

ORIGINAL ARTICLE

Healthcare professionals attitudes on “Female Genital Mutilation”: an observational study

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Doi: 10.36129/jog.2023.117

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ABSTRACT

Objective. To explore attitudes and perceptions on Female genital mutilation (FGM) in Italian healthcare professionals, focusing on their agreements or disagreements associated to their education levels in this task.

Materials and Methods. An on-line, observational, cross-sectional and multicenter study was carried out from July 2021 to February 2022, through social media platforms.

Results. There was insufficient knowledge and preparation on the topic of FGM ($p=.002$). Only 35.8% ($n=86$) of professionals disagreed with the practice know the Law n. of 9 January 2006 ($p=.001$). 80.4% ($n=193$) of the sample declared the absence of healthcare workers dedicated to support women in this phase. 68.8% ($n=165$) of participants who disagreed with this practice did not receive post-basic training in the care of the FGM woman ($p=.001$).

Conclusions. There were some gaps in the FGM knowledge among healthcare professionals who were nevertheless recognized by the WHO as the main actors in the eradication of this practice.

Key words

Attitude; Female Genital Mutilation; Healthcare Professional.

Introduction

Female Genital Mutilation (FGM) referred to “all procedures that involve the partial or total removal of the female external genitalia or other harmful interventions on the female genital organs for both cultural and other non-therapeutic reasons and without any consents” [1]. FGM is widespread in 31 African countries, in the Middle East (Iran, Iraq, Yemen, Saudi Arabia and Israel) and in Asia (Indonesia) [2]. Africa records a higher prevalence than other continents, especially the sub-Saharan areas (Sudan, Chad, Niger, Burkina Faso, Mali and Mauritania), where there are about 3 million girls who undergo the FGM practice. In Kenya, among the Maasai tribes (traditionally nomadic shepherds) and Samburu, the rate of mutilated women ranges from 78% to 86%, in Cameroon and Uganda it is estimated only 1%, while in Somalia and Guinea percentages increase over 90%. In recent decades, migratory flows have substantially contributed to transfer cultural and traditional beliefs related to FGM to the Western world [3,4]. Therefore, the FGM practice becomes a global problem also in Australia, North America and Europe [5]. In fact, the estimate of excised women / girls in Europe is equal to 600,000 and in Italy, which is one of the most involved host countries, is 80,000 [6]. An Italian survey conducted by the Bicocca University of Milan revealed that in Italy during 2018, the number of “mutilated” women ranges around 87,600. Of these, 7,600 are girls or adolescents coming from Malian, Somali, Sudanese and Burkinabé. These partial estimations cannot be detected, since the practiced mutilation constitutes an underground and illegal network in Italy [7]. On the other hand, according to the latest surveys in the world, at least 200 million women and girls have undergone FGM and, among the victims, there are girls up to 14 years of age, while 3.5 million women are at risk, every year [8-11]. The UNICEF organization states that the trend of girls who will practice the FGM in the next 15 years will be raised, due also to the population growth. The Covid-19 pandemic also impacts not only in the reorganization of pregnancy clinical pathways [12], but also the increasing number of mutilated women, due to the internal blockade and the temporary closure of borders, hampering anti-FGM groups and global efforts to eradicate this practice [13]. FGMs are influenced by various factors, including: beliefs, customs, rituals, norms of behavior, cultural ideals of femininity, social hierarchies that embrace not only tradition but also aspects related to politics, economics and religion, as well as in several gynecologic dimensions [14]. FGM is considered as a “rite of passage” or “initiation rite” in order to guarantee social status to women and relating families to become part of a community. The ritual ensures pride, honor and a sense of belonging to society, avoiding stigma and exclusion. These

