Review article

Prevalence and risk factors of female genital mutilation in Egypt: a systematic review

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ABSTRACT

Background: Female genital mutilation (FGM) is an ancient practice with several physical, emotional, and sexual complications. This study aimed to investigate the prevalence and risk factors of FGM in Egypt via systematic review.

Methods: According to the checklist of PRISMA, we systematically retrieved studies that assessed FGM prevalence among various Egyptian samples from different scientific databases.

Results: FGM prevalence in the included studies ($n = 36$) ranged between 14.7% and 100% (66.2%–100% in the hospital-based studies and 14.7%–86.9% in the student-based studies). FGM prevalence has been showing a declining trend throughout the previous decades. Low parental education and rural residence were identified as major risk factors for FGM. Social, religious, and hygienic drives were shown to enhance the continuation of the practice.

Conclusion: FGM prevalence in Egypt, though not precisely detected, seems to be enormous. Understanding the social and religious drives of FGM can help in its elimination.

1. Introduction

Female genital mutilation (FGM), also referred to as female genital cutting or female circumcision, is a term used to describe partial or complete excision of the external female genitalia for non-therapeutic reasons.¹ FGM has many types ranging from excision of the prepuce with/out clitoris (Type I or Clitoridectomy) and excision of the clitoris and labia minora (Type II or Excision) to profound excision of the external genitalia with stitching and tightening the vaginal opening (Type III or Infibulation). Type IV describes pricking, piercing, scraping, and cauterization of the external genitalia without flesh removal.² In societies with Muslim majorities, type I is known as “*Sunna Circumcision*”; a religious term linking the practice to the commands of the Prophet of Islam or “*Khifad*” the Arabic synonym of “*reduction*”; a term claiming that the Prophet of Islam endorsed partial rather than complete excision of the external genitalia.³ In Egypt, types I and II are also called “*Tahara*”; the Arabic synonym of “*purification*” which points to the hygienic drive of the practice.⁴

FGM is endemic in Sub-Saharan and Northern African countries,⁵

yet it is also encountered in Europe,^{6,7} Australia,⁸ and the USA⁹ through the immigrants who brought their culture. However, the spread and determinants of the practice differ significantly across the countries. In Egypt, FGM is deeply entrenched in the beliefs and values of the society due to many social and religious factors.¹⁰ Even though the law in Egypt penalizes people who perform and people who request FGM with hefty fines and even jail,¹¹ the Egyptian Demographic Health Surveys (EDHSs) for the years 1995, 2000, 2003, 2005, 2008, and 2014 showed that the practice in the country was almost universal.^{12–17} Regardless of its prevalence, the physical and psychological complications of FGM in Egypt were shown to be enormous. These complications are usually categorized into primary or acute complications and secondary or long-term complications. The primary complications include pain, bleeding, and psychiatric trauma while the secondary complications include several emotional, menstrual, and sexual disorders.^{18–20}

Although FGM is known to be widespread across the country, its exact prevalence is not identified. Many studies investigated the epidemiology of FGM among various populations in Egypt but reached conflicting results and drew inconsistent conclusions. The unawareness

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of the real magnitude of FGM in addition to the complexity of the drives behind its continuation seem to curb the efforts of developing national risk-prevention strategies with the purpose of eliminating FGM. Herein, we systematically collected studies that investigated the prevalence and risk factors of FGM in Egypt.

2. Methodology

2.1. Search strategy

This systematic review was reported according to the checklist of PRISMA.²¹ We retrieved studies that investigated FGM prevalence among Egyptian women and were published in English or Arabic languages before 30/11/2018. Studies were collected from the following scientific databases: PubMed, Google Scholar, and the Egyptian Knowledge Bank. We used the following search terms: (Female genital mutilation OR Female circumcision OR Female genital cutting OR Female genital excision OR Infibulation OR Clitoridectomy) AND (Egypt). The Arabic translates of these search terms were used to collect the Arabic studies.

2.2. Study selection

Our initial research retrieved 1258 articles, then we eliminated the duplicates to reach 512 articles. Later, we manually screened the abstracts to include studies that assessed FGM prevalence among Egyptian women. In this step, we excluded studies without abstracts ($n = 18$), studies that did not assess FGM prevalence ($n = 404$), studies that assessed FGM among non-Egyptian samples ($n = 46$), and books and editorials ($n = 8$) to reach a final list of 36 articles (Fig. 1). All included studies were published in English since the reviewed Arabic studies focused on investigating the social correlates with FGM rather than its prevalence. No efforts were done to access unpublished reports. The articles included in the final list were reviewed and the following data were extracted: first name of the first author, publication year, study location, number and age of participants, prevalence, risk factors, drives, complications, and study limitations.

