INTRODUCTION

Definition
The World Health Organization (WHO) (2000) defines female genital mutilation (FGM) as 'procedures involving partial or total removal of the external female genitalia or other injury to the female genital organs whether for cultural, religious or other non-therapeutic reason'.

Scope of the problem
The prevalence of FGM is illustrated in Figure 1. Female circumcision or genital mutilation is still widely practiced in over 30 countries in the world. WHO estimates that over 120 million women have been circumcised and several thousand more are circumcised each day. Due to population movements women and girls living in western nations but originating from cultures where FGM is practiced are also at risk. The practice has become an issue for most healthcare providers, particularly midwives and obstetricians who may, however, not be aware of the consequences. All health workers who are involved in caring for the mutilated patient have an important role to play: they must recognize the sensitive nature and complexity of the issues related to FGM, and should have knowledge on the possible complications in childbirth. Caregivers should avoid becoming judgmental or punitive.

In this chapter, we will explain the problems surrounding female circumcision/genital mutilation particularly the sexual problems and the possible serious gynecological and obstetric complications.

History and practice
Female sexuality has been repressed in a variety of ways in all parts of the world throughout history up to the present time. Female slaves in ancient Rome had one or more rings put through their labia to prevent them from becoming pregnant. Chastity belts were brought to Europe by the crusaders during the 12th century. The burning of women as witches in Europe, foot binding in China and widow burning in India all contributed to the oppression of women. In the 19th century the removal of the clitoris was performed as a surgical remedy against masturbation in Europe and in the USA. FGM may be viewed upon as one of the
extreme forms of female oppression seen across centuries. FGM is found across many African countries (Figure 1) and some countries in Asia and the Middle East such as Malaysia, Indonesia and the United Arab Emirates. It is traditional in many different groups and faiths, including Christians and Muslims. Although there is no clear obligatory statement in the Qur’an for this practice, it is still carried out in the name of religion, although the practice is not exclusive to Muslims.

The age at which FGM is carried out differs from area to area. It varies from a few days’ old baby (e.g. Mali, the Jewish Flashas in Ethiopia and the Nomads of the Sudan) to about 7 years old (as in Egypt and many countries of Central Africa), or to adolescents (among the Ibo of Nigeria) where excision takes place shortly before marriage or before the first child (as among the Ahol in mid-Western Nigeria). Most experts agree, however, that the age of mutilation is becoming younger and less and less to do with initiation into adulthood.

Most frequently, FGM is performed by an old woman of the village (known as ‘Noumou Mousso’ in Mali, ‘Gadda’ in Somalia) or traditional birth attendants (called Daya in Egypt and the Sudan). In northern Nigeria and in Egyptian villages barbers carry out the task and on rare occasions it is done by the mother herself. Anesthetics are never used and the child is usually held down either by one or several village women. Herb mixtures, earth, cow dung or ashes are rubbed into the wound to stop bleeding. The instruments are crude and include kitchen knives, razor blades and pieces of glass. Needles, thorns, catgut or thread are used to stitch the wound. There is no attempt at asepsis.

FGM is practiced on thousands or hundreds of thousands of newborn and small girls worldwide. These girls have the most awful experiences and the degree of post-traumatic stress will never be fully assessed in most individuals.

Forms of female genital mutilation

Figure 2 illustrates the types of FGM:

- Type I: excision of the prepuce (a retractable piece of skin covering part of the clitoris), with or without excision of parts or all of the clitoris.
- Type II: excision of the clitoris with partial or total excision of the labia minora (may be known as sunna circumcision).
- Type III: excision of part or all of the external genitalia and stitching/narrowing of the vaginal opening, or infibulation (may be known as pharaonic circumcision of infibulation).
- Type IV: 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 purpose of tightening or narrowing it – and any other procedure that falls under the definition given above.

Cultural issues

Several theories exist about its origin:

- To control women’s sexuality or an attempt to obtain control of women’s magic power. To guarantee virginity until marriage. The excision of the clitoris would decrease sexual desire and pleasure of the women before marriage.
- To ensure a secure future for a female child in a society ‘that requires infibulated wives, and since a girl has no other choice in life but to marry, she must undergo the operation’.
- As a protection against rape for young girls who take the animals out to pasture.
- For hygienic and esthetic reasons because a woman’s genitalia were considered unclean and unsightly.
- As a religious ritual in some countries. The Mossi in Burkina Faso believe that contact between the clitoris and child’s head during delivery can result in the death of the child. In other cases it is believed that removal of the clitoris promotes fecundity.