are beliefs that are transmitted from one generation to the next with strong community pressure, where the fundamental role is assumed by profane elderly women, generally old from the village called "jedda" in Somalia, or "daya" in Sudan or "mammana" or by the child's grandmother or mother with a payment in money or good fees for practice execution [15-17]. In the FGM practice, men play a marginal role and also they agree to the FGM practice and prefer to marry mutilated women, too [2,18-20]. FGM practices are divided into four categories, according to the severity of the operation, specifically: the partial or the total clitoris removal, the narrowing of the vaginal orifice with a practice better known as the female infibulation, the procedure that often required a further practice of reopening the suture performed, to facilitate the intervention or delivery, through a de-fibulation operation. In some regions women can be re-infibulated after the opening of the scar with the risk of being subjected to infibulation and de-fibulation several times in their lives. FGM practices are performed at various ages, since the first week of life to the moment before childbirth or at other times of life. In Egypt over 90% are between 4 and 15 years old, 60% before the age of 5 years in Ethiopia, Mali and Mauritania, 76% in the first two weeks of life in Yemen [21]. FGMs are performed individually or in groups especially during local party events [22]. The practice lasts about 15-20 minutes, it is painful and traumatic and its performance is often unsanitary [14]. The FGM practice is globally unique, non-sterile, by using razors, knives, broken glass or wood splinters [22]. During the FGM practice, the child is forcibly restrained, the legs are kept tied for 7-14 days or even 40 days to promote healing [22]. The margins of the vulva are sewn with acacia spines, only in some lucky cases are catgut (thread-like material obtained from the intestines of animals) [23] and a small orifice is left, for the passage of the menstrual flow and urine, which is held open by a small sliver of wood with a very small diameter, so that "only a grain of a mile passes" [24]. Cow dung, tree sap, ashes, egg white, coffee mash, herbs are used for haemostasis [25]. No form of anesthesia or analgesia is expected. Only in recent years, the "mutilatory" practice began to involve physicians, nurses, midwives, gynecologists and other health personnel who work both in public or private clinics, assuming the definition of "medicalization of FGM", condemned in 2009 by the WHO, UNICEF and UNFPA [26]. In 1999, the WHO recommended the implementation of an approach to behavior change and to identify new cases of mutilated women or preventive action against FGM to improve efforts against FGM among healthcare professionals, who play a key role in this task [27]. In Italy, there are specific provisions of the Ministry of Health to guarantee the legal and socio-health protection of women victims of FGM. However, a holistic approach is still lacking. The P-ACT, a project financed by the Asylum, Migration and Integration Fund of the Ministry of the Interior, contributes to filling the gaps in services and territorial networks relating to the personnel skills and approaches by building and training actions. Social, cultural and community norms often create challenges for health professionals working with mutilated women and girls. In this context, the Supervisory Body of International Human Rights Treaties (TMB) also stresses to resist and eradicate FGM by requiring a multi-sectoral, gender- and culture-sensitive response that works across sectors, communities and generations [10,28-29]. The aim of the present study was to explore attitudes and perceptions on Female genital mutilation (FGM) in Italian healthcare professionals, focusing on their agreements or disagreements associated to their education levels in this task.

Materials and Methods

Study Design

Observational, cross-sectional and multicenter study.

Study Approach

From July 2021 to February 2022, it was carried out an on-line survey, which was disclosed via email and through social media platforms, using the “Snowball sampling” technique for statistical sampling until the sample is saturated.

Participants

Healthcare professionals, including nurses and pediatric nurses, midwives, physicians, psychologists, psychiatric rehabilitation technicians, developmental neuro and psychomotor therapists, professional educators, health assistants were thought as potential participants of the present study. By considering that in Italy there were around 1,500,000 healthcare workers and also by fixing the minimum statistically significant sample size thanks to the Cochran formula [30] with 95% as the confidence level and 5% as the confidence interval, the representative sample size of the Italian healthcare population was 384.

Recruitment criteria: inclusion and exclusion criteria

Included healthcare professionals were: physicians, pediatric nurses and nurses, psychologists, midwives, developmental neuro and psychomotor therapists, psychiatric rehabilitation technicians, professional educators, health assistants operating, at the time of the study, within an Italian public or private structure or professional firm with a work experience of at least 12 months and who have agreed to participate in the study by signing the informed consent.

Those who had been operating for less than 12 months and / or those who did not agree to join the study by not signing the participation consent were excluded.

The Questionnaire

The survey tool included two main sections. The first section included socio-demographic characteristics of interviewers, specifically:

- gender, as female and male;
- age groups, as: from 20 to 30 years, from 31 to 40 years, from 41 to 50 years, from 51 to 60 years and over 61 years;
- years of work experience, classified interviewers into two groups, as: healthcare professionals who worked until 5 years and who worked over 6 years;
- professional role, among: nurse and pediatric nurse, professional educator, physician, midwife, psychologist, psychiatric rehabilitation technician, psychomotor therapist;
- work area, such as: surgery, emergency, medicine, maternal-infantile, mental health, territorial services;
- if participants, in their careers, had never met a women undergoing the FGM practice;
- if in the interviewer’s workplace there was any healthcare professional employed to support women with the FGM.

In the second section of the questionnaire, the perception of participants agreeing or disagreeing in the FGM practice was assessed by also explored other aspects, specifically:

- if the interviewer believed to have sufficient knowledge and training in the FGM matter;
- how participants felt to be updated on the FGM matter;
- how participants got their knowledge on this topic;
- if participants knew the Law no.7, 9 January 2006 regarding "Provisions concerning the prevention and prohibition of the FGM practices;
- what were the determining factors involving the FGM practice, between: illiteracy, gender identity, hygiene information, femininity ideals, purity, religion, rite of passage;
- how healthcare professionals took care of a minor at risk of FGM practice, such as: involving family and/or social services, confide it to their colleagues, respect the original culture and tradition.

Data analysis

All data were collected in an Excel data sheet and processed thanks to the SPSS, IBM, version 20.

Socio-demographic data were all continuous variables and presented as frequencies and percentage. *Chi-square tests* adjusted thanks to *Bonferroni test corrections* were performed for all the items of the second section of the questionnaire, by highlighting any significant difference between who agreed and who disagreed the FGM practice according to all the items included. All p-values less than 0.05 were considered as statistical significant.

Results

Socio-demographic characteristics

A total of 240 healthcare professionals were recruited in the present study. of these, 86.30% were females and 13.80% were males. Most of participants were nurses (57.50%) and aged between 20 to 30 years (36.70%) and between 31 to 40 years (32.10%) and worked over 6 years (59.60%), especially in the maternal-infantile (22.50%) and in the territorial services (20.80%), respectively. 72.50% of interviewers did not met female patients with FGM and 80.40% of them stated that at their work places there were not present any professionals dedicated to the FGM condition (Table 1).

