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## **CLINICAL ARTICLE**

# The relationship between female genital cutting and sexual problems experienced in the first two months of marriage



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## ABSTRACT

Objective: To examine the relationship between female genital cutting (FGC) and sexual problems experienced by couples in the first 2 months of marriage ("honeymoon distress"). *Methods:* A multicenter cross-sectional study was conducted at centers in Assiut and Sohag, Egypt, between March 1, 2011, and March 31, 2014. Eligible couples presented with sexual problems during the first 2 months of marriage. Couples were interviewed and asked to complete a pre-designed questionnaire, and a genital examination was performed. The primary outcomes of the study were the contribution of FGC to honeymoon distress and the effect of FGC on quality of life. *Results:* Overall, 430 couples enrolled in the study. FGC was present in 376 (87.4%) women. The main presenting feature of honeymoon distress was superficial dyspareunia, which affected 291 (77.4%) women with FGC versus 16 (29.6%) of 54 without FGC (hazard ratio 8.13, 95% confidence interval 4.32–15.30). Women with FGC were more likely to have a poor quality of life during the first 2 months of marriage than were those without FGC (279 [74.2%] vs 13 [24.1%]; odds ratio 9.07, 95% confidence interval 4.66–17.64). *Conclusion:* FGC was found to be a contributing factor to honeymoon distress.

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## 1. Introduction

Female genital cutting (FGC) is a complex issue that involves intentional injury to, or removal of, the healthy female genital organs for non-medical reasons [1]. FGC is a hazardous procedure with no recognized health benefits. Apart from the immediate health consequences of FGC—including severe pain and shock, hemorrhage, and infection—the procedure is associated with long-term harmful effects on female sexual function [2] and psychological condition [3], in addition to increased risks of infertility [4] and complications of childbirth [5]. There is an international consensus that FGC constitutes serious child abuse and violence against women [5], as well as a public health problem [6]. There is a strong push to make efforts to prevent this practice and defend the health and human rights of girls and young women [7].

More than 125 million girls and women alive today have been cut in the 29 countries in Africa and the Middle East where FGC is concentrated [8]. In Egypt, although the government has banned the procedure, FGC is a deep-seated tradition that has been conducted since the Pharaonic period and its practice remains widespread. According to the Egypt Demographic Health Survey conducted in 2008 [9], the percentage of women aged 15–49 years with FGC is 95.5% in rural areas

and 85.1% in urban areas, with no differences between Upper and Lower Egypt.

Although FGC constitutes a major public health problem affecting both women and girls and leading to several serious health problems, the implications of FGC on the quality of life (QoL) of recently married women have rarely been investigated. The aim of the present study was to evaluate the contribution of FGC to sexual problems experienced by couples in the first few months of marriage (i.e. "honeymoon distress") in Egypt, such as failure to consummate the marriage, progressively difficult intercourse, or bleeding during intercourse.

## 2. Materials and methods

A multicenter cross-sectional study was conducted among couples attending the gynecology outpatient clinic of either Sohag University Hospital, Sohag, Egypt, or Women's Health Centre, Assiut, Egypt, between March, 1, 2011, and March 31, 2014. To be eligible, couples had to present with honeymoon distress during first 2 months of marriage. Women with chronic or severe medical illnesses, or psychiatric illnesses were excluded from the study to avoid the possibility of psychological vaginismus. Any evidence of erectile dysfunction was also a criterion for exclusion. The institutional ethics committee of Sohag University's Faculty of Medicine approved the study (IRB G-1074). Written informed consent was obtained before recruitment; women had the right to refuse to participate in the study at any stage without being denied full clinical care.

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The couples who enrolled were interviewed and asked to complete a questionnaire to assess the woman's QoL. The women then underwent general examination and genital examination, and the status of the female external genitalia, cut versus uncut, was recorded. The region that was cut was documented. The presence of injury, bleeding, or genital tears was noted. If there was considerable bleeding with evidence of tissue tearing, surgical intervention to repair the tears and stop bleeding was undertaken.

The design of the questionnaire was based on four principles: first, both physical and emotional health aspects were to be included and measured; second, the questionnaire had to reveal the area of functional importance to the women's QoL; third, the questionnaire had to be simple and short; and last, the summary score should be suitable for statistical analysis [10–12]. As a result, a 10-item survey was developed on the basis of various studies of women with FGC or individuals who customarily care for women with FGC. Categorical variables were given values of 1, 2, or 3 to indicate the absence or presence of the factor under study (dummy variables). Participants could score 10–25. A score for the QoL was calculated such that the higher the score, the better the quality of life. A good QoL was considered to be indicated by a score of more than 15 points.