Fig. 1. Flow chart of the study selection process.

3. Main findings

3.1. FGM prevalence and its decreasing trend

A total of 36 cross-sectional studies investigated FGM prevalence in Egypt during the period between 1980 and 2018. Twelve studies were conducted in North Egypt and put the prevalence between 14.7% and 92%, 15 studies were conducted in South Egypt and put the prevalence between 47.3% and 100%, and 9 studies (including 6 EDHSs) representing the whole country put the prevalence between 50.2% and 97%. Yet, the prevalence rates in the EDHSs were significantly higher than other studies that represented the whole nation; 91%–97% versus 50.2%–64.8%, respectively. The hospital- and student-based studies together contributed to 40% of the total studies with FGM prevalence ranging between 66.2% and 100% in the hospital-based studies and 14.7%–86.9% in the student-based studies (Table 1) (Fig. 2).

It should be noted that a declining FGM prevalence throughout the previous decades has been detected. For example, FGM prevalence in the EDHSs decreased from 97% in 2003 to 92% in 2014 amongst the ever-married women.^{14–17} FGM prevalence in the EDHSs 2008 and 2014 was lower among women (15–24 years) compared with older women.^{16,17}

On the other hand, more obvious drops were noticed in other epidemiological studies. For example, recent studies conducted on populations from North and South Egypt^{18,22} showed much lower rates of FGM compared with earlier studies.^{10,23} These drops are thought to be attributed to decreased illiteracy, FGM criminalization, and official and non-official campaigns that aim to raise the awareness about FGM.²⁴

3.2. Factors affecting FGM prevalence

3.2.1. Socio-demographic variations

The variations in the socio-demographic characteristics of the investigated populations had significant impacts on the estimated FGM prevalence. Since FGM is tightly related to low socio-economic standards,²² studies conducted on populations residing in the deprived governorates of South Egypt showed a higher FGM prevalence than that reported in North Egypt.^{12–17} A nationwide study conducted on 38,816 schoolgirls showed that FGM prevalence in South Egypt was almost double that of North Egypt.²⁵

Besides, low parental education and rural residence or origin were detected as significant risk factors of FGM in Egypt. In a study conducted on householders, 92% of mothers of the circumcised daughters were illiterate compared with 69% of the uncircumcised.²⁶ Another study concluded that rural residence of adolescent girls doubled their risk of exposure to FGM.¹⁸ A study conducted on university students showed that illiteracy rates among parents of the circumcised girls were 11.4% for fathers and 23.1% for mothers compared with 2.5% and 3.6% among fathers and mothers of the uncircumcised girls, and 53.9% of the circumcised girls were residing in rural areas compared with 16.4% in the uncircumcised group.²⁴ Other studies from North and South Egypt reached similar conclusions.^{22,23,27,28}

3.2.2. Study location

Ten studies were conducted on patients or their relatives who were attending public hospitals for different reasons. These studies showed a higher FGM prevalence compared with other epidemiological studies. In two hospital-based studies, Al-Hussaini found that all nulliparous women coming for delivery were circumcised¹⁰ and Assad reported an FGM prevalence of 90.8% among women attending a family planning center.²⁹ Unlike hospital-based studies, FGM prevalence among university students was considerably lower than that reported in other epidemiological studies. For example, one study used a multi-stage random sampling method to include 1723 university students and reported a 47.3% FGM prevalence.²⁴ Another study conducted on 313 medical students put FGM prevalence at 14.7%.³⁰

Table 1
Summary of studies assessing prevalence of female genital mutilation in Egypt.