Table 1. Sampling characteristics (n=240).

Healthcare professionals' levels of agreeing or disagreeing on the FGM practices

By considering the grade of agreeing and disagreeing on the FGM practice among healthcare professionals (Table 2), significant differences were reported between participants who disagreed the FGM practice and their scarce perception levels on their knowledge on this matter ($p=.002$). additionally, most of participants stated that they got knowledge on the FGM in other conditions which not included experience on their practical field, educational course post degree or

conferences on this matter ($p < .001$). Finally, most of participants stated that in presence of minor aged with FGM, they believed to contact their families and also the relative social service in order to support this condition ($p < .001$) (Table 2).

Table 2. Healthcare professionals' levels of agreeing or disagreeing on the FGM practices and their relating attitudes on this matter (n=240).

* $p < .05$ is statistically significant.

Discussion

The survey was carried out to explore attitudes and perceptions on Female genital mutilation (FGM) in Italian healthcare professionals, focusing on their agreements or disagreements associated to their education levels in this task. Our study found that 83.3% (n=207) of the 240 healthcare professionals who participated in the study were dominant, with 59.6% having a work experience of over 6 years (n=143). Nurses represented 57.5% (n=138) of the sample, followed by 15.4% (n=37) of obstetricians and 10.8% (n=26) of psychiatric rehabilitation technicians. The maternal and child area was the most represented (22.5%; n=54), together with local services (20.8%; n=50). Our study showed that 57.1% (n=137) of the disagreeing sample did not have sufficient knowledge or training on FGM. From a 2012 study by Caroppo et al. [31], it emerged that only 7.3% of the interviewees knew FGM well, while 4.9% did not know it at all [31]. Healthcare professionals in Belgium [32] and Spain [33] had a greater knowledge of FGM and various types, respectively 81% and 94.5%. The lack of knowledge of mutilation and its consequences by European health workers was confirmed by a study, published in July 2021, which explored the experiences of FGM of migrant women from countries practicing FGM residing in a European host country [34] as showing by studies conducted by Siddig et al. [35] and Khosla et al. [10], respectively. In Kenya, on the other hand, a country with a high prevalence of the practice, despite nurses and obstetricians having a high knowledge of the various types of FGM, 57.7% believed that it was a culturally beneficial [1]. In the study carried out by Kaplan et al. [36] it was shown that in sub-Saharan Africa healthcare workers had a lot of knowledge on mutilation and their complications, 24.4% of the sample expressed themselves in a favorable way and had more favorable attitudes towards abandonment if this practice was not adopted among their daughters [33]. Our study showed that 68.8% (n=165) of information on the topic was gained through means other than conferences / courses, field experience or masters and this appeared in line with the literature. A study in the United States, published in 2021, revealed that 41.5% of health professionals involved, although caring for women with mutilation, had not received any training on the subject. A further study conducted in Spain, published in 2020 [37] demonstrated how healthcare professionals lack training on both academic and post-academic FGM, leading to the non-recognition of this practice on mutilated women [37], as also confirmed by the study by Kimani et al. [1]. In Belgium, only 31.2% of a sample confirmed the training underlying the information on the topic of "mutilation" [31].

In our survey, 40% (n=96) of Italian professionals were familiar with Law no.7, which implemented the principles of the Declaration and Program of the IV UN World Conference on Women - Beijing 1995, as well as the provisions of Articles 2,3,32 of our Constitution - protecting women victims of this abuse and declaring any "female genital lesion or mutilation, caused in the absence of therapeutic needs, for the purpose of sexual conditioning", punishable with imprisonment from 6 to 12 years) and through art. 583 bis c.p. it introduced the "hard" line to protect the health and dignity of the woman subjected to mutilation. In reality, in the case of FGM it was clear that we were faced with acts imposed on minors, acts that caused physical and psychological damage - qualifying, under our criminal code, as injuries - acts that constitute real violence, with sometimes irreversible

