusing) FGM/C while 20. 2% had a neutral attitude. This is a significant association between females' knowledge and their attitude regarding Female Genital Mutilation (p-value <0.001).

**Conclusion:** Poor Knowledge and favorable attitude regarding female genital mutilation were more prevalent. A statistically significant association between females' knowledge and their attitude regarding Female Genital Mutilation was revealed.

**Recommendations:** Development of an educational programs and brochures for mothers is required to enhance their knowledge and establish negative attitude regarding Female Genital Mutilation.

Keywords: Female Genital Mutilation; Knowledge Attitude

### Introduction

According to a representative from the United Nations Population Fund in Cairo, Egypt's rate is so high that it accounts for one-fourth of all cases worldwide [1]. Female genital cutting roots are unknown, but it is supposed to predate all religions, including Judaism, Christianity, and Islam, and to have been performed within all of these religions [2-5].

Female genital mutilation/cutting has complicated social and cultural foundations that outweigh the requirements and ideas of individuals [6-8]. Female genital mutilation/cutting is seen as a normal part of female socialization in societies that practice it [9-12]. 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 sex-

ual partners, having social significance, and being accepted for marriage [13-17].

Female genital mutilation/cutting Female genital mutilation/ cutting Female genital mutilation/cutting Female genital mutilation/cutting is also seen as a technique for cleaning girls in some societies. They believe that FGM/C should be continued as a source of femininity and to protect virginity [18]. The concept of the girl as a source of shame influences attitudes toward the continuance of FGM/C. People feel that because FGM/C lowers female desire, it reduces premarital sex and sexual relationships [19-23].

Some opinions explain why FGM/C is still practiced. One of these theories is the social convention hypothesis, which de-

Copyright © All rights are reserved by Fatima Hosny Abd-ELhakam, Rasha El-Syed Ebrahim, Momen Zakria Mohammed and Hanan Elzeblawy Hassan\*

scribes parents' attitudes toward social conventions and social norms. It discusses why families continue to practice FGM/C and why abandoning FGM/C is difficult for daughters and families [24-27].

## Aim of the Study

The present study was carried out to:

1. Assess Female Genital Mutilation Females' Related Knowledge

2. Assess Female Genital Mutilation Females' Related attitude

3. Assess Relationship between Knowledge and attitudes regarding Female Genital Mutilation among Upper Egyptian Females

## **Research Questions**

1. What is the level of knowledge of females regarding the practice of FGM.?

2. What are Sources of Knowledge Related to FGM?

3. What are the levels of attitude of females toward the practice of FGM?

4. Is there Relationship between Knowledge and attitudes regarding Genital Mutilation among Upper Egyptian Females?

## **Subjects and Methods**

*Research Design:* A Descriptive Cross-sectional study was used to achieve the aim of the current study.

## Subjects & Setting:

*Setting:* The study was conducted in Family Health Centers (FHCs) in different sitting at Beni-Suef Governorate. Sample:

Sample Type: A Convenient sample was used.

*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.

## 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 four 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 about Female Genital Mutilation was assessed using both single-response and multiple-response questions.

## 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  $\geq$  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  $\geq$ 75%.
- A fair level of knowledge is  $\geq$ 50% to <75 %.
- Poor level of knowledge <50%.

## Section III: Attitudes of females regarding FGM/C:

A Likert scale was used to assess attitudes, ranging from agree to disagree.

## Scoring system

- It received (1) if participants have bad attitude
- It received (2) if participants have neutral attitude
- It received (3) if participants have favorable attitude
- The scores are then turned into percentages, and the overall score is divided into the following categories:
- Favorable attitude  $\geq$ 75%.
- Neutral attitude  $\geq$ 50% to <75 %.
- Unfavorable attitude <50%.

# Section IV: Sources of Females' knowledge about Female Genital Mutilation.

### Validity of the Tool

The questionnaire was developed in consultation with two gynecologists, five maternity & gynecological nursing professors, and expert in questionnaire validation. The validity of the used tool was evaluated by a health-care specialists.

## Reliability of the Tool

Reliability assessed by piloting & measuring the related Cronbach Alpha value (Alpha = 0.405 for knowledge and 0.764 for attitude).

## Ethical and Administrative Considerations:

Data were collected after explaining the purpose of the study to all women who took part in the study. Confidentiality was mentioned during all stages of the study, as well as obtained personal data and respects for participants' privacy were totally ensured.

