# Female Genital Mutilation, Sexual Quality of Life and Marital Relationship: A Case-Control Study From Iran

# Shahla Shafaati Laleh; M.Sc.<sup>1</sup>, Farzaneh Soltani; Ph.D.<sup>2</sup>, Ghodratollah Roshanaei; Ph.D.<sup>3</sup>

1 Student Research Committee, Hamadan University of Medical Sciences, Hamadan, Iran

2 Mother and Child Care Research Center, Hamadan University of Medical Sciences, Hamadan, Iran 3 Department of Biostatistics, School of Public Health, Hamadan University of Medical Sciences, Hamadan, Iran

Received June 2022; Revised and accepted November 2022

# Abstract

Objective: Studies on the sexual consequences of female genital mutilation is mostly related to sexual function, while sexual quality of life is a more objective criterion for studying the effects of genital mutilation on the women's sexual life. The purpose of this study was to compare the sexual quality of life and marital relationship in the mutilated women with other women living in the Kurd region of Mahabad (Iran).

Materials and methods: In a case-control study, 600 married women (300 mutilated and 300 non- mutilated women) who referred to the health centers completed the sexual quality of life questionnaire (SQOL-F) as well as demographic questionnaires. Data analyzed using chi-square, independent t-test, and linear regression model with stepwise method at 95% confidence level.

Results: The mean total score of sexual quality of life in the mutilated group (40.28±16.76) was significantly lower than the control group (45.29±19.16). The chance of having a higher score of sexual quality of life in the mutilated group was 0.13 times lower than the control group. This value was 0.16 times for self-worthlessness area, 0.10 for sexual repression, 0.12 for psycho-sexual feeling, and 0.32 for sexual and marital satisfaction areas (p < 0.05). In the mutilated group, the total score of sexual quality of life was significantly correlated with age, income, spouse's violence, spouse's infidelity, intercourse frequency, and residence status (P < 0.05).

Conclusion: Female genital mutilation can decrease the sexual quality of life and increase the chance of negative consequences such as spouse violence, infidelity, and intercourse reduction.

Keywords: Female Genital Mutilation; Quality of Life; Sexuality; Women's Health

### Introduction

Female genital mutilation (FGM) is still one of the challenges of reproductive health, which it's economic, social, and health consequences threaten

**Correspondence:** Dr. Farzaneh Soltani Email: farzanehsoltani2008@yahoo.com the achievement of sustainable development goals. According to the report of UNISEF, near to 200 million women suffered from the mutilation in 30 countries including 27 African and 3 Asian countries, such as Iraq, Kurdistan, Indonesia and Yemen, and the more girls are being exposed to the mutilation per year due to the increasing rate of population in such



Copyright © 2022 Tehran University of Medical Sciences. Published by Tehran University of Medical Sciences. This work is licensed under a Creative Commons Attribution-Noncommercial 4.0 International license (https://creativecommons.org/licenses/by-nc/4.0/). Noncommercial uses of the work are permitted, provided the original work is properly cited.

countries (1). More than a half of these women are 3-10 years and many were mutilated under 15 (2). In Iran, FGM (Known as SONNAT) is common in some southern and western districts, and is mainly the 1<sup>st</sup> grade and rarely the 2<sup>nd</sup> grade. Its prevalence was reported from 55.7% (3) to 70% (4) among the girls of Arab and Kurd districts respectively. The prevalence of FGM among Arab and Kurd tribes may mostly refer to the common culture and religious beliefs of two tribes in western and southern Iran.

FGM which is defined as cutting and removing all or a part of the clitoris to removing the large lips of the external genitalia, is almost traumatized and without any health advantage (5, 6) and the range of its complications is not only physical (from bleeding, infection to death), but psychological (such as anxiety and post-traumatic stress) and also sexual (7, 8). Urinary infections, sexual transmitted diseases, bleeding after intercourse, necrotizing fasciitis and long-term side effects in the form of ascariasis, genital lesion, dyspareunia, and infertility, labor and delivery disorders, and reducing the quality of sexual relations are some complications of female mutilation (9-11). Even the researchers indicated that the vulnerability of mutilated women to HIV is more by 2.1 times (11). Researchers who analyzed the data of 15 studies including 1267 samples from 7 countries, found that the mutilated women were reported to have more dyspareunia by 52%, less desire for twice more than others, and less sexual satisfaction for one third (12).