consequences on the psychic and physical levels and which today had very little to do with religious justifications, but certainly with ancient and prejudiced customs [38]. In the case of a minor at risk of FGM, 12.1% (n = 29) of professionals would inform the social services and 10.4% (n=25) would involve family members by informing them of the psychological / physical harm and legal consequences in Italy, 63.3% (n=152) gave both answers. These data confirmed those found by Caroppo et al. [31], in which among the Italian healthcare workers who worked with asylum seekers from countries with a high prevalence of FGM only less than half were aware of the anti-FGM law. Instead, there was greater knowledge of the legislation against FGM in Belgium (75.2%) [32] and in Spain (75%) [33]. 29.6% (n = 71) of our study believed that the determining factor for the implementation of mutilation was religion, followed by 19.2% (n = 46) as the rite of passage. Only 2 participants (0.8%) considered the FGM as a sanitation issue. The study by Balde et al. [39], conducted in Guinea, did not support the religious motive as a determining factor for the implementation of mutilation, in fact the midwives supported the practice to avoid stigmatization, control sexual desire and promiscuity; dissociation between religion and practice also presented in Kenya [1]. In Other Countries, as Iran, sex-based model addressed to married women were performed [41]. Regarding the degree of disagreement, 95.8% (n=230) of the participants in our study expressed disagreement with the mutilator practice. In reality we know that infibulation did not find its source in religion but in a terrible patriarchal custom that still saw women as an object today. Subject of abuse, not only by her husband, but primarily by the family of origin, society and ancestral customs to which most African populations were still linked [40]. 94% of Guinean healthcare workers also believed that FGM was a serious problem [36]. While 4% of healthcare professionals said the opposite, as reporting in the study of Balde et al. [39]. Of the 240 participants in our study, only 27.5% (n=66) encountered women undergoing FGM. The data collected in the literature through a review over a period of time ranging from 2000 to 2014 showed the opposite for other countries. For example, the clinical experience with mutilated women concerned 75.3% of obstetricians and gynecologists in New Zealand [42], in the USA 40% of nurses and midwives [43], in Switzerland 50% of gynecologists and obstetricians [44], 60% of healthcare workers including pediatricians in Sweden [45], 80% of gynecologists and 12% of pediatricians in Spain [46] and 58% of gynecologists in Belgium [47]. Mutilations were carried out with instruments that were often not sterilized, unsafe, approximate. Those who practiced them, at times, were a doctor or an expert, but in other cases they were women to whom the modalities with which the practice was carried out were orally transmitted. With tools like this, as it was easy to guess, FGMs caused terrible pain, affecting women for the rest of her life. Such practices caused consequences, such as: infections, cystitis, urinary retention, painful sexual intercourse, painful births. All this enormously conditions the lives of the women who had suffered them. Those who decided to rebel or escape female genital mutilation end up being marginalized or stigmatized by society. The woman became an outcast, abandoned and mocked. In a study conducted by Gonzales et al. [34] it was found that among the women who requested healthcare in the host country, 4 of them in the UK had been offered defibulation for childbirth and only two had accepted. In Spain, no healthcare workers had proposed defibulation during pregnancy of women, only one woman in Spain had requested surgical reconstruction but there was no knowledge of the procedure [34]. Moeed et al. [42] found that out of 385 respondents in Australia and New Zealand (including trainees, fellows and prevention program operators), 21% of them had been asked for reinfibulation after childbirth, 3% had done so more than one, while two out of 385 respondents were asked to perform FGM on an infant, girl or young woman. In a study in Gambia [36] it was female operator who recognized complications related to mutilation more than men and, moreover, having also involved students from academic centers, they had shown a better identification. Transmission of infectious diseases was the most frequently reported consequence (78.5%), followed by bleeding (72.8%). For 65%, obstetric and sexual complications related to childbirth were also recognized and for 33% decreased sexual feelings [36]. According to the study by Isam et al. [48], the difficulties encountered by midwives were closely related to cultural beliefs, religion and tradition given by the perception that FGMs were an important part of culture. The study by

Moeed et al. [42], confirmed the unfamiliarity of health workers with mutilations in fact, argued that staff were unable to manage the mutilated woman during labor and that she was unable to perform an anterior defibulation or episiotomy. The same study argued that African women often had to give in statements to midwives regarding the management of labor in women with FGM. The Marea et al. study [11], evaluated "negative attitudes towards FGM and towards the people who practiced them" and "empathic attitudes" of health professionals, finding that the female gender had less negative attitudes than males, especially considering those who had not received training in the treatment of mutilations and those who identified themselves as people of color. While healthcare workers in Nigeria were less empathetic to the practice [11] and seemed to state that they would also perform it on their daughters [45]. Since 2011, Evans et al. [50] reviewed studies covering professionals such as midwives, physicians, school nurses, district / community nurses and counselors in high-income countries. The review confirmed the lack of the FGM knowledge all around the world and the discomfort's perception among healthcare workers in dealing this specific topic, by highlighting the risk to not identifying cases and then, giving inadequate care for these patients, due also to the absence of protocols, guidelines and referencing paths. The Covid-19 pandemic period contributed to jeopardizing a precarious situation in terms of training, by stopping global programs destined to combat the FGM practice and its relating socio-health consequences. The measures adopted to counter the spread of the SARS-CoV-2 infection had forced many vulnerable girls into domestic isolation, depriving them of any type of protection, by also improving the FGM practice at home. Therefore, it was necessary to ensure and evaluate adequate skills among healthcare professionals, also through training both on-line or in-person, too. Several studies adopted post-training evaluation strategies, as well as the study of Diaz et al. [51] which assessed the knowledge among USA nurses and midwives before and after training in FGM women's, by adopting an educational program that included instructional information, case studies, a laboratory of practical deinfibulation and repair skills, and advice from an intermediary. Knowledge in several types of mutilation and the ability to provide safe assistance were greatly improved after training [50]. Spreading a health culture on FGM in educational settings, such as: schools and universities, was therefore essential, as confirmed by the study by Balde et al. [39], Ugarte et al. [37], and the study by Isman et al. [48] in which midwives in Somalia expressed the need to increase their skills through further studies and training to be able to face new knowledge and development in the field of FGM. The need for more training was also confirmed in the Cappon et al. [32] and Reig-Alcaraz et al. [33] studies. The need for new developments and studies was also expressed in the review by Auricchio et al. [52] due to the absence of standardized lines on clitoral reconstructive surgery and the presence of scant studies, in a historical context in which the growth of awareness of self-image and sexual identity, as well as the stigmatizing language associated with them such as "poor victim" was leading women to a greater demand for reconstructive surgery. Therefore, it was necessary to safeguard the dignity and physical and psychological integrity of women, and indicate specific health policy actions necessary to achieve any goals included in the Agenda for Sustainable Development [53].