Necessary approval from previous mentioned MCH centers' directors at Beni-Suef city was taken after issuing an official letter from the dean of the Faculty of Nursing, Beni-Suef University.

## Pilot Study

The pilot study included about 10% (20 women) of the study sample. The pilot study assessed the clarity of language, the applicability of items, and time consumed for filling in the tools' items.

## Field Work

Data collection was done over a period of six months from the beginning of November 2021 till the end of April 2022.

## 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.

Descriptive Statistics data were expressed as:

- 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.

### Analytical Statistics:

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

a. One-way ANOVA test (F): A statistically significant difference between the means of three or more independent groups is detected using this method.

b. Post hoc test (Tukey): After a one-way ANOVA test, this statistic is used to test all pairwise comparisons between the means of all groups and the mean of every other group.

Student t-test (t): It's used to see if there's a significant

*Citation:* Fatima Hosny Abd-ELhakam, Rasha El-Syed Ebrahim, Momen Zakria Mohammed and Hanan Elzeblawy Hassan\*. Female Genital Mutilation: Relationship between Upper Egyptian Females' Knowledge and Attitude. *IJCMCR. 2023; 29(4): 001* 

c.

### difference between two independent variables or to find out if two meanings are different. *Graphical presentation:*

- a. Data visualization was done with graphs.
- Coulum chart
- Bie in 3D chart

## Results

**Figure (1):** presents the distribution of females aged 18-60 years according to their total knowledge score. Only 25.7% of females had good knowledge regarding FGM/C, while 40.5% and 33.8% had poor and fair levels of knowledge,

**Figure (2):** describes the percent of the distribution of females according to their total attitude score towards FGM/C. More than one-third of females (35.5%) had an unfavorable attitude towards (supporting) FGM/C and 44.3 % of them had a favorable attitude towards (refusing) FGM/C while 20. 2% had a neutral attitude.

 Table (1) & Figure (3): Presents the Relationship between

 Knowledge and attitudes regarding Female Genital Mutila 

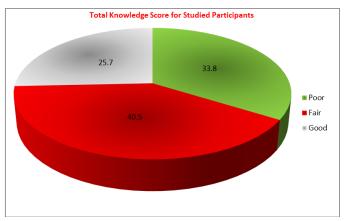


Figure 1: Distribution of the females according to their total knowledge score regarding FGM/C.

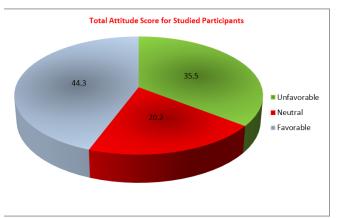
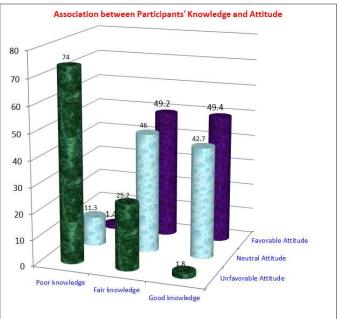


Figure 2: Distribution of females according to their total attitude score towards FGM/C.

tion among Upper Egyptian Females. It showed an association between Poor knowledge and unfavorable attitude. An unfavorable attitude was more prevalent among females with poor knowledge (74%), while the favorable attitude was more prevalent among females with good knowledge (49.4%). This is a significant association between females' knowledge and their attitude regarding Female Genital Mutilation (p-value <0.001). **Table (2):** presents the Studied Participants' Sources of Knowledge Related to FGM. About 71.3% of females mentioned that the source of their information about FGM/C was their personal experience, 36.2% from friends or neighbors, 22% from TV or radio, 22.1% from the internet, 5.1% mentioned religious leaders,10.3% from doctors and nurse, 8% from the lecture about FGM and 0.03% of females read about FGM/C health consequences in books.



Figu	re .	3: A	lssc	ciati	on bei	tween Part	ticipants' l	Knowle	edge and	
-						Attitude.	-		-	
TT 11	•	<b>G</b> .	1.	1 D		. 10	6 17	1 1	D 1 . 1	

Table 2: Studied Participants' Sources of Knowledge Related
to FGM.

Sources of information #	Values (no=2837)				
Personnel experience	2021	71.3			
Friends and neighbors	1028	36.2			
Family	95	3.3			
TV and radio	626	22			
Lecture about FGM	229	8			
Religious leader	146	5.1			
Doctor or nurse	294	10.3			
Internet	629	22.1			
Books	1	0.03			

Table 1: Relationship between Participants' Knowledge and Attitude.