Despite FGM being implicated with sexual complications, the results of the studies on the sexual consequences of FGM are controversial. Some confirmed that the mutilation reduces the women's sexual satisfaction, orgasm frequencies and sexual tendency (11-15); on the contrary, others didn't find any significant relation between mutilation and sexual intercourse and sexual satisfaction (16-19). In the meantime, limited studies have been conducted on the effects of FGM on the general quality of life and sexual quality of life. Sexual quality of life as a key topic in the sexual and reproductive health issues is a context-based concept originating from human behaviors and interactions, and socio-cultural norms and refers to activities related to sexual and affective relations with partner and sexual satisfaction (20). According to Rosen, the constituents of sexual quality of life are the sexual function, sexual ability, sexual self-sufficiency, sexual satisfaction. satisfaction to the relations and general satisfaction

(21). Today, there is a consensus that the sexual quality of life has an interconnected and mutual relationship with general life quality so that the sexual quality of life may show the health status and general quality of life (22). In a case-control study, Andersson et al in London compared the life quality of mutilated African women with a non-mutilated group. According to the results, the sexual quality of life of the mutilated women was lower than the control group (14). In Sena et al.'s study, the total score of sexual quality of life, general quality of life, and physical, psychological, and social dimensions were significantly different between the two groups, so that Egyptian mutilated women were worse than the control group in terms of the above mentioned cases (19). In Daneshkhah et al.'s study in Piranshahr, the quality of life of mutilated women was not significantly different from that of women without mutilation. However, the mean of quality of life was inversely correlated with women's general health and sexual function (23).

Limited studies on the sexual consequences of FGM in Iran is mostly related to sexual function (3, 4, 23), while sexual quality of life is a more objective criterion for studying the effects of FGM on women's sex life. On the other hand, some researchers have reported that there is a significant relationship between women mutilation and psychological and social marriage problems (24). This study aimed to compare the sexual quality of life, as well as marital relationship, in the mutilated women with other women living in Kurd region of Mahabad (Iran).

# Materials and methods

Study design and participants: The present case-control study was performed in Mahabad city (capital of Mahabad County), in West Azerbaijan Province, in Iran, in 2019. Study participants were married women of reproductive age referring to health centers for routine health care services such as outpatients' clinics or children vaccinations. The inclusion criteria were sexually- active married women, passing at least one year from marriage life, and exclusion criteria were pregnant and lactating women, sexual inactivity within the last 6 months, suffering from the physical and mental illness, smoking or drug use. Women who did not answer more than 10% of the questionnaire questions were omitted from the study.

*Sample size:* To determine the number of samples

from the indices obtained from previous studies (15), taking into account  $\sigma_1 = 13.73$ ,  $\sigma_1 = 27.93$ , d = 6.5, type error = 5%, and test power = 90%, with regard to 10% sample drop probability; the number of samples in each group was calculated as 300 women.

Sampling: Using convenience sampling method through 4 randomly selected rural health centers, 300 mutilated and 300 non-mutilated women were selected. For determining the type of FGM in the present study, participants were asked about which parts of their genital organs were removed. In case of needing to determine the grade of FGM, participants were examined by a midwife working in the health center. It should be noted that all mutilated females in our study had the first-grade genital circumcision, in which the external part of the clitoris is cut off. Informed consents were obtained from all participants and they were assured about the confidentiality of their information.

#### **Data collection instruments**

*Socio-demographic characteristics questionnaire:* Socio-demographic variables included age, educational level, and occupation status of women and their spouses, duration of marriage, housing statues, family income status, and number of pregnancies. In addition, underlying factors included contraceptive method, spouse's smoking and alcohol consumption, spouse's violence and type of violence, spouse's infidelity as well as intercourse frequency per month.

Sexual Quality of Life Questionnaire (SQOL-F): The SQOL designed and psychometrized by Symonds et al (25). It has 18 questions in 4 subscales (Psychosexual feelings, Sexual and relationship satisfaction, self-worthlessness, and Sexual repression). This questionnaire is rated on a six-point Likert scale (ranging from 1 to 6), the score of the questionnaire ranges from 18-108, with higher scores reflecting the more desirable sexual quality of life. Validity and reliability of questionnaire was confirmed by Pakpour in Iran (26), and in the present study, the reliability of the SQOL-F Questionnaire was calculated using the Cronbach's alpha and it turned out to be 0.73.