Limitations

Among the limitations of the study, it should be emphasized that it was able to reach a more heterogeneous population at the national level, that could be not considered as representative of all the Italian professional categories included in the study. Additionally, more than half of the sample recruited was not directly involved in the care of these patients. In addition, it should consider also a possible recall bias due to participants and attributed also to a reticence of the particular topic.

Conclusions

The survey was carried out to explore attitudes and perceptions on Female genital mutilation (FGM) in Italian healthcare professionals, focusing on their agreements or disagreements associated to their education levels in this task. The results of the present study demonstrated some knowledge gaps of the FGM by healthcare professionals who were nevertheless recognized by the WHO as the main actors in the eradication of the practice. Furthermore, Italy appeared to be one of the EU countries where there was a high prevalence of women who underwent FGM [54]. In fact, in 2016 the presence of FGM women in Italy ranged between 60,000 and 80,000 [55]. Hence the importance to adopt training interventions based on cross-cultural assistance starting from schools and universities without forgetting post-graduate training, which was required and compulsory for health care categories, since this issue belonged to us geographically, ethically and morally. Each of us could play an active role in abandoning this practice, which violated the right of choice and health of every child, girl, woman who was still undergoing any kind of genital cut dictated by social norms, as well as providing adequate health care so as to reduce any complications from FGM. "We need training, awareness and empowerment processes, which concerned not only local communities, but also all sectors involved in the phenomenon" [51,53].

Ethical concerns

Ethical concerns of the study were stated within the presentation of the questionnaire. Participation in the study was voluntary and considered as consent expression. It was emphasized that participation was voluntary and that the participant could refuse participation. Those interested in participating were presented with the opportunity to express informed consent and the confidentiality and anonymous nature of the information was guaranteed according to the Declaration of Helsinki principles.

COMPLIANCE WITH ETHICALS STANDARDS

Authors contribution

Conceptualization: E.V., R.L.; Data curation: A.L., T.B., M.C.C.; Formal Analysis: E.V., P.S.; Funding acquisition: None, Investigation: R.L., A.D.B., L.C., A.C.; Methodology: E.V.; Project administration: R.L., A.R., M.C.; Writing – original draft: E.V., R.L. A.L.; Writing – review & editing: E.V., R.L.

Funding

None.

Study registration (if applicable)

Not applicable.

Disclosure of interests

None to declare.

Ethical approval

Not requested.

Informed consent

Informed consent was obtained from all subjects involved in the study. Written informed consent for publication was obtained from participating nurses.

Data sharing

Not applicable.

References

1. Kimani S, Esho T, Kimani V, Muniu S, Kamau J, Kigundu C, et al. Female Genital Mutilation/Cutting: Innovative Training Approach for Nurse-Midwives in High Prevalent Settings. *Obstet Gynecol Int.* 2018; 2018:5043512. doi: 10.1155/2018/5043512.
2. Perron L, Senikas V, Burnett M, Davis V. Guideline No. 395-Female Genital Cutting. *J Obstet Gynaecol Can.* 2020; 42(2):204-217.e2. doi: 10.1016/j.jogc.2019.06.015.
3. Essén B, Johnsdotter S. Female genital mutilation in the West: traditional circumcision versus genital cosmetic surgery. *Acta Obstet Gynecol Scand.* 2004; 83(7):611-3. doi: 10.1111/j.0001-6349.2004.00590.x.
4. Mathews B. Female genital mutilation: Australian law, policy and practical challenges for doctors. *Med J Aust.* 2011; 194(3):139-41. doi: 10.5694/j.1326-5377.2011.tb04197.x.
5. Ortensi LE, Farina P, Leye E. Female genital mutilation/cutting in Italy: an enhanced estimation for first generation migrant women based on 2016 survey data. *BMC Public Health.* 2018; 18(1):129. doi: 10.1186/s12889-017-5000-6.
6. European Parliament. (2020). Female genital mutilation: where, why and consequences. Available from: <https://www.europarl.europa.eu/news/it/headlines/society/20200206STO72031/female-genital-mutilation-where-why-and-consequences> Accessed on May 8, 2022.
7. United Nations Population Fund. 2021. Female genital mutilation (FGM) frequently asked questions. Available from: <https://www.unfpa.org/resources/female-genital-mutilation-fgm-frequently-asked-questions> Accessed on May 22, 2022.
8. Ahmed HM, Shabu SA, Shabila NP. A qualitative assessment of women's perspectives and experience of female genital mutilation in Iraqi Kurdistan Region. *BMC Womens Health.* 2019; 19(1):66. doi: 10.1186/s12905-019-0765-7.
9. Katz I, Sanders R, Carvalho MN, Friedman HS, Legesse B, Winfrey W, et al. Cost and impact of scaling up female genital mutilation prevention and care programs: Estimated resource requirements and impact on incidence and prevalence. *PLoS One.* 2021; 16(1):e0244946. doi: 10.1371/journal.pone.0244946.
10. Khosla R, Banerjee J, Chou D, Say L, Fried ST. Gender equality and human rights approaches to female genital mutilation: a review of international human rights norms and standards. *Reprod Health.* 2017; 14(1):59. doi: 10.1186/s12978-017-0322-5.