Study	Year	Site	Population	Age	Prevalence	Drives	Risk Factors	Complications	Limitations
Assad ²⁹	1980	Cairo (N)	54	20–60	90.8%	NA	Low education	1ry: Pain Bleeding Inflammation	Hospital-based Unclear sampling Small sample size
Badawi ²³	1989	Cairo (N)	350	20–50	81.6%	NA	Low parental education Rural origin	1ry: Psychic trauma 2ry: Sexual dysfunction	Unclear sampling Small sample size Inadequate analysis
El-Zanaty ¹²	1996	EDHS (N&S)	14,779 ever- married	15–49	97%	Social 58.3% Hygienic 36.1% Religious 30.8%	Low parental education	NA	Only ever-married
Sayed ²⁶	1996	Assiut (S)	Mothers of 1732 girls	< 20	62.3% among daughters & 36.6% to be circumcised	Social 77% Hygienic 7% Religious 4%	Low parental education	1ry: Bleeding 6% Pain 3%	Only 1 village Unclear sampling Inadequate analysis
El-Defrawi ³²	2001	Ismailia (N)	250	NA	80%	NA	NA	1ry: Pain 29% Bleeding 10.5% 2ry Sexual dysfunction	Hospital-based Unclear sampling Small sample size No adjustment Only ever-married
El-Zanaty ¹³	2001	EDHS (N&S)	15,573 ever- married	15–49	97%	Social 57.7% Hygienic 28.6% Religious 12.1%	Low parental education	NA	
Dandash ²⁷	2001	Sharkia (N)	Mothers of 352 girls	14–16	89.5%	Social 30.2% Religious 17.5% Hygienic 3.5%	Rural residence Low parental education	NA	Hospital-based Unclear sampling Small sample size
Al-Hussaini ¹⁰	2003	Assiut (S)	254 nulliparous coming for labor	16–37 (21.5 ± 3.4)	100% (51% type I vs. 49% type II)	Social 46.5% Hygienic 2.4% Religious 0.8%	NA	1ry 28%: Pain Bleeding Dysuria 2ry 2.4%: Discharge Pain	Hospital-based Small sample size Only nulliparous Non-response bias
El-Zanaty ¹⁴	2004	EDHS (N&S)	6,587 ever- married	15–49	97%	Religious Social	Low parental education Rural residence	NA	Only ever-married
Yount ⁴¹	2004	Minia (S)	1504 Mothers & 3212 daughters	M 35–44 D > 5	M 98% D 55.7% & 36.1% to be circumcised 96%	Religious Social	Low parental education	NA	Only ever-married
El-Zanaty ¹⁵	2006	EDHS (N&S)	19,474 ever-married	15–49		NA	Low parental education Rural residence	NA	Only ever-married
Elhashar ⁴²	2007	Qalyu- beya (N)	264 newly- married	NA	75.8%	NA	Rural residence	2ry: Dysmenorrhea 40% Irregular menses 20% Discharge 77.5% Dyspareunia 40.5% Loss of libido 28.5% No satisfaction 43% Episiotomy 88.8% Fetal distress 23.7% Anxiety Phobia	Hospital-based Unclear sampling Small sample size Only newly-married No adjustment

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Table 1 (continued)

Study	Year	Site	Population	Age	Prevalence	Drives	Risk Factors	Complications	Limitations
Hassanin ²⁸	2008	Sohag (S)	3730 schoolgirls	10–14 (12.4 ± 1.2)	84.9%	Religious 36.7% Social 32.8%	Rural residence	NA	Unclear sampling
Tag-Eldin ²⁵	2008	Cairo Alex- andria Sharkia Dakahlia Demiatia Port Said Beni- Suef Assiut N. Sinai (N&S)	38,816 schoolgirls	5–14 (10.1 ± 2.3)	Total 50.3% Cairo 36.5% Alexandria 39.2% Sharkia 73.9% Dakahlia 49.8% Demiatia 21.5% Port Said 17.9% Beni-Suef 73.1% N. Sinai 25.3% Assiut 75.5%	Religious 33.4% Hygienic 18.9% Social 17.9%	Low parental education Rural residence Southern Governorates	NA	Only school students
El-Zanaty ¹⁶	2009	EDHS (N&S)	5539	15–49	91% ever-married 95.2% never-married 80.5%	NA	Low parental education	NA	Limited sample size
Emam ⁴³	2011	Minia (S)	300 mothers & daughters	M 40.6	M 95.7% D 77.3%	NA	Rural residence Low education	NA	Unclear sampling Only ever-married Only rural areas
Habib ⁴⁴	2011	Minia (S)	772	16–50	92.2%	NA	NA	2ry: Dyspareunia 39.7%	Hospital-based Unclear sampling
Rasheed ⁴⁵	2011	Sohag & Qena (S)	4158 residents, nurses, patients	NA (young)	89.2%	NA	Rural residence FGM of mother	NA	Hospital-based Unclear sampling
Ibrahim ¹⁹	2012	Ismailia (N)	220 married women	29	74.5% (86% type I vs. 14% type II)	NA	Rural residence Low education	1ry: Pain Bleeding 2ry: Sexual dysfunction Depression Anxiety	Hospital-based Unclear sampling Small sample size
Zayed ²⁰	2012	Giza Cairo (N)	244	< 30	63.9%	Social 64.1% Religious 35.9%	NA	1ry: Bleeding 33.3% 2ry: Dysuria 7.7%	Unclear sampling Small sample size
Shaeer ⁴⁶	2013	Egypt (N&S)	542 internet users	NA	50.2%	Religious 58%	NA	NA	Online survey
Hassanin ⁴⁷	2013	Assiut Sohag (S)	500 mothers	33	71.6% at least 1 daughter with FGM	Social 42.6% Religious 19.3%	NA	NA	Unclear sampling Hospital-based Unclear sampling Inadequate methods
Arafa ⁴⁸	2014	Sharkia (N)	1500	30	85.5% (49.2% type I vs. 50.8% type II)	Religious 46.6% Social 38.2% NA	Rural residence	1ry: Bleeding 19.6%	Hospital-based Unclear sampling No adjustment Only ever-married
El-Zanaty ¹⁷	2015	EDHS (N&S)	21,762 ever-married	15–49	92%	Religious 38.6% Social 37.1%	Low parental education Rural residence Rural origin	NA	Unclear sampling Small sample size
Abolfotouh ³⁰	2015	Alex- andria (N)	313 medical students	NA	14.7%	Religious 38.6% Social 37.1%	Low income	1ry: Bleeding 30.9% 2ry: Loss of libido 28.8%	Only 1 village Unclear sampling No adjustment
Shaheen ⁴⁹	2016	Menofia (N)	400 married	31.1 ± 6.9	83%				(continued on next page)