*Statistical analysis:* SPSS software version 20.0 was used for data entry and analysis. Data were analyzed using Chi-square, independent t-test, linear regression model with Stepwise method at 95% confidence level. Values of P<0.05were considered statistically significant.

#### Results

The results indicated that the highest percentage of participants in both groups was 20-40 years old, housewife and education of high school to diploma. Also, their spouses were 20-40 years old, self-employed with education of high school to diploma. Their marriage period passed less than 10 years, they lived in therented houses, the family income was in sufficient level, and they had the experience of less than 3 previous pregnancies. There was a significant difference between two groups about the variables of education of women and their spouses, while there was not any significant difference between other variables (Table 1).

There was no significant difference between two groups regarding smoking and alcohol consumption by spouse, violence by spouse, type of violence (physical-psychological-sexual) and type of contraception. However, the percentage of infidelity was significantly higher in the mutilated group than in the control group, and the percentage of having no sexual relation in month was higher in control group than the mutilated group (P<0.05) (Table 2).

The mean total score of sexual quality of life in the mutilated group ( $40.28\pm16.76$ ) was significantly lower than the control group ( $45.29\pm19.16$ ). The relationship of sexual quality of life with FGM was studied using the linear regression model. The results showed that the chance of having a higher total score of sexual quality of life in the non-mutilated women was 0.13 (2.12-7.90) times higher than the mutilated group. This value was 0.16 (0.64-1.80) times greater for self-worthlessness, 0.10 (0.22- 1.48) times for sexual repression, 0.12 (0.71-3.39) times for psychosexual feeling, and 0.32 (0.25-1.51) for sexual and marital satisfaction areas compared to mutilated group (p <0.05) (Table 3).

The relationship between total score of sexual quality of life with demographic characteristics and underlying variables were evaluated by Stepwise method using linear regression model.

The results showed that in the mutilated group, the total score of sexual quality of life was significantly correlated with age, income, spouse violence, intercourse frequency, infidelity, and residence, so that the chance of having a high sexual quality of life score increased with age. Additionally, women with lower levels of income, having spouse violence, low rate of intercourse, the spouse infidelity, and personal residence were less than other group (P<0.05) (Table 4).

Variable	Group	FGM	(n=300)	Control	p-value	
		n	%	n	%	
Women's age (year)	<20	16	5.3	21	7.0	0.56
	20-40	241	80.3	242	80.7	
	>40	43	14.3	37	12.3	
Spouse's age(year)	<20	1	0.3	0	0	0.34
	20-40	224	74.7	235	78.6	
	>40	77	25.0	64	21.4	
Duration of marriage (year)	<10	192	64.0	206	68.7	0.13
	10-20	62	25	83	27.7	
	>20	42	11	11	3.7	
Number of pregnancy	1-3	271	90.3	283	94.3	0.05
	4-6	25	8.3	17	5.7	
	>6	4	1.4	0	0	
Spouse's occupation	Unemployed	10	3.3	16	5.4	0.12
	Staffer	67	22.3	81	27.1	
	Worker	41	13.7	47	14.7	
	Self-employed	182	60.7	151	51.5	
	Retired	0	0	4	1.3	
Family income status	Poor	102	32.7	107	34.7	0.08
	Moderate	174	59.3	171	58.3	
	Good	24	8.0	21	7.0	
Housing statues	Owner	148	47.7	129	40.4	0.12
	Renter	110	38.3	114	38.6	
	Living with her parents	12	4.7	25	8.3	
	Living with spouse's parents	30	12.3	32	12.7	
Women's Occupation	Self-employed	60	20.0	68	22.7	$0.0001^{***}$
	Staffer	67	22.3	62	20.7	
	Unemployed	173	57.7	170	56.7	
Women's Education	Under diploma	108	36	61	20.3	0.0001***
	Diploma	103	34.3	165	55	
	Collegiate	89	29.7	74	24.7	
Spouse's education	Under diploma	83	27.7	49	16.3	0.0001***
	Diploma	186	62	172	57.3	
	Collegiate	31	10.3	79	26.3	

**Table 1:** Comparison of the demographic characteristics between two groups (n=600)

P values calculated using Chi-square /Fisher's Exact Test.