11. Marea CX, Warren N, Glass N, Johnson-Agbakwu C, Perrin N. Factors Associated with Health Care Provider Attitudes, and Confidence for the Care of Women and Girls Affected by Female Genital Mutilation/Cutting. *Health Equity*. 2021; 5(1):329-337. doi: 10.1089/heq.2020.0130.
12. Vitale E, Canonico A. Obstetric nursing reorganization in pregnancy during the COVID-19 pandemic: a proposal integrative review of the literature. *Ital J Gynaecol Obstet*. 2021; 33(3): 190-196.
13. Unicef. (2021). *COVID-19: A threat to progress against child marriage*. Available from: <https://www.unicef.org/press> Accessed on May 23, 2022.
14. Aquino CI. Gynæcology & Obstetrics. *Ital J Gynaecol Obstet*. 2022; 34(3): 167.
15. González-Timoneda A, González-Timoneda M, Cano Sánchez A, Ruiz Ros V. Female Genital Mutilation Consequences and Healthcare Received among Migrant Women: A Phenomenological Qualitative Study. *Int J Environ Res Public Health*. 2021; 18(13):7195. doi: 10.3390/ijerph18137195.
16. Sugamele L. (2015). Le mutilazioni dei genitali femminili. Available from: <https://www.rivistadisocietesociali.it/le-mutilazioni-dei-genitali-femminili/> Accessed on May 6, 2022.
17. Semprini A. (2022). Storia delle mutilazioni genitali femminili. Available from: https://www.pediatria.it/storiapediatria/p.asp?nfile=storia_mutilazioni_genitali_femminili Accessed on May 22, 2022.
18. Balogun OO, Hirayama F, Wariki WM, Koyanagi A, Mori R. Interventions for improving outcomes for pregnant women who have experienced genital cutting. *Cochrane Database Syst Rev*. 2013; 2013(2):CD009872. doi: 10.1002/14651858.CD009872.pub2.
19. Mulongo P, McAndrew S, Hollins Martin C. Crossing borders: discussing the evidence relating to the mental health needs of women exposed to female genital mutilation. *Int J Ment Health Nurs*. 2014; 23(4):296-305. doi: 10.1111/inm.12060.
20. Sakeah E, Debpuur C, Aborigo RA, Oduro AR, Sakeah JK, Moyer CA. Persistent female genital mutilation despite its illegality: Narratives from women and men in northern Ghana. *PLoS One*. 2019; 14(4):e0214923. doi: 10.1371/journal.pone.0214923.
21. Yirga WS, Kassa NA, Gebremichael MW, Aro AR. Female genital mutilation: prevalence, perceptions and effect on women's health in Kersa district of Ethiopia. *Int J Womens Health*. 2012; 4:45-54. doi: 10.2147/IJWH.S28805.
22. Odukogbe AA, Afolabi BB, Bello OO, Adeyanju AS. Female genital mutilation/cutting in Africa. *Transl Androl Urol*. 2017; 6(2):138-148. doi: 10.21037/tau.2016.12.01.
23. Del Riccio M, Rosini D, Bartalucci C. Mutilazioni genitali femminili. *Salute internazionale*, 2019.
24. Sacchetti G, 2022. Prendersi cura delle FGM. Available from: https://www.regione.marche.it/Portals/0/ODS/Materiale%20FGM/Graziella%20Sacchetti_FGM.pdf Accessed on May 8, 2022.
25. Iavazzo C, Sardi TA, Gkegkes ID. Female genital mutilation and infections: a systematic review of the clinical evidence. *Arch Gynecol Obstet*. 2013; 287(6):1137-49. doi: 10.1007/s00404-012-2708-5.