	Attitude categories								
Knowledge Score	Unfavorable	Unfavorable attitud		eNeutral attitude		Favorable attitude		Total	
Categories	(n=1257)		(n=573	(n=573)		(n=1007)			
	No	%	No	%	No	%	No	%	
Poor knowledge	880	74	65	11.3	15	1.4	960	33.8	
Fair knowledge	137	25.2	246	46	555	49.2	3359	40.5	
Good knowledge	31	1.8	242	42.7	576	49.4	728	25.7	
P-value	< 0.001*								

## Discussion

Female genital mutilation/ cutting are procedures in which young girls and women's external genital organs are manipulated, altered, or removed. A religious leader, town elder, or medical practitioner with insufficient experience performs the procedure using a blade or shard of glass [28-29]. The current study was conducted to assess the Relationship between Knowledge and attitudes regarding Female Genital Mutilation among Upper Egyptian Females.

In the current study, more than one third of females had poor knowledge regarding FGM/C. This may attribute to that the most of the studied females were young aged and rural residents. Several nations, including Sudan, Ethiopia, and Nigeria, have conducted studies on females' knowledge of FGM.

This is contradicted the results of Adigüzel et al., 2019 that discovered that the majority of females had a good level of knowledge about FGM/C [30, 31]. Additionally, it was lower than Mohammed, et al., (2018) studies' findings, which showed that more than half of the female participants had a good level of understanding [32].

Moreover, the present study revealed that more than one-third of females had an unfavorable attitude towards FGM/C and more than two-fifths of them had a favorable attitude towards FGM/C. This result is higher than that reported in Sohag. A study of university students indicated that near to one third of the female students supported the continued use of FGM/C [33]. It is clear that female attitudes regarding FGM/C are changing significantly for the better, and this will contribute to the eventual eradication of the practice and a drop in its prevalence [34-36].

Other findings of studies on female attitudes regarding FGM/C; In Sudan, most respondents had an unfavorable attitude towards FGM/C practice and they supported continuation rather for good prospective of marriage or protecting virginity, while in Ethiopia, more than three fourths of participants had a negative attitude toward FGM/C, with more than one fifth of them being in favor of the procedure [37,38].

Concerning the relationship between knowledge and attitudes regarding Female Genital Mutilation among Upper Egyptian Females, The results of the current study reveals an association between Poor knowledge and unfavorable attitude. An unfavorable attitude was more prevalent among females with poor knowledge, while the favorable attitude was more prevalent among females with good knowledge.

This may attribute to females' residency and their sources of information. The main source of information as discovered by study results was friends and neighbors. Researche discovered that the females' knowledge and attitudes toward FGM/C varied by area and ethnicity of the interviewees [30, 31, 39].

#### Conclusion

Poor Knowledge and favorable attitude regarding female genital mutilation were more prevalent. An unfavorable attitude was more prevalent among females with poor knowledge, while the favorable attitude was more prevalent among females with good knowledge. A statistically significant association between females' knowledge and their attitude regarding Female Genital Mutilation was revealed.

## Recommendation

Development of an educational programs and bro-1. chures for mothers is required to enhance their knowledge and establish negative attitude regarding Female Genital Mutilation.

