# Female circumcision: history, medical and psychological complications, and initiatives to eradicate this practice

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Female circumcision — a procedure where the parts of the female genitals are removed, which is also known as female genital cutting (FGC) or female genital mutilation (FGM) — continues to be practiced in more than 28 African

### Objective

We performed a review of the literature to examine the history of female circumcision, its medical and psychological consequences, and government and non-government educational initiatives that are currently being taken to eradicate this practice.

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Address correspondence to Dr. Gaurang Shah, Glickman Urological and Kidney Institute, Cleveland Clinic, 9500 Euclid Avenue, Mail Code WL 10, Cleveland, OH 44195 USA countries. It is estimated that 80-100 million women have been circumcised. We performed a review of the literature to examine the history of female circumcision, its medical and psychological consequences, and government and non-government educational initiatives that are currently being taken to eradicate this practice.

Key Words: female circumcision, clitoris

# Definition

Female circumcision — a procedure where parts of the female genitals are removed — is also known as female genital cutting (FGC) or female genital mutilation (FGM). Female genital circumcision can be classed as one of four types, depending on the extent of the procedure.<sup>1-5</sup>

In Type I female genital circumcision (also known as prepucectomy or Sunna circumcision), the clitoral prepuce is excised.

In Type II female genital circumcision (clitoridectomy), the prepuce and glans clitoris are removed and the labia minora is partially or totally removed. In Type III female genital circumcision (also known as infibulations or Pharaonic circumcision), part or all of the external genitalia (clitoris, labia minora, labia majora) are excised and both sides of the vulva are generally stitched across the vagina. Only a pencil-sized hole is left to allow the passage of menstrual blood and urine. The woman's legs are generally bound together from the hip to the ankle for approximately 40 days, so that she remains immobile to allow the formation of scar tissue. In some communities where no stitching is used, adhesive substances including sugar, eggs, and, in rare cases, even animal excreta are sometimes placed on the wound to allow it to heal.<sup>2-4</sup>

Type IV female genital circumcision includes other forms of genital cutting, such as pricking, piercing, incision, and cauterization of the clitoris; incision, scraping, and cutting the vagina or surrounding tissue; and the introduction of corrosive substances or herbs into the vagina.

# Background

For thousands of years, female circumcision the clitoris — which is associated with sexuality and reproduction<sup>6</sup> — has been an accepted practice in different African cultures. This practice is tightly linked to cultural values, where culture is defined as a system of shared beliefs, values, customs, and behaviors that members of a society use to cope with their world and with one another.<sup>1</sup> The practice is believed to preserve family honor, to reduce sexuality, and to "protect" women from seducers and rapists.<sup>7</sup>

It is estimated that\_worldwide 80-100 million women have undergone this procedure, and currently, an estimated 2 million girls a year are at risk.<sup>2</sup> Female circumcision is practiced in 28 countries. It is a cultural ritual and can affect the survival of communities, since men will not marry with women who have not been circumcised. Where it is practiced, female circumcision is linked with "the essence of womanhood", the society's family structure, and its religious beliefs; women of a certain age, class, and social identity are expected to undergo this procedure; and it is linked with responsibility.<sup>7</sup>

# History

Herodotus described female and male circumcision in the fifth century B.C. and the Phoenicians, Egyptians, Ethiopians, and Hittites performed circumcision on both sexes. Female circumcision was practiced in Africa before the arrival of Christianity and Islam faiths.<sup>8</sup> Ethiopians referred to female circumcision as "pharaonic circumcision," which suggests that the Egyptians practiced female circumcision over 4000 years ago, making them the first to practice this.<sup>9</sup> The practice of female circumcision spread from people living beside the Nile and its tributaries to people living in adjacent regions such as Palestine, Oman, the United Arab Emirates, and Yemen. Next it spread into North West Africa and across the Sahara and Sahel regions. From there it spread into the Red Sea coast, the Horn of Africa, East Africa, and parts of Malaysia and Indonesia.

Female circumcision was also practiced by certain indigenous Andean and Australian groups, Bedouin groups in Israel, and by members of religious groups such as the Falashas, Muslims, Coptic Christians, and certain Protestants, and Catholics.<sup>3</sup>

In Britain, clitoridectomy was practiced in Victorian times. Isaac Brown published a book describing his success in treating female masturbation, hysteria, and epilepsy with clitoridectomy. In 1867, the Obstetrical Society of London abolished this procedure.