26. United Nations Population Fund, 2009. Female genital mutilation. Available from: <https://www.unfpa.org/female-genital-mutilation> Accessed on May 22, 2022.
27. Jiménez-Ruiz I, Almansa Martínez P. Female genital mutilation and transcultural nursing: adaptation of the Rising Sun Model. *Contemp Nurse*. 2017; 53(2):196-202. doi: 10.1080/10376178.2016.1261000.
28. Brown K, Beecham D, Barrett H. The Applicability of Behaviour Change in Intervention Programmes Targeted at Ending Female Genital Mutilation in the EU: Integrating Social Cognitive and Community Level Approaches. *Obstet Gynecol Int*. 2013; 2013:324362. doi: 10.1155/2013/324362.
29. Min M, Wong T, Akinsulure-Smith AM. Exploring Beliefs and Attitudes Toward Female Genital Mutilation/Cutting Among Healthcare Providers in New York City. *Violence Against Women*. 2022; 28(12-13):3174-3193. doi: 10.1177/10778012211045710.
30. Cochran WG. *Sampling Techniques*, 2nd Ed., New York: John Wiley and Sons, Inc., 1963.
31. Caroppo E, Almadori A, Giannuzzi V, Brogna P, Diodati A, Bria P. Health care for immigrant women in Italy: are we really ready? A survey on knowledge about female genital mutilation. *Ann Ist Super Sanita*. 2014; 50(1):49-53. doi: 10.4415/ANN_14_01_08.
32. Cappon L, Vander Laenen F. Gehoord worden is nog geen inspraak: perspectieven van minderjarigen en ouders op de beslissingen genomen door de jeugdrechter. *TIJDSCHRIFT VOOR JEUGD EN KINDERRECHTEN*. 2015; 16(1):3-19.
33. Reig-Alcaraz M, Siles-González J, Solano-Ruiz C. A mixed-method synthesis of knowledge, experiences and attitudes of health professionals to Female Genital Mutilation. *J Adv Nurs*. 2016; 72(2):245-60. doi: 10.1111/jan.12823.
34. González-Timoneda A, González-Timoneda M, Cano Sánchez A, Ruiz Ros V. Female Genital Mutilation Consequences and Healthcare Received among Migrant Women: A Phenomenological Qualitative Study. *Int J Environ Res Public Health*. 2021; 18(13):7195. doi: 10.3390/ijerph18137195.
35. Siddig I. Female genital mutilation: what do we know so far? *Br J Nurs*. 2016; 25(16):912-6. doi: 10.12968/bjon.2016.25.16.912.
36. Kaplan Marcusán A, Riba Singla L, Laye M, Secka DM, Utzet M, Le Charles MA. Female genital mutilation/cutting: changes and trends in knowledge, attitudes, and practices among health care professionals in The Gambia. *Int J Womens Health*. 2016; 8:103-17. doi: 10.2147/IJWH.S102201.
37. Ugarte-Gurrutxaga MI, Molina-Gallego B, Mordillo-Mateos L, Gómez-Cantarino S, Solano-Ruiz MC, Melgar de Corral G. Facilitating Factors of Professional Health Practice Regarding Female Genital Mutilation: A Qualitative Study. *Int J Environ Res Public Health*. 2020; 17(21):8244. doi: 10.3390/ijerph17218244.
38. Colombo C. L'articolo 583 bis cp un illecito compiuto in nome della religione?. *Rivista di criminologia, vittimologia e sicurezza* 2009; 3: 60-67.
39. Balde MD, O'Neill S, Sall AO, Balde MB, Soumah AM, Diallo B, et al. Attitudes of health care providers regarding female genital mutilation and its medicalization in Guinea. *PLoS One*. 2021; 16(5):e0249998. doi: 10.1371/journal.pone.0249998.
40. Basile F. La nuova incriminazione delle pratiche di mutilazioni degli organi genitali femminili. *Dir. pen. proc.* 2006; 6: 680-691.

41. Jalambadani Z. Education based on the Trans-Theoretical Model on sexual function of married women in Iran. *Ital J Gynaecol Obstet.* 2022; 32(4): 254-261.
42. Moeed SM, Grover SR. Female genital mutilation/cutting (FGM/C): survey of RANZCOG fellows, diplomates & trainees and FGM/C prevention and education program workers in Australia and New Zealand. *Aust N Z J Obstet Gynaecol.* 2012; 52(6):523-7. doi: 10.1111/j.1479-828X.2012.01476.x.
43. Hess RF, Weinland J, Saalinger NM. Knowledge of female genital cutting and experience with women who are circumcised: a survey of nurse-midwives in the United States. *J Midwifery Womens Health.* 2010; 55(1):46-54. doi: 10.1016/j.jmwh.2009.01.005.
44. Jäger F, Schulze S, Hohlfeld P. Female genital mutilation in Switzerland: a survey among gynaecologists. *Swiss Med Wkly.* 2002;132(19-20):259-64. doi: 10.4414/smw.2002.09912.
45. Tamaddon L, Johnsdotter S, Liljestrand J, Essén B. Swedish health care providers' experience and knowledge of female genital cutting. *Health Care Women Int.* 2006; 27(8):709-22. doi: 10.1080/07399330600817741.
46. Kaplan-Marcusán A, Del Rio NF, Moreno-Navarro J, Castany-Fàbregas MJ, Nogueras MR, Muñoz-Ortiz L, et al. Female genital mutilation: perceptions of healthcare professionals and the perspective of the migrant families. *BMC Public Health.* 2010; 10:193. doi: 10.1186/1471-2458-10-193.
47. Leye E, Ysebaert I, Deblonde J, Claeys P, Vermeulen G, Jacquemyn Y, et al. Female genital mutilation: knowledge, attitudes and practices of Flemish gynaecologists. *Eur J Contracept Reprod Health Care.* 2008; 13(2):182-90. doi: 10.1080/13625180701780957.
48. Isman E, Mahmoud Warsame A, Johansson A, Fried S, Berggren V. Midwives' Experiences in Providing Care and Counselling to Women with Female Genital Mutilation (FGM) Related Problems. *Obstet Gynecol Int.* 2013; 2013:785148. doi: 10.1155/2013/785148.
49. Ashimi A, Aliyu L, Shittu M, Amole T. A multicentre study on knowledge and attitude of nurses in northern Nigeria concerning female genital mutilation. *Eur J Contracept Reprod Health Care.* 2014; 19(2):134-40. doi: 10.3109/13625187.2014.885940.
50. Evans C, Tweheyo R, McGarry J, Eldridge J, Albert J, Nkoyo V, et al. Improving care for women and girls who have undergone female genital mutilation/cutting: qualitative systematic reviews. Southampton (UK): NIHR Journals Library; 2019 Sep.
51. Diaz MP, Steen M, Brown A, Fleet JA, Williams J. Female Genital Mutilation/Cutting Education for Midwives and Nurses as Informed by Women's Experiences: Protocol for an Exploratory Sequential Mixed Methods Study. *JMIR Res Protoc.* 2021; 10(10):e32911. doi: 10.2196/32911.
52. Auricchio V, Garzon S, Pomini P, Laganà AS, Casarin J, Cromi A, Ghezzi F, Vigato E, Franchi M. Clitoral reconstructive surgery after female genital mutilation: A systematic review. *Sex Reprod Healthc.* 2021; 29:100619. doi: 10.1016/j.srhc.2021.100619.
53. AMREF-Health Africa. (2021). L'Africa è donna. Available from: <https://www.back.amref.it> Accessed on May 22, 2022.
54. De Schrijver L, Van Baelen L, Van Eekert N, Leye E. Towards a better estimation of prevalence of female genital mutilation in the European Union: a situation analysis. *Reprod Health.* 2020; 17(1):105. doi: 10.1186/s12978-020-00947-2.