#### References

- Abdelhafeez MA, Salem MS, Eisa M. Assessment of Sexual Troubles in Egyptian Women with Female Genital Mutilation. Evidence-Based Women's Health Journal, 2020; 10(2): 170-175. Gharib EL. The Challenge of Female Genital Mutilation.
- 2. Sci J Research & Rev., 2019; 1(3): 512, 21
- Hassan H, Abd-ELhakam F, Ebrahim R, Mohammed M. Female Genital Mutilation: Females' Intention in 3. Northern Upper Egypt. Journal of Obstetrics Gynecology and Reproductive Sciences, 2023; 7(1): 1-11. DOI: 10.31579/2578-8965/144
- 4 Abd-ELhakam F, Ebrahim R, Mohammed M, Hassan H. Relationship between Women's Intention for Female Genital Mutilation and their Exposure to Complication and Pressure. Journal of Community Medicine and Public Health Reports, 2022; 3(10). Doi.Org/10.38207/JC-MPHR/2022/DEC031002139
- 5. Hassan H, Ebrahim R, Mohammed M, Abd-ELhakam F. Female Genital Mutilation: Impact on Knowledge, Attitude, Sexual Score Domains and Intention of Females in Northern Upper Egypt. Archives of Medical Case Reports and Case Study, 6(5): 1-8. org/10.31579/2692-9392/161 DOI: https://doi.
- Ebrahim R, Mohammed M, Hassan H, Abd-ELhakam F. Relationship between Personal Characteristics and the Person Performing Female Genital Mutilation. Journal of Community Medicine and Public Health Reports, 2022
- Abd-ELhakam F. Prevalence of Female Genital Mutila-7. tion at Beni-Suef Governorate, Egypt. [Master's Dissera-tion, Beni-Suef University]. Beni-Suef, Egypt, 2022.
- Hassan H, Abd-ELhakam F, Ebrahim R, Mohammed M. Prevalence of Female Genital Mutilation in Northern Upper Egypt. American Journal of Nursing Research, 2023; 11(1): 12-20. DOI: 10.12691/ajnr-11-1-2
- 9. Abd-ELhakam F, Ebrahim R, Mohammed M, Hassan H. Relationship between Socio Demographic Data and Female Genital Mutilation. Archives of Medical Case Reports and Case Study, 6(5); 1-7. DOI:10.31579/2692-9392/160
- 10. Hassan H, Abd-ELhakam F, Ebrahim R, Mohammed M. Call for Change Enhancement Upper Egyptian Females' Knowledge Regarding Effect of Female Genital Mutilation. American Journal of Public Health Research, 2023; 11(1): 5-12. DOI: 10.12691/ajphr-11-1-2
- 11. Abd-ELhakam F, Ebrahim R, Mohammed M, Hassan H. Female Genital Mutilation: Females' Related Knowledge. Biomedical Research and Clinical Reviews, 2022; 7(2).
- 12. Abd El Salam S, Hassan H, Kamal K, Ali R. Sexual Dysfunction of Women's Associated with Cervical Cancer. Journal of Applied Health Sciences and Medicine, 2021; 1(2): 12-27.
- 13. Matanda D, Okondo C, Kabiru CW, Shell-Duncan B. Tracing change in female genital mutilation/cutting: Shifting norms and practices among communities in Narok and Kisii counties, Kenya, 2018; 1-57. DOI:10.31899/rh6.1036.
- 14. Hassan H, Mohammed M, Abd-ELhakam F, Ebrahim R. Female Genital Mutilation: Study Sexual Issues. Journal of Gynecology and Women's Health, 2023; 25(1): 1-8. DOI: 10.19080/JGWH.2023.23.556145
- 15. Mohammed M, Abd-ELhakam F, Hassan H, Ebrahim R. Study Females' Intention to practice Female Genital Mutilation for their daughters at Beni-Suef. Public Health Open Access, 2022; 6(2): 1-8. 16. Hassan H, Ebrahim R, Mohammed M, Abd-ELhakam F.
- Prevalence and Determinants of Female Genital Mutilation at Beni-Suef. Journal of Gynecology and Women's Health, 2022; 24(3): 1-10. DOI: 10.19080/JGWH.2022.23.556138
- 17. Abd-ELhakam F, Hassan H, Ebrahim R, Mohammed M. Relationship between Females' Intention of Mutilating

Their Daughters and Demographic Characteristics, Journal of Psychology and Neuroscience, 2023; 5(1): 1-6.