According to many reports, many slaves sent to the United States from Africa had been circumcised and some had rings threaded to their labia. In the United States, clitoral excision was performed to treat conditions such as masturbation, frigidity, hysteria, depression, epilepsy, urinary frequency and urgency, and lesbianism. The Orificial Surgical Society published articles about the benefits of clitoridectomy for things as trivial as headache. From 1970 to 1977, more than 3000 clitoral excisions were performed in the United States, and the cost was covered by Blue Cross insurance.<sup>9</sup>

# Beliefs

Reasons given for practicing female circumcision include "It is our religious obligation," "All normal people have it done, " "It makes a woman clean, beautiful, and sweet smelling," and "It prepares a woman for marriage and makes her presentable to her husband, able to satisfy and keep her husband, and able to conceive and bear children." In groups that practice female circumcision, all women in the community are circumcised. Marriage with a woman from a community where circumcision is not practiced is only allowed if the future spouse becomes circumcised. In many societies where female circumcision is practiced, brides-to-be are inspected by their future mother- in-laws. Men are taught that only circumcised women make good wives.

### Medical and psychiatric consequences

Medical and psychiatric consequences of infibulation (fastening the labia majora) are well described. Estimates of the incidence of medical complications from this procedure range from 10% to 30%. Cultural taboos do not allow discussion about such complications. Rates of complications are probably even higher than reported estimates, since most procedures are performed without anesthesia using rudimentary, unsterile instruments such as razors, scissors, or kitchen knives. The procedures are generally done by medically untrained women. Even when the operation is carried out by a medically trained midwife or nurse in sterile conditions, it is still hazardous. Often, many girls are operated on during a single ritual ceremony. In these cases, the same razor or knife is commonly used on a number of girls.<sup>2</sup>

Short term complications from female circumcision include hemorrhage, pain, shock, septicemia, and, rarely, tetanus. Long term complications include hematocolpus, chronic pelvic pain, dysmenorrhoea, pelvic inflammatory disease due to narrowing of the vaginal opening, chronic urinary tract infection, dyspareunia, and infertility, Table 1.

Effects on a woman's sexuality include inability to achieve orgasm, which is related to the type of circumcision that was performed. When a woman is about to be married, the infibulation is opened, and this procedure may take weeks or months to heal completely. When a woman is about to deliver a child, the infibulations must be cut in an anterior direction to allow room for the fetal head to pass through. If the infibulation is not adequately opened, delivery of the baby's forehead can be difficult, which can lead to perineal tear, urinary incontinence, vesicovaginal fistula, obstructed labor, and even fetal death, Table 2.<sup>3-5,10,11</sup>

TABLE 1. Possible medical complications from female circumcision

| Short term complication | Long term complication   |
|-------------------------|--------------------------|
| Hemorrhage              | Childbirth complications |
| Pain                    | Dysmenorrhoea            |
| Septicemia              | Dyspareunia              |
| Shock                   | Hematocolpus             |
| Tetanus                 | Infertility              |
|                         | Pelvic pain              |
|                         | Urinary tract infection  |

TABLE 2. Possible childbirth complications from female circumcision

| Problems during delivery |
|--------------------------|
| Fetal death              |
| Obstructed labor         |
| Perineal tear            |
| Urinary incontinence     |
| Vesico-vaginal fistula   |
|                          |

Psychological problems related to female circumcision include anxiety, depression, and phobia, which can occur before circumcision, at menarche, before and after marriage, and during childbirth.

### Eradication efforts

In Western cultures and many other cultures, female circumcision is now viewed as a violation of a woman's rights. The procedure can lead to life long pain and suffering, and it can even cause complications such as the death of the fetus during childbirth.