Table 1 (continued)

Study	Year	Site	Population	Age	Prevalence	Drives	Risk Factors	Complications	Limitations
Abdel- Aleent ⁵⁰	2016	Assiut Sohag (S)	430 newly- married	24 ± 7	87.4%	NA	NA	2ry: Dyspareunia 77.4%	Hospital-based Unclear sampling Small sample size Small sample size
Modrek ⁵¹	2016	Qalyu- beya (N)	410 mothers & daughters	M 31.3 D 6.8	M 92% D 12% & 35% to be circumcised 86.9%	Religious	NA	NA	Unclear sampling Small sample size Inadequate analysis Hospital-based Unclear sampling
Yousef ⁵²	2017	Sohag (S)	480 university students	19.7 ± 1.5	89.1% (58.5 % type I vs. 41.5% type II)	Social 21.2% Religious 18.6% Religious Social	NA	1ry: Bleeding 38.5% Urinary 23.9% 2ry: Sexual dysfunction 40.9% Urinary 15.1% 2ry: Depression Anxiety Somatization Distress	Unclear sampling Small sample size Inadequate analysis Hospital-based Unclear sampling
Mitwaly ⁵³	2017	Luxor (S)	1175 coming to outpatient clinics	NA		NA	Rural residence	NA	Hospital-based Unclear sampling Small sample size No adjustment Unclear sampling
Ahmed ¹⁸	2017	Ismailia (N)	204	14-19 (16.0 ± 2.5)	66.2%	Religious	Rural residence Low parental education	NA	Hospital-based Unclear sampling Small sample size No adjustment Unclear sampling
Sayed ²⁶	2017	Egypt (N&S)	2012	10–14	64.8%	Religious	Rural residence Low parental education	NA	Hospital-based Unclear sampling Small sample size No adjustment Unclear sampling
Arafa ²⁴	2018	Beni- Suef (S)	1723 university students	20.8 ± 1.7	47.3%	Religious 96.3% Social 81.5% Hygienic 10.6%	Religious Low parental education	2ry: Dysuria 11.8%	Only university students No adjustment
Ali ²²	2018	Beni- Suef (S)	3353	12-25 (20.1 ± 3.2)	55%	NA	Rural residence Low parental education	2ry: Dysuria 12.2%	Only Beni-Suef City No adjustment Only 1 village
Mohamed ³³	2018	Minia (S)	418	18-78 (31.8 ± 14.6)	76.6%	NA	Poor knowledge about FGM	NA	Unclear sampling No adjustment
Abdel Raheem ⁴⁰	2018	Fayoum (S)	518	15-49 (34.2 ± 9.6)	83.4%	NA	Rural residence Low parental education	2ry: Sexual dysfunction	Unclear sampling No adjustment

M: mother, D: daughter, N: North, S: South, NA: not available.

