

# Sexual function in women with female genital mutilation

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**Objective:** To compare the sexual function of women with female genital mutilation (FGM) to women without FGM.

**Design:** A prospective case-control study.

**Setting:** A tertiary referral university hospital.

**Patient(s):** One hundred and thirty sexually active women with FGM and 130 sexually active women without FGM in Jeddah, Saudi Arabia.

**Intervention(s):** Women with and without FGM were asked to answer the Arabic-translated version of the female sexual function index (FSFI) questionnaire.

**Main Outcome Measure(s):** The individual domain scores for pain, arousal, lubrication, orgasm, satisfaction, pain, and overall score of the FSFI were calculated.

**Result(s):** The two groups were comparable in demographic characteristics. There were no statistically significant differences between the two groups in mean desire score ( $\pm$  standard deviation) or pain score. However, there were statistically significant differences between the two groups in their scores for arousal, lubrication, orgasm, and satisfaction as well as the overall score.

**Conclusion(s):** Sexual function in women with FGM is adversely altered. This adds to the well-known health consequences of FGM. Efforts to document and explain these complications should be encouraged so that FGM can be abandoned. (Fertil Steril® 2010;93:722–4. ©2010 by American Society for Reproductive Medicine.)

**Key Words:** Sexual function, female genital mutilation

Female genital mutilation (FGM) is defined by the World Health Organization (WHO) as all procedures that involve partial or total removal of the female external genitalia and or injury to the female genital organs for cultural or any other nontherapeutic reasons (1). It is classified into four types: type I is excision of the prepuce, with or without excision of part or all of the clitoris; type II is excision of the clitoris with partial or total excision of the labia minora; type III is excision of part or all of the external genitalia and stitching/narrowing of the vaginal opening (infibulation); and type IV, unclassified, includes pricking, piercing, or incising of the clitoris and/or labia; stretching of the clitoris and or labia; cauterization by burning of the clitoris and surrounding tissue; scraping of tissue surrounding the vaginal orifice (*angurya* cuts) or cutting of the vagina (*gishiri* cuts); introduction of corrosive substances or herbs into the vagina to cause bleeding or for the purposes of tightening or narrowing it; and any other procedure

that falls under the definition of FGM given above. Immediate and life-threatening as well as long-term complications are well documented, including shock, infection, clitoral cysts, dysmenorrhea, infertility, recurrent urinary tract infections, obstetric complications, and psychological and sexual problems. Some of these medical consequences are well documented by good scientific evidence and some by common sense and authoritative opinion (2–5).

There have been no proper research studies on the psychological and sexual function of women with FGM due to many factors including negligence (6), and this lack of information has led to lay speculation (7). Our study compared female sexual function in women with and without FGM.

## MATERIALS AND METHODS

Between February 2007 and March 2008, 130 sexually active women with FGM and 130 sexually active women without FGM were interviewed during their visit to the gynecology clinic at King Abdulaziz University Hospital, Jeddah, Saudi Arabia. The participants were given the Arabic-translated version of the female sexual function index (FSFI) questionnaire. Each woman gave consent to participate after the objective of the study had been explained. Institutional review board approval was obtained.

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The FSFI is a brief, multidimensional, validated tool for assessment of sexual function. It consists of 19 questions for domains of libido (two questions), arousal (four questions), lubrication (four questions), orgasm (three questions), satisfaction (three questions), and pain (three questions). Each question is given a score of 0 or 1 to 5. Each domain score and the total score are calculated as previously described elsewhere (8).

## RESULTS

One hundred and eight women (41.5%) were Saudi, and 152 women (58.5%) were residents from neighboring countries. Fifty-three (40.8%) women characterized their FGM as type I and type II; 55 (42.3%) women characterized their FGM as type III; and 22 (16.9%) women as “unknown.” There were no statistically significant differences between the FGM and the control groups in age: women with FGM,  $30 \pm 7.8$  years (mean  $\pm$  SD) (range: 16 to 39 years) versus women without FGM,  $31 \pm 8.2$  years (range: 17 to 40 years); level of education (high school): 90% women with FGM versus 92% in women without FGM; parity: 13 nulliparous (10%) and 117 multiparous (90%) women in the FGM group versus 16 nulliparous (12.3%) and 114 multiparous (87.3%) women in the control group; and frequency of sexual intercourse (three times or fewer per week): 117 (90%) in the FGM group versus 120 (92.3%) in the control group. There were no statistically significant differences between the two groups in desire score:  $3.6 \pm 1.1$  in the FGM group versus  $3.7 \pm 1.2$  in the control group; or the pain score:  $3.5 \pm 1$  in the FGM group versus  $3.8 \pm 1.1$  in the control group.