55. Ortensi LE, Farina P, Leye E. Female genital mutilation/cutting in Italy: an enhanced estimation for first generation migrant women based on 2016 survey data. BMC Public Health. 2018; 18(1):129. doi: 10.1186/s12889-017-5000-6.

Manuscript accepted for publication

Table 1. Sampling characteristics (n=240).

Characteristics	n(%)
Sex	
Female	207(86.30%)
Male	33(13.80%)
Age	
20-30years	88(36.70%)
31-40years	77(32.10%)
41-50years	41(17.10%)
51-60years	28(11.70%)
>61years	6(2.50%)
Work experience	
>5years	97(40.40%)
<6years	143(59.60%)
Healthcare profession	
Nurse	138(57.50%)
Pediatric Nurse	11(4.60%)
Professional educator	2(0.80%)
Physician	12(5.00%)
Midwife	37(15.40%)
Psychologist	6(2.50%)
Psychiatric Rehabilitation Technician	26(10.80%)
Psychomotor therapist	8(3.30%)
Ward employment	
Surgery	29(12.10%)
Emergency	40(16.70%)
Medicine	35(14.60%)
Maternal-Infantile	54(22.50%)
Mental health	32(13.30%)
Territorial services	50(20.80%)
Have you ever met a woman undergoing FMG in your work experience?	
Yes	

No	66(27.50%) 174(72.50%)
In your work environments were any healthcare professionals employed to support women with FMG?	
Yes	47(19.60%)
No	193(80.40%)

Table 2. Healthcare professionals' levels of agreeing or disagreeing on the FMG practices and their relating attitudes on this matter (n=240).

Items	Agree n(%)	Disagree n(%)	p-value
The interviewer believed to have sufficient knowledge and training in the FMG matter?			
Yes	9(3.80%) _a	93(38.80%) _b	.002*
No	1(0.40%) _a	137(57.10%) _b	
How participants felt to be updated on the FMG?			
A little	5(2.10%) _a	158(65.80%) _a	.329
Enough	5(2.10%) _a	66(27.50%) _a	
Very	0(0%) _a	6(2.50%) _a	
How participant got the knowledge on FMG?			
Experience on the field	2(0.80%) _a	16(6.70%) _a	>.001*
Conferences	3(1.20%) _a	44(18.30%) _a	
Post graduate training	4(1.70%) _a	5(2.10%) _b	
Other	1(0.40%) _a	165(68.80%) _b	
Did participant know the Law of 9 January 2006, no. 7 regarding "Provisions concerning the prevention and prohibition of FMG practices"?			
Yes	10(4.20%) _a	86(35.80%) _b	>.001*
No	0(0%) _a	144(60.00%) _b	
What were the determining factors involving in the FMG?	1(0.40%) _a	43(17.90%) _a	

Illiteracy (Unfpa, 2016)	1(0.40%) _a	8(3.30%) _a	.257
Gender identity formation	0(0%) _a	2(0.80%) _a	
Hygienic-sanitary	2(0.80%) _a	9(3.80%) _b	
Femininity ideal	2(0.80%) _a	27(11.20%) _a	
I do not know	0(0%) _a	24(10.00%) _a	
Purity	2(0.80%) _a	71(29.60%) _a	
Religion	2(0.80%) _a	46(19.20%) _a	
Rite of passage			
How healthcare professionals took care of a minor at risk of FMG?			>.001*
Involve family members by informing them of the psychological / physical damage and legal consequences in Italy	1(0.40%) _a	25(10.40%) _a	
Inform social services	4(1.70%) _a	29(12.10%) _b	
Both of the above given items	3(1.20%) _a	152(63.30%) _b	
Confide it to colleagues	0(0%) _a	10(4.20%) _a	
Respect the original culture and tradition	2(0.80%) _a	4(1.70%) _b	
Other	0(0%) _a	10(4.20%) _a	

Each letter in subscript format indicates a subset of administration categories whose portions of the column are not very different from each other at level 0.05. *p<.05 is statistically significant.