FGM, female genital mutilation

# Discussion

The results of the present study showed that the mutilated women had a worse sexual quality of life than the control group. This is in line with the results of the Anderson et al study in London (14). The mutilated women were reported to have various sexual problems including disorder in the whole or a part of their sexual stages (4). It seems that they are resulted from the painful trauma, sense of humiliation, and being deceived by parents, negative genital imagination, lack of sense of body ownership, and sexual life vandalism (27, 28).

Sexual quality of life and satisfaction of interpersonal relations have a close and mutual relationship with the couple's satisfaction and general quality of life so that the disorder in sexual function reduces the general quality of life, and worsening the general quality of life has a negative effect on the couple's sexual quality of life (29). In the study of Sena et al., the negative effect of mutilation on both variables of health- related quality of life (HR-QOL) and sexual quality of life (SQOL-F) was shown (19). In this study, psychological domains of health-related quality of life were significantly impaired in mutilated women, which can be largely explained by significant decrease of sexual quality of life in the mutilated group, so that sexual dysfunction may lead the emotional distress which solely provides the requirements of partner separation.

#### Shafaati Laleh et al.

Variable 2. Companson of the dr	<u> </u>					
Variable			(n=300)		l (n=300)	p-value
		n	%	n	%	
Spouse's smoking	Yes	89	29.7	92	30.7	0.79
	No	211	70.3	208	69.3	
Alcohol consumption	Yes	30	10.0	32	10.7	0.78
	No	270	90.0	268	89.3	
Spouse's violence	Yes	41	13.7	32	10.7	0.16
	No	259	86.3	266	89.3	
Type of violence	Physical	15	28.3	12	27.9	0.83
	Psychological	34	64.2	29	67.4	
	Sexual	4	7.5	2	4.7	
Spouse's infidelity	Yes	7	2.3	2	0.7	$0.04^{*}$
	No	277	92.3	270	90	
	I don't know	16	5.3	9.3	28	
Contraceptive method	Withdrawal	98	32.7	100	32.9	0.11
	OCP	69	23.3	84	28.7	
	Condom	27	8.7	27	9.1	
	IUD	41	13.7	28	9.1	
	DMPA	3	1.0	7	2.4	
	Others	62	20.7	54	18.0	
Intercourse frequency (per month)	1-2	19	6.3	31	10.3	$0.03^{*}$
	3-4	113	37.7	130	43.3	
	>4	168	56	139	46.3	

Table 2: Comparison of the underlying factors between two groups (n=600)

P values calculated using Chi-square /Fisher's Exact Test. FGM, female genital mutilation

In addition, depression, lack of self-reliance, weak self-imagination, and matrimonial conflicts may be caused by the sexual dysfunction (30). Likewise, Sexual dysfunction may reduce desire of sexual intercourse due to fear of partner's rejection, and more important, have negative influence on the social communication of a person. Laumann and Waite indicated that the sexual dysfunction influences on the quality of life especially the decrease of spiritual senses and happiness (31). Jeong et al confirmed the relationship of sexual dysfunction with serious depressive symptoms without any consideration to the age, health habits or comorbidities (32).

Unlike the study of Alsibiani and Rouzi (13, 33), total sexual quality of life in mutilated women was

different in our study. A study on African women reported the significant reduction of sexual quality of life in mutilated women (12). But the study of Daneshkhah et al in Piranshahr showed that the quality of life and mental health of mutilated women are in the same level of non-mutilated women in spite of disorder in sexual function of mutilated women (23). On the other hand, in the present study, the total score of sexual quality of life was significantly correlated with age, income, spouse's violence, intercourse frequency, spouse's infidelity, and residence, so that the chances of having a better sexual quality of life were higher in older women. Coital frequency probably due to dyspareunia and decrease of orgasm quality can influence on the sexual quality of life of both couple.