However, there were statistically significant differences between the two groups in arousal score:  $3.6 \pm 1.2$  in the FGM group versus  $4.2 \pm 1.4$  in the control group ( $P=.007$ ); lubrication score:  $3.4 \pm 1$  in the FGM group versus  $3.9 \pm 1.3$  in the control group ( $P=.01$ ); orgasm score:  $3.7 \pm 1.2$  in the FGM group versus  $4.2 \pm 1.4$  in the control group ( $P=.03$ ); satisfaction score:  $4.5 \pm 1.2$  in the FGM group versus  $5 \pm 1.4$  in the control group ( $P=.03$ ); and the full scale (overall) score:  $21.4 \pm 4.4$  in the FGM group versus  $23.5 \pm 5$  in the control group ( $P=.009$ ).

## DISCUSSION

Female sexual dysfunction is defined as a disorder of sexual desire, orgasm, arousal, and sexual pain that results in significant personal distress (9). Sexual dysfunction after FGM is a very important issue (10). To the best of our knowledge, there are no published studies in the literature to assess female sexual dysfunction after FGM. This pilot study documents the detrimental effects of FGM on female sexual function.

Worldwide, it is estimated that 100 to 140 million girls and women have undergone some form of FGM, and each year 2 million girls are thought to be at risk (1). The World Health Organization (WHO) classification is superior to

terms used by the public or even some scholarly reviewed publications. The latter terms include female genital cutting, female circumcision, female Sunna circumcision, and Pharaonic circumcision. The practice of FGM predates Islamic times and is common in religious and nonreligious groups (11). It is not included in the Muslim holy book, the *Qur'an*.

In the Middle East as well as parts of Africa, most women characterize their FGM as Sunna (excision of the prepuce) or Pharaonic circumcision (infibulation). We intentionally avoided the use of the word “Sunna” to prevent implying religious support for the procedure. We classified milder forms of FGM (i.e., “female Sunna circumcision”) as type I and type II and severe forms (i.e., “Pharaonic circumcision”) as type III. Sunna means following the instructions of the Prophet Mohammed, and detailed discussion of the Islamic views on the subject is beyond the scope of this report. Suffice it to say that all scholars and Islamic authorities agree that all types of body mutilation including FGM are condemned by Islamic faith. However, female Sunna circumcision, while not an obligation according to the *Qur'an*, is considered a Sunna tradition, and it is a controversial religious issue because some scholars question its authenticity as a proof of being Sunna. This in itself is the important distinction between FGM and female Sunna circumcision: true female Sunna circumcision does not exist in the real world because of the circumstances in which the procedure is performed (7). Rather, in this part of the world, FGM is performed shortly after birth by a *Daya* (traditional birth attendant) or an elderly woman without anesthesia and with primitive instruments. To follow the Prophet Mohammed’s instructions for the performance of female Sunna circumcision (6) (to remove minimal tissue from the prepuce) would require the help of a pediatric surgeon in an operating room with anesthesia. Emphasizing only the health risks of FGM may lead to the “medicalization” of the procedure, with the preconceived notion that it will result in milder forms of FGM (12–14); however, research has shown that performance of FGM by health-care providers still leads to the severe forms of FGM (15).

Our findings add to the existing literature an important aspect of the medical complications of FGM. We have demonstrated scientifically that even type I and type II are associated with sexual dysfunction. Previous studies also documented the occurrence of clitoral cysts accompanying type I FGM (5). Efforts by local religious and medical authorities in countries where FGM is common to demonstrate that female Sunna circumcision does not exist in the real world, and that all types of FGM including type I are associated with a long list of health consequences, will help toward abandoning the procedure.

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