- 18. World Health Organization (WHO). Female genital mutilation Geneva: WHO; 2020.
- Hassan H, Abd-ELhakam F, Ebrahim R, Mohammed M. Study Females' Attitude toward Female Genital Mutilation. Journal of Gynecology and Women's Health, 2022; 24(3): 1-9. DOI: 10.19080/JGWH.2022.24.556137
- Ebrahim R, Abd-ELhakam F, Hassan H, Mohammed M. Relationship between Females' Knowledge and Attitude and Intention of Female Genital Mutilation. Research in Psychology and Behavioral Sciences, 2023; 11(1): 1-6. DOI: 10.12691/rpbs-11-1-1
- 21. Khalil AI, Orabi AM. A Community-Based Intervention: Impact of an Educational Program in Exchanging Knowledge, Attitude, and Practices of Female Genital Mutilation (FGM). Health Care Current Reviews, 2017; 5(209): 2:
- 22. Hassan H, Abd-ELhakam F, Zakria M, El-sayed R. Female Genital Mutilation in Northern Upper Egypt: Prospects of Reasons for Performing and Refusing. Nursing and Care Open Access Journal, 2023; 9(1): 6–10. DOI: 10.15406/ncoaj.2023.09.00251
- Hassan H, Saber N, Sheha E. Comprehension of Dyspareunia and Related Anxiety among Northern Upper Egyptian women: Impact of Nursing Consultation Context Using PLISSIT Model. Nursing & Care Open Access Journal, 2019; 6(1): 1-19. DOI: 10.15406/ncoaj.2019.06.00177
- Shell-Duncan B, Njue C, Moore Z. Trends in the medicalization of female genital mutilation/cutting: What do the data reveal? 2018; 1-24. DOI: 10.31899/rh6.1038.
- Hassan H. The Impact of Evidence-Based Nursing as The Foundation for Professional Maternity Nursing Practices. Open Access Journal of Reproductive System and Sexual Disorder, 2019; 2(2): 195-197. DOI: 10.32474/ OAJRSD.2019.02.000135.
- 26. UNICEF. Female genital mutilation/cutting: a global concern. Geneva, 2016.
- Hassan H. Evidence-Based Practice in Midwifery and Maternity Nursing for Excellent Quality of Care Outcomes. American Journal of Nursing Research, 2020; 8(6): 606-607. doi: 10.12691/ajnr-8-6-3.
- Klein E, Helzner E, Shayowitz M, Kohlhoff S, Smith-Norowitz TA. Female genital mutilation: health consequences and complications-a short literature review. Obstetrics and gynecology international, 2018; 1-8. https:// doi.org/10.1155/2018/7365715.

- Said S, Hassan H, Sarhan A. Effect of an Educational Intervention on Women's Knowledge and Attitude Regarding Cervical Cancer. American Journal of Nursing Research, 2018; 6(2): 59-66. doi: 10.12691/ajnr-6-2-4.
- Adigüzel C, Baş Y, Erhan MD, Gelle MA. The female genital mutilation/cutting experience in Somali women: their wishes, knowledge, and attitude. Gynecologic and Obstetric Investigation, 2019; 84(2): 118-127.
   Melese G, Tesfa M, Sharew Y, Mehare T. Knowledge, atti-
- Melese G, Tesfa M, Sharew Y, Mehare T. Knowledge, attitude, practice, and predictors of female genital mutilation in Degadamot district, Amhara regional state, Northwest Ethiopia, 2018. BMC Women's Health, 2020; 20(1): 178. https://doi.org/10.1186/s12905-020-01041-2
- Mohammed ES, Seedhom AE, Mahfouz EM. Female genital mutilation: current awareness, beliefs and future intention in rural Egypt. Reproductive Health, 2018; 15(1): 1-10.
- 33. Yousef F, Hamed A, Mostafa N. Female genital cutting: prevalence, knowledge, and attitudes of Sohag University level students, Upper Egypt. Egyptian Journal of Community Medicine, 2017; 35(1): 1-9.
- 34. Alkhalaileh D, Hayford SR, Norris AH, Gallo MF. Prevalence and attitudes on female genital mutilation/cutting in Egypt since criminalisation in 2008. Culture, Health & Sexuality, 2018; 20(2): 173-1821
- Qalawa Sh, Eldeeb A, Hassan H. Young Adult Women's intention regarding breast and cervical cancer screening in Beni-Suef. Scientific Research Journal, 2015; 3(3): 11-24.
- Sabry HA, Elamir RY. Knowledge, Attitude and Intention to Future Practice of Female Genital Mutilation among Medical Students, Egypt. The Egyptian Family Medicine Journal, 2020; 4(2): 7-21.
- 37. Esmeal EA, Ahmed AE, Waggiallah HA, Almosaad YM. Knowledge, attitude, and practice among mothers towards female circumcision Ombada province Khartoum state, Sudan. International Journal of Community Medicine and Public Health, 2016; 3(7): 1788]
- Yirga WS, Kassa NA, Gebremichael MW, Aro AR. Female genital mutilation: Prevalence, perceptions and effect on women's health in Kersa district of Ethiopia. International Journal of Women's Health, 2012; 4: 45-54. https:// doi.org/10.2147/IJWH.S28805<sup>(1)</sup>
- Abd- Elhakam F, Ibrahim R, Mohamed M, Hassan H. Prevalence of Female Genital Mutilation at Beni-Suef Governorate, Egypt. Egyptian Journal of Health Care, (EJHC), 2023; 14(1): 564-577. 10.21608/EJHC.2023.285610