Table	3:	The	rela	tionsh	ip	betwee	n	female	genital	mutilation
status	and	sex	ual q	uality	of	life and	its	areas	(n=300)	)

		1 /	
B	OR	CI 95%	P- value
1.22	0.16	1.80-0.64	$0.0001^{*}$
0.85	0.10	1.48-0.22	$0.008^{*}$
2	0.12	0.71-3.39	$0.003^{*}$
0.88	0.32	1.51-0.25	$0.006^{*}$
0.5	0.13	7.90-2.12	$0.0001^{*}$
	1.22 0.85 2 0.88	1.22         0.16           0.85         0.10           2         0.12           0.88         0.32	1.220.161.80-0.640.850.101.48-0.2220.120.71-3.390.880.321.51-0.25

		В	OR	CI 95%	P- value
FGM	Age	10.33	0.26	6.15, 14.50	0.0001
	Family income	- 5.67	- 0.17	-9.16, -2.19	0.001
	Spouse's violence	-17.57	- 0.36	- 7.44, -27.70	0.001
	Intercourse frequency (per month]	- 11.71	- 0.36	-5.54, -17.88	0.0001
	Spouse's infidelity	- 16.78	- 0.27	-4.75, -28.81	0.007
	Housing statues	- 10.88	- 0.27	-2.65, -12.19	0.01
Control	Women's education	- 2.33	- 0.13	- 0.40, -4.26	0.01
	Spouse's smoking	- 20.34	- 0.44	-9.47, -31.22	0.001
	Intercourse frequency (per month]	- 14.49	- 0.50	-7.67, -21.30	0.0001

**Table 4:** The adjusted logistic regression analysis of sexual quality of life and demographic factors in each group

FGM, female genital mutilation

In study of Raheem et al, the mutilated women's husbands had impotence and premature ejaculation for twice more, and less sexual satisfaction was seen in 56%. There was a significant relationship between women mutilation and existence of psychological and social marriage problems (24). Peltzer and Pengpid found out that the mutilated women experience the sexual partner's violence two times more than others (34). Other researchers have confirmed these results (35).

In the present study, women with lower levels of income, having more spouse's violence, and decreased frequency of intercourse, spouse's infidelity, and non-private residence were less likely than other groups. In the study of Sena et al., the sexual quality of life in mutilated women with educated, employed, and age younger than 30 was better than the others. However, it was not significantly correlated with residence (19). The results of the present study were not in line with the results of the above study in relation to the variables of age and place of residence. The reason for the observed difference may be due to cultural differences, increased adaptation of women over time or religious reasons, and adherence to customs. In a study, despite the sexual dysfunction in mutilated women, there was no significant change in the quality of life and general health of mutilated women compared to non-mutilated ones. About 14% of women in the mutilated group reported a history of violence by their spouse, which was only 3.3 percent in the control group (11). Increasing violence by the spouse and decreasing closeness in the mutilated women is an alarm that threatens many young girls exposed to mutilation in the following years, so planning and designing appropriate interventions in this regard, should be considered by the authorities.

negative influences of mutilation on sexual life and fertility of women (4, 5, 35), but the results of the present study indicate the mentioned negative effects as well as a general negative psychological effect by reducing SQOL-F score, and contribute to the existing literature on the sexual life of mutilated women. Since this study tried to find very private aspects of women's life, much bias and recall bias may exist. In addition, Shame, accompanying cultural problems and inadequate awareness of one's sexual responses may affect the responses of the participants, as mentioned by others. Similarly, some variables such as perceived violence have not been assessed with validated questionnaires. A wide confidence interval is noted in some of the variables as a result of a small sample size. Conducting further studies with larger sample sizes and in another setting are needed to increase the accuracy and generalizability of the findings obtained from this study.

### Conclusion

Female genital mutilation can decrease the sexual quality of life of women and increase the chance of negative consequences such as spouse's violence, reduction of intercourse frequency, and spouse's infidelity. Designing and implementing communitybased interventions should be considered to improve the sexual quality of life of mutilated women especially on young women with low income and no personal residence. Also, considering the key role of health professionals in preventing physical, mental and social complications of female mutilation, it is recommended to evaluate the sexual quality of life in mutilated women in health clinics and to provide appropriate and timely interventions.

# **Conflict of Interests**

Generally, many different researchers reported the

Authors have no conflict of interests.