All forms of female circumcision were made illegal in Sweden in 1982, in the United Kingdom in 1985, and in the United States in 1997. A number of international organizations have supported efforts to eradicate the practice. In 1992 and 1993, respectively, the International Federation of Gynecology and Obstetrics, and the World Health Assembly called for the abolition of female circumcision. World Health Organization (WHO) governing bodies have urged member states to establish clear national policies to end female circumcision. The WHO has developed a program to end female circumcision that can be integrated into a country's health and development initiatives. In March 1997, the WHO's regional office for Africa launched a 20 year regional plan of action to eliminate female circumcision in African countries.<sup>2</sup>

Although most African countries have made female circumcision illegal, the practice still continues and the cultural role of women in these countries inhibits public discussion or opposition to the practice. Many efforts are being made to discourage female genital surgery in African countries and other countries by providing up-to-date information to show its disadvantages, Table 3. Many outreach groups within these countries are using the mass media and giving seminars and classes to educate the public about the harms of female circumcision, in order to eradicate this practice. National and international nongovernmental organizations (NGOs) sponsor Female circumcision: history, medical and psychological complications, and initiatives to eradicate this practice

| TABLE 3.   | Estimated | current | prevalence | of | female |
|------------|-----------|---------|------------|----|--------|
| circumcisi | on        |         |            |    |        |

| Country   | Estimated<br>prevalence |
|---|-------------------------|
| Cameron, Congo, Ghana, Niger,   | 0%-20%                  |
| Senegal, Tanzania, Tongo, Uganda<br>Benin, Kenya, Mauritania, Nigeria,<br>Yemen | 21%-40%                 |
| Central African Republic, Chad,<br>Cote d'Ivoire, Guinea-Bissau, Liberia        | 41%-60%                 |
| Burkina Faso, Ethiopia  | 61%-80%                 |
| Djibouti, Egypt, Erieta, Gambia, Guinea,<br>Mali, Sierra Leone, Somalia, Sudan  | 81%-100%                |

programs or work directly with male and female community and religious leaders, community health and social workers, traditional birth attendants, members of youth organizations, government officials, and others.<sup>2</sup>

According to the WHO constitution, the sexual rights of each individual must be respected, protected, and allowed to be fulfilled.<sup>12</sup> The US state department has gathered information from US embassies in countries where female circumcision is practiced and considers the practice to be a harmful tradition. The United States has also sponsored programs in African countries to educate people, empower women, enforce laws, and evaluate existing educational programs aimed at eliminating female circumcision. Financial support for these programs has been provided by the Democracy and Human Rights Fund (DHRF).<sup>2</sup>

### Conclusion

Female circumcision continues to be practiced in more than 28 African countries. These practices take many forms such as a tradition performed at birth, a symbol of reaching womanhood, control against premarital sexual activity, and a sign of tribal affiliation. Educational initiatives by local and regional groups and by government and nongovernment organizations are a very important step towards eventually eradicating this practice.

- 2. Report on Female Genital Mutilation as required by Conference Report (H. Rept. 106-997) to Public Law 106-429 (Foreign operations, Export Financing, and Related programs Appropriations Act, 2001).
- 3. Toubia N. Female circumcision as a public health issue. *N Eng J Med* 1994;331(11):712-716.
- Okonofua F, Larsen U, Oronsaye F et al. The association between female genital cutting and correlates of sexual and gynecological morbidity in Edo State, Nigeria. *BJOG* 2002;109(10):1089-1096.
- 5. Nour N. Female genital cutting: clinical and cultural guidelines. *Obstet Gynecol Survey* 2004;59:272-279.
- 6. Abusharaf RM. Revisiting Feminist Discourses on Female Circumcision: Responses from Sudanese Indigenous Feminists. Paper presented at the American Anthropological Association's 95th Annual Conference, San Francisco; 1996.
- Matias AS. Female circumcision in Africa. Africa Update. 1996, http://www2.h-net.msu.edu/~africa/sources/clitorodectomy. html
- El Musharaf S, Elhadi N, Almroth L. Reliability of self reported form of female genital mutilation and WHO classification: cross sectional study. *BMJ* 2006;333:106-107.
- 9. Watson MA. Female circumcision from Africa to the Americas: Slavery to the present. *Social Science Journal* 2005;42:421-437.
- 10. Okonofua F. Female circumcision and obstetric complications. Int J Gynecol Obstet 2002;77(3):255-265.
- 11. Rushwan H. Female genital mutilation (FGM) management during pregnancy, childbirth and postpartum period. *Int J Gynecol Obstet* 2000;70(1):99-104.
- Constitution of the World Health Organization. 22 July 1946. www.WHO.Int/ (last accessed 17 July 2008).

References

Fourcroy JL. Customs, culture, and tradition - what role do they play in a woman's sexuality? J Sex Med 2006;3(6):954-959.