Fig. 2. Distribution of studies by socio-demographic characteristics, publication year, and FGM prevalence.

3.3. Drives

The list of FGM drives in Egypt can be shortened to social, religious, and hygienic drives.

These drives were primarily ignited by two important risk factors: low education and rural residence.

3.3.1. Social drives

Socially, FGM practice is not widely condemned and parents of the circumcised children and FGM practitioners do not consider the practice a type of physical violence. People often accept FGM as a normal milestone of the woman's life. Some parents are even accused of negligence in case of omitting FGM and face substantial social pressure to get their young daughters circumcised.³¹

Moreover, there is a strong association between FGM and the accepted moral standards of the woman in rural communities. These moral standards determine the chances of the young girls in doing well in the marriage market. Uncircumcised girls are thought to have lower marriage opportunities because it is socially unacceptable for men to marry uncircumcised women.³² A recent study showed that 71.4% of men preferred circumcised wives, and accordingly, women in this rural community were supportive of the continuation of FGM even more than men; 60.3% versus 47.9%, respectively.³³

Van Rossem et al. analyzed the education, labor market participation, and literacy of women included in the EDHSs in relation to their attitudes towards FGM and found that the improvement of women's social position was associated with anti-FGM attitudes. The authors suggested that the disadvantaged social position of women in Egypt paved the way to the continuation of FGM in the context of the societal gender inequality.³¹

However, the change of the attitude might not be sufficient to curb the practice without improving the parental education. Educated parents pose a stronger social position in the rural community compared with the low or non-educated members. This privileged position enhances the autonomy of parents' decision and makes them more loyal to family than community traditions. When parents, especially mothers, become less guided by social traditions, they are more likely to oppose FGM. Over time, the educated parents will cast a collective choice abandoning FGM.³¹

3.3.2. Religious drives

Many people believe that the goal of FGM is to attenuate the sexual

desire of women to agree with the moral view of Islam. But, this claimed religious moral view may be no more than a translation of the social view in the country because FGM is not practiced among the Muslim populations in Gulf countries; meanwhile, it is practiced by Christians in Egypt. In a rural area in South Egypt, 47.3% of Muslims versus 30% of Christians described FGM as a good practice that should be continued.³³

Many contradictions were noticed among the views of the Muslim preachers and religious leaders regarding FGM. In 1950, the Grand Mufti of Egypt, one of the highest religious leaders in Egypt, quoted "Female circumcision is an Islamic practice mentioned in the tradition of the Prophet. We support the practice as a Sunna and sanction it because of its effect on attenuating the sexual desire in women and directing it to the desirable moderation".²⁹ In 2013, another Grand Mufti published a review "The Islamic view on female circumcision" where he defined the practice as "a mutilation that endangers the health and social life of women". He also called the legislative organs to take decisive actions against FGM by declaring it a crime.³⁴

Currently, the mainstream of religious leaders denounces the continuation of FGM, however, there is a wide discrepancy between their views and those of the local preachers in villages and semi-urban areas who do not condemn and sometimes even support the practice. The beliefs of those preachers can not be detached from their social background. We suppose that if the influential preachers in the community declare their opposition to FGM, significant drops in the prevalence may occur shortly. Since religious preachers in Egypt have a profound impact on shaping the opinions of the Egyptians, future studies should investigate the knowledge and attitude of religious preachers about FGM.

3.3.3. Hygienic drives

While the social and religious drives of FGM could be understood within the socio-cultural dogma of the Egyptian society, the hygienic drive seems irrational and stands on no basis. Rural residents in Egypt refer to FGM as "Tahara" or "purification" which reflects the hygienic perception about the practice. It is thought that FGM is associated with the cultural ideals of femininity. These ideals consider the girls purified only after removal of the unfeminine body parts.³⁵ Mostly, this drive is attributed to the suboptimal knowledge and attitude regarding FGM.

4. Study limitations

The included studies carried potential limitations that may affect the generalizability of the results. For example, data on FGM came from self-reported questionnaires or interviews. Previous studies found incomplete agreement between self-report of FGM and gynecological examination; 79% and 97%.^{36,37} In addition, the sampling methods of most of the included studies were vague or unsuitable. Failing to use appropriate sampling techniques can lead to serious forms of bias that result in under- or overestimation of the findings.