# Acknowledgments

The authors sincerely appreciated from financial support of Research Deputy of Hamadan University of Medical Sciences (ID: 9610266894). In addition, all participants and personnel in health care centers who helped in the research process are appreciated.

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee (IR.UMSHA.REC.1396.682), and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participants included in the study.

# References

- Johansen REB, Ziyada MM, Shell-Duncan B, Kaplan AM, Leye E. Health sector involvement in the management of female genital mutilation/cutting in 30 countries. BMC Health Serv Res 2018; 18: 240.
- González-Timoneda A, Ruiz Ros V, González-Timoneda M, Cano Sánchez A. Knowledge, attitudes and practices of primary healthcare professionals to female genital mutilation in Valencia, Spain: are we ready for this challenge? BMC Health Serv Res 2018; 18: 579.
- Pashaei T, Rahimi A, Ardalan A, Felah A, Majlessi F. Related factors of female genital mutilation (FGM) in Ravansar (Iran). J Women's Health Care 2012;1: 1000108.
- 4. Shafaati Laleh S, Maleki A, Samiei V, Roshanaei G, Soltani F. The comparison of sexual function in women with or without experience of female genital circumcision: A case-control study in a Kurdish region of Iran. Health Care Women Int 2022; 43: 194-206.
- 5. World Health Organization. Female genital mutilation. Fact sheet No241, 2022. https://apps.who.int/iris/bitstream/handle/10665/11232 8/WHO\_RHR\_14.12\_eng.pdf
- Esho T, Kimani S, Nyamongo I, Kimani V, Muniu S, Kigondu C, et al. The 'heat' goes away: sexual disorders of married women with female genital mutilation/cutting in Kenya. Reprod Health 2017; 14:164.
- Ismail SA, Abbas AM, Habib D, Morsy H, Saleh MA, Bahloul M. Effect of female genital mutilation/cutting; types I and II on sexual function: case-controlled study. Reprod Health 2017; 14: 108.
- Horowicz M, Cottler-Casanova S, Abdulcadir J. Diagnoses and procedures of inpatients with female genital mutilation/cutting in Swiss University Hospitals: a cross-sectional study. Reprod Health 2022; 19: 104.
- 9. Klein E, Helzner E, Shayowitz M, Kohlhoff S, Smith-

Norowitz TA. Female Genital Mutilation: Health Consequences and Complications-A Short Literature Review. Obstet Gynecol Int 2018: 7365715.

- Alradie-Mohamed A, Kabir R, Arafat SMY. Decision-Making Process in Female Genital Mutilation: A Systematic Review. Int J Environ Res Public Health 2020; 17: 3362.
- Smolak A. The Association of Female Circumcision with HIV Status and Sexual Behavior in Mali: A Multilevel Analysis. J Acquir Immune Defic Syndr 2014; 65(5): 597-602.
- 12. Buggio L, Facchin F, Chiappa L, Barbara G, Brambilla M, Vercellini P. Psychosexual Consequences of Female Genital Mutilation and the Impact of Reconstructive Surgery: A Narrative Review. Health Equity 2019; 3: 36-46.
- 13. Alsibiani SA, Rouzi AA. Sexual function in women with female genital mutilation. Fertil Steril 2010; 93: 722-4.
- 14. Anderson SH, Rymer J, Joyce DW, Momoh C, Gayle CM. Sexual quality of life in women who have undergone female genital mutilation: A case-control study. BJOG 2012; 119: 1606–11.
- 15. Anis TH, Aboul Gheit S, Awad HH, Saied HS. Effects of female genital cutting on the sexual function of Egyptian women. A cross-sectional study. J Sex Med 2012; 9: 2682-92.
- 16. Catania L, Abdulcadir O, Puppo V, Verde JB, Abdulcadi, J, Abdulcadir D. Pleasure and orgasm in women with female genital mutilation/cutting (FGM/C). J Sex Med 2007; 4: 1666-78.
- 17. Sylla F, Moreau C, Andro A. A systematic review and meta-analysis of the consequences of female genital mutilation on maternal and perinatal health outcomes in European and African countries. BMJ Glob Health 2020; 5: e003307.
- Van Rossem R, Gage AJ. The effects of female genital mutilation on the onset of sexual activity and marriage in Guinea. Arch Sex Behav 2009; 38: 178–85.
- 19. Sena HFAA, El Shahed ARM, Moahmmad SHAR. Effect of Female Genital Mutilation on Female Quality of Life. SM Journal of Gynecology and Obstetrics 2017; 3: 1018.
- 20. Riazi H, Madankan F, Azin SA, Nasiri M, Montazeri A. Sexual quality of life and sexual self-efficacy among women during reproductive-menopausal transition stages and postmenopause: a comparative study. Womens Midlife Health 2021; 7: 8.
- 21. Rosen R, Brown C, Heiman J, Leiblum S, Meston C, Shabsigh R, et al. The Female Sexual Function Index (FSFI): a multidimensional self-report instrument for