After the questionnaire was finalized, three gynecologists evaluated its format, content, and validity, as part of a pilot phase. The questionnaire was then tested on 30 women attending the outpatient gynecology clinic and the interviewers completed feedback forms, as well as data collection forms. No difficulties with the women's understanding of, or response to, the questions were reported. As a result, a simple questionnaire was designed in a table form on a special hospital card (Table 1).

The primary outcomes of the study were the contribution of FGC to honeymoon distress and the effect of FGC on quality of life. Sample size estimation was calculated on the basis of a two-sided significance level  $(1-\alpha)$  of 95, a power  $(1-\beta)$  of 80, an unexposed/exposed ratio of 1,35% of unexposed women having the outcome, and 50% of exposed women having the outcome (i.e. a 15% difference in the incidence of FGC would be sufficient to observe a statistically significant relationship between the exposure [FGC] and the outcome [honeymoon distress]). It was found that a minimum of 430 patients would be needed to detect a true difference.

Statistical analysis was performed with SPSS version 15.0 (SPSS Inc, Chicago, IL, USA). Continuous data were described as mean  $\pm$  SD. Categorical data were summarized as number (percentage). The independent-sample t test was used to assess the significance of the difference between continuous variables in the two groups. The  $\chi^2$  test or the Fisher exact test was used to assess the statistical significance of categorical variables. The odds ratio or hazard ratio with 95% confidence interval (CI) was used to detect statistical significance.

## 3. Results

During the study period, 468 couples presented with honeymoon distress at the outpatient clinics of Assiut and Sohag University

**Table 2** Sociodemographic characteristics.<sup>a</sup>

Characteristic	Women with FGC $(n = 376)$	Women without FGC $(n = 54)$	Mean difference or odds ratio (95% confidence interval)
Age, y Residence	$24\pm7$	$25 \pm 9$	-1.00 (-3.61 to 1.61) <sup>b</sup> 1.09 (0.61 to 1.93) <sup>c</sup>
Urban	175 (46.5)	24 (44.4)	
Rural	201 (53.5)	30 (55.6)	
Educational level			0.85 (0.48 to 1.52) <sup>c</sup>
Higher education	87 (23.1)	13 (24.1)	
Middle education	201 (53.5)	31 (57.4)	
Not educated	88 (23.4)	10 (18.5)	

Abbreviation: FGC, female genital cutting.

- <sup>a</sup> Values are given as mean  $\pm$  SD or number (percentage), unless indicated otherwise.
- <sup>b</sup> Mean difference.
- <sup>c</sup> Odds ratio.

**Table 3** Examination findings among women with female genital cutting (n = 376).

Anatomic finding	No. (%)
Amputated clitoris alone	48 (12.8)
Amputated clitoris and additional features	328 (87.2)
Fused labia minora	
Upper one-third	203 (61.9)
Upper two-thirds	89 (27.1)
Whole length	36 (11.0)
Fused labia majora	13 (4.0)
Clitoral cyst	41 (12.5)

Hospitals. After explaining the aim of the study, 430 agreed to participate. Among the couples, FGC was present in 376 (87.4%) women. The sociodemographic characteristics of the study population by presence of FGC are shown in Table 2.

Few women had clitoral amputation alone (Table 3). Among the women with an amputated clitoris and additional features, different degrees of fusion of the labia minora were observed among the study women (Table 3). Fusion of labia majora was observed in a small number (Table 3).

The features of honeymoon distress were five to eight times more common among women with FGC than among those without (Table 4). The need for surgical intervention to control bleeding was 4.8 times higher in the cut versus the uncut group. Consummation of marriage within 2 days of the ceremony was 6.5 times more common among women with no FGC.

The overall analysis of the QoL questionnaire showed that the QoL scores were significantly better among women without FGC (Table 5). Subgroup analysis of women with FGC showed that cutting of more than the clitoris was associated with an increased frequency of honeymoon distress (Table 6).

**Table 1**Questionnaire for assessing the quality of life of women in the first 2 months of marriage.<sup>a</sup>

Question	Answer scoring 1	Answer scoring 2	Answer scoring 3
1. Do you feel that you have disfigurement of your external genital system?	Yes	No	_
2. Do you feel pain during sexual intercourse?	Yes	No	-
3. Do you feel that pain is making you refuse to have sexual intercourse?	Yes	No	-
4. Did you need surgical treatment to overcome this pain?	Yes	No	-
5. Are you satisfied with the support that you get from your parents or husband to solve your sexual problem?	No	Yes	-
6. How satisfied are you with your sexual life?	Dissatisfied	Satisfied	-
7. How often do you have negative feelings, blue mood, anxiety, and depression?	Always	Quite often	Never
8. How much are you enjoying your married life?	Not at all	A little	A lot
9. How do you rate your quality of life since marriage?	Poor	Good	Excellent
10. Will you perform female genital cutting on your future daughter?	Yes	Maybe	Never

<sup>&</sup>lt;sup>a</sup> A score of 10–15 indicated poor quality of life; a score of ≥16 indicated good quality of life.