Although the EDHSs are widely perceived among the scientific community in Egypt as an accountable indicator for many health issues, including FGM, due to their extensive coverage, classy sampling methods, and large sample size, they are not without limitations. First, these surveys were conducted on ever-married women who had dissimilar socio-demographic characteristics to the never-married, and when the EDHS 2008 included a mixed sample from never- and ever-married women, the overall FGM prevalence dropped to 91% (95.2% in ever-married and 80.5% in never-married).¹⁶ Besides, the age category (15–24 years) of the surveyed women represented less than 18% of the sample. This is despite that the median age of the Egyptians in 2015, for example, was 24.7 years and 35% of women in this year were under 15 years.³⁸ Besides, the included women who were married at the age between 15 and 24 years would be more likely to be circumcised because early marriage and FGM have the same socio-educational risk factors.³⁹

Further, the EDHSs carry possible sampling and non-sampling errors. While non-sampling errors were difficult to be detected, some sampling errors were documented elsewhere.^{12–17} One more concern about the EDHSs is that the response rates of most surveys were higher than 99%, despite the EDHS lengthy questionnaires for which the interviewers offered no personal incentives for participation. Other studies that investigated FGM among Egyptian samples showed response rates less than 85%.^{22,40} We think that the very high response rates of the EDHSs could be embellished because the Egyptian community is conservative enough to classify the gynecological affairs of women as a taboo that should not be unveiled. So, further clarifications about the response rate and the possibility of non-response bias should be considered in future EDHSs.

Moreover, most studies had several limitations that significantly affect the generalizability of their findings such as investigating a particular category (ever-married, nulliparous women, one village, school or university students, or hospital attendants). Specifically, findings from hospital-based and student-based studies should not be generalized. Public hospitals in Egypt offer primary, secondary, and tertiary health care services with low prices making them the first choice of a significant portion of the destitute people. Therefore, hospital-based studies, mostly conducted on underprivileged populations, can not represent women in Egypt. On the other hand, studies conducted on university students can not be representative for women in the same age category due to two main reasons. First, in comparison to their low to moderately educated counterparts, university students usually come from families with higher social and economic levels. Second, following the campaigns that advised against FGM, an evolving perception linking between FGM and socio-economic shortcomings started to appear. Further, many circumcised women do not consider themselves mutilated and perceive the term FGM as an offense. Therefore, for a young girl looking for a university social life, admitting exposure to FGM could be stigmatizing or offending making them avoid participation in FGM studies which underestimates the real FGM prevalence.

5. Conclusion

Based on the vagueness of the implemented sampling methods and the wide variations in the socio-demographic characteristics of the investigated populations, we believe that the answer of the question “What is the prevalence of FGM in Egypt?” is still without a conclusive answer. We also believe that this prevalence is varying across the governorates and even within the same governorate according to the socio-educational status of the residents. Since FGM is primarily a cultural practice, its prevalence should be changing over time. Accordingly, before extracting conclusions from the findings of FGM studies, including the EDHSs, recognizing the sampling methods, the characteristics of the study population, and the time of data collection is mandatory.

We can expect that investigating easily reached samples such as patients and university students is attributed to the lack of sustained funding of FGM research. In this regard, funding future wide-scale epidemiological studies investigating FGM is highly recommended. Prospective studies that aim to evaluate the trends of FGM and assess the impacts of the awareness campaigns on its continuation are needed as well. However, future research should adopt intricate sampling methodologies that minimize the effect of non-response bias and guarantee the representativeness of the whole community. Besides, we believe that detecting the prevalence of FGM in Egypt should not be a responsibility of one research center or one organization, but many research institutions and organizations.

Further, we concluded that low parental education and rural residence are the top risk factors for FGM while religious, social, and hygienic factors are the primary drives behind the continuation of the practice. For a better understanding of the religious drives, future studies should investigate the knowledge and attitude of religious

preachers regarding FGM.

Finally, eradicating FGM demands a collaborative approach including community leaders, influential preachers, health care professionals, social workers, national and international institutions, and non-governmental organizations. Still, we believe that any initiative to eradicate FGM should begin with empowering the social position of women throughout education to make them the key agents of change. Also, adopting a clear religious speech that condemns FGM should be encouraged.

Authors contribution

AA and AM contributed to the systemic review of articles and manuscript writing.

EE contributed to manuscript writing and proof editing.

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Declaration of competing interest

None.

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