the assessment of female sexual function. J Sex Marital Ther 2000; 26: 191-208.

- 22. Flynn KE, Lin L, Bruner DW, Cyranowski JM, Hahn EA, Jeffery DD, et al. Sexual Satisfaction and the Importance of Sexual Health to Quality of Life Throughout the Life Course of U.S. Adults. J Sex Med 2016; 13: 1642-50.
- 23. Daneshkhah F, Allahverdipour H, Jahangiri L, Andreeva T. Sexual Function, Mental Well-being and Quality of Life among Kurdish Circumcised Women in Iran. Iran J Public Health 2017; 46: 1265-74.
- 24. Raheem TAA, Eltahalawi SMR, Raia NMA, Elsary AY, Ibrahem KM. The effect of female genital mutilation on couple sexual function. International Journal of Community Medicine and Public Health 2018; 5: 905-11.
- 25. Symonds T, Boolell M, Quirk F. Development of a questionnaire on sexual quality of life in women. J Sex Marital Ther 2005; 31: 385-97.
- 26. Pakpour AH, Zeidi IM, Saffari M, Burri A. Psychometric Properties of the Iranian Version of the Sexual Quality of Life Scale Among Women.J Sex Med 2013; 10: 981–9.
- 27. World Health Organization (WHO). Sexual and Reproductive Health and Research (SRH) Health risks of female genital mutilation (FGM) 2022.
- 28. O'Neill S, Pallitto C. The Consequences of Female Genital Mutilation on Psycho-Social Well-Being: A Systematic Review of Qualitative Research. Qual Health Res 2021; 31: 1738-50.
- 29. Owiredu WK, Owusu AO, Amidu N, Quaye L, Gyasi-Sarpong CK, Dapare PP, et al. Sexual dysfunction and sexual quality of life among the physically challenged

in the Kumasi metropolis, Ghana. Health Qual Life Outcomes 2015; 13: 3.

- 30. Park JW, Kim DJ, Shin MH. The Effect of Stress on Compulsive Sexual Behavior Disorder: Active Coping Strategy and Self-Control as Mediators. Psychiatry Investig 2021; 18: 997-1005.
- 31. Laumann EO, Waite LJ. Sexual dysfunction among older adults: prevalence and risk factors from a nationally representative U.S. probability sample of men and women 57-85 years of age. J Sex Med 2008; 5: 2300-11.
- 32. Jeong JY, Lee SK, Kang YW, Jang SN, Choi YJ, Kim DH. Relationship between ED and depression among middle-aged and elderly men in Korea Hallym aging study. Int J Impot Res 2011; 23: 227-34.
- 33. Rouzi AA, Berg RC, Alamoudi R, Alzaban F, Sehlo M. Survey on female genital mutilation/cutting in Jeddah, Saudi Arabia. BMJ Open 2019; 9: e024684.
- 34. Peltzer K, Pengpid S. Female genital mutilation and intimate partner violence in the Ivory Coast. BMC Womens Health 2014; 14: 13.
- 35. Aboagye RG, Seidu AA, Asare BY, Peprah P, Addo IY, Ahinkorah BO. Exposure to interparental violence and justification of intimate partner violence among women in sexual unions in sub-Saharan Africa. Arch Public Health 2021; 79: 162.

**Citation:** Shafaati Laleh S, Soltani F, Roshanaei G. **Female Genital Mutilation, Sexual Quality of Life and Marital Relationship: A Case-Control Study From Iran.** J Family Reprod Health 2022; 16(4): 264-71.