**Table 4** Clinical presentation.<sup>a</sup>

Presentation	Women with FGC ( $n = 376$ )	Women without FGC ( $n = 54$ )	Hazard ratio (95% confidence interval)
Superficial dyspareunia	291 (77.4)	16 (29.6)	8.13 (4.32–15.30)
Excessive bleeding following first trial of intercourse	105 (27.9)	4 (7.4)	4.84 (1.71-13.74)
Need for surgical management to control bleeding	57 (15.2)	2 (3.7)	4.65 (1.10-19.61)
Need for surgical management to release labial adhesions	129 (34.3)	0	N/A
Unable to consummate marriage in the first 2 days	286 (76.1)	32 (59.3)	2.18 (1.21–3.95)

Abbreviations: FGC, female genital cutting; N/A, not applicable.

**Table 5**Ouality of life.<sup>a</sup>

Quality of life	Women with FGC $(n = 376)$	Women without FGC $(n = 54)$	Odds ratio (95% confidence interval)
Good	97 (25.8)	41 (75.9)	9.07 (4.66–17.64)
Poor	279 (74.2)	13 (24.1)	

Abbreviation: FGC, female genital cutting.

## 4. Discussion

The present study has shown that the expectation of happiness in early marriage might not be realized because of FGC. Honeymoon distress is more common among women with FGC, especially those with cutting of more than just the clitoris, than among those without. Furthermore, FGC is associated with a poor quality of life.

Diverse variations of fusion of the labia minora were found in approximately 60% of the study women, and 4% had adhesion of the labia majora. These findings are consistent with those of other studies [13,14]. The varying degrees of fusion of either the labia minora or labia majora can lead to tears and bleeding during the first coitus [2]. In the present study, superficial dyspareunia was significantly more common among cut than among non-cut women. Additionally, women were four times more likely to have bleeding, which increased the need for surgical intervention. These findings are in agreement with the results of Hassanin et al. [15].

Women who undergo type II and type III FGC usually develop narrowing of the vaginal opening [1], which makes many young girls come to seek advice for possible defibulation. In the present study, 48 women had type I FGC whereas type II/III was present in 328 women. FGC led to a twofold decrease in consummation of the marriage within the first 2 days, but notably, there were no significant differences between women with type I FGC (clitoral amputation alone) and those with type II/III in terms of the frequency of superficial dyspareunia and inability to consummate marriage in the first 2 days. These findings are similar to the results of Sharfi et al. [14] and El Dareer [16]. Women with FGC, especially type II and type III cutting, typically report sexual dysfunction: major physical and psychologic trauma can result from surgical interference in the highly sensitive genital organs, which not only reduces the female sexual response but also leads to anxiety, nightmares, and blue mood [16].

QoL is considered a multidimensional concept that includes maintenance of functional capacity, overall satisfaction, personal achievements, emotional state, and social interaction. In the present study, FGC influenced the QoL scores. Starting from the first day of marriage, women with FGC showed worse scores of QoL than did non-cut women. Furthermore, more women with extensive cutting reported problems with sexual activity in the first few days of marriage. This might be due to the preferential contribution of different segments of the female genital tract to the sexual process.

The main limitation of the study was the lack of data on the influence of psychosocial, biological, and financial factors on the QoL of women with FGC. However, these factors might affect QoL over the long term rather than the early period of marital life, which was the focus of the present study. A second limitation is that the study was conducted in tertiary hospitals; as a result, the study population might not be representative of the community. However, community-based sampling might not be achievable because newly married women might feel ashamed and therefore avoid hospital.

Even with these limitations, the present study provides preliminary data on the effect of FGC on the QoL of recently married couples and contributes to the argument for all health authorities to ban FGC. Girls and women with FGC are not only affected at the health and social level, but are also affected early in marriage.

## **Conflict of interest**

The authors have no conflicts of interest.

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**Table 6**Main clinical presentation by type of female genital cutting. <sup>a</sup>

Presentation	Women with clitoral amputation only $(n=48)$	Women with additional cutting $(n = 328)$	Hazard ratio (95% confidence interval)
Superficial dyspareunia	32 (66.6)	278 (84.8)	2.78 (1.42-5.44)
Excessive bleeding after first trial of intercourse	2 (4.2)	157 (47.9)	21.12 (5.04-88.43)
Need for surgical management to control bleeding	2 (4.2)	95 (29.0)	9.04 (2.16-37.81)
Need for surgical management to release labial adhesions	0	129 (39.3)	N/A
Unable to consummate marriage in the first 2 days	36 (75.0)	250 (76.2)	0.94 (0.46-1.89)

Abbreviation: N/A, not applicable.

<sup>&</sup>lt;sup>a</sup> Values are given as number (percentage) unless stated otherwise.

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