Continuation of the practice

Why does the practice continue when the personal, psychological and health complications are so severe? A study in 1984 of 300 women in Sierra Leone found that of the 90% who were circumcised the reasons cited were tradition (85.6%), to belong to a group (35%), religion (17%), protection of virginity (3.7%), to please husband (0.7%) and to maintain good health (0.3%). Haga Sasso a Sierra Leone woman who practices FGM in a village
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explains ‘If the women of our village stop this practice, life will be meaningless to us all. It is our culture, and nobody has the right to take it away from us’.

WHO has taken a stand against genital mutilation but has acknowledged that in the African countries where female circumcision is practiced, attempts to outlaw this have met with strong opposition from both men and women and an insistence that westerners should not interfere with the cultural practices of another nation.

HEALTH COMPLICATIONS

Health complications of FGM for women and children are serious, many and varied. They are physical, psychological and social. They are acute or chronic. There is a broad range of complications due to genital mutilation which women can suffer from during their entire life:

**Acute complications**

These may include the immediate ones such as shock due to pain, infection or severe hemorrhage. Acute infection with tetanus and generalized septicemia is a frequent problem due to the conditions in which FGM is carried out. Abscess, urinary retention and damage to the urethra or anus may occur. The mortality rate of girls as a result of bleeding after FGM is unknown because these deaths are rarely reported to the health information system and are usually kept secret.

**Chronic complications**

These include chronic urinary retention, obstruction to menstrual flow and consequences of infection can lead to the following frequent occurring complications:

**Figure 2** Different types of female genital mutilation (FGM). (a) Type I FGM; (b) type II FGM; (c) type III FGM; (d) type IV FGM. Source: Touré, M. *Excision et Santé de la Femme*. Conakry, Guinea: Editions Ganndal. ISBN: 2–913326–49–8
• Chronic urinary tract infections (UTI).
• Chronic pelvic pain.
• Infertility.
• Keloid scar – sometimes extensive keloid is seen (Figure 3).
• Psychological trauma: infibulated women suffer considerable trauma during actual or attempted sexual penetration. Full sexual intercourse may take some weeks to achieve.
• Difficulties in childbirth: especially after excision type III (infibulation) the child may be retained in the vagina (Figure 4). The presenting part can compress the bladder and the rectum due to the fetus being retained in the vagina through infibulation itself or scar tissue of type I and II FGM. If the situation lasts for many hours, tissue necrosis of bladder and rectum will develop which will lead to a vesico-vaginal (VVF) or recto-vaginal fistula (RVF) once the necrotic tissue falls off (for more information about fistula see Chapter 21). In most cases the fetus will die (Figure 5) and the mother, if she survives may suffer from serious injuries (Figure 6) and become a social outcast due to the permanent stench of urine. FGM and the resulting scar tissue causes rigidity of vaginal tissue. At childbirth the level of elasticity of the vagina cannot be expected to be normal due to scarring. In the absence of surgical interventions severe tears of the vaginal wall or perineum can arise with the risk of major bleeding.
• Loss of sexual function: sexual pleasure and orgasm is diminished or absent. Dyspareunia (pain during intercourse) and trauma can lead to vaginismus and other sexual problems.
• Psychological implications: disorders such as insomnia, nightmares, mood disorders, difficulty concentrating, depression, chronic anxiety have been reported. One can assume that these problems have a high incidence among women suffering from FGM but there are hardly any statistics or studies available on this issue. In addition many victims are not even aware of the fact that their symptoms are related to FGM as the procedure is considered as normal in their setting and they can’t compare their health problems with someone who has not undergone FGM. Many women or girls can’t express their pain and suffer in silence.

Less common complications

• Abscesses: collection of pus in wound cavities after excision. These abscesses may prevent sexual intercourse and are very painful (Figure 7).
- Clitoral neurinoma: nerve endings in the clitoris, can be caught in the scar tissue, causing excruciating pain on the slightest touch (Figure 8).
- Menstrual difficulties: in case of closure of the introitus (infibulation) a hematocolpos (accumulation of menstrual blood in the vagina) or hematometra (accumulation of blood in the uterus) can develop which can cause an abdominal swelling and be mistaken for a pregnancy and may lead to infertility (Figure 9).

Difficulties in the provision of gynecological care to victims of female genital mutilation

The vaginal opening is very small in cases of primary classical or secondary type II infibulation (Figure 10). A normal gynecological examination is
not possible for anatomical reasons or due to the recurrent psychological trauma of pain. As a consequence, screening for cervical cancer with cytology swab or direct visual inspection is extremely difficult or not possible at all. The same accounts for the insertion of an intrauterine device (IUD).

If you need to do a gynecological examination on an FGM victim you should consider her psychological and physical trauma. Explain well what you plan to do and discuss the possibility of pain relief, e.g. oral diclofenac or local lignocaine injection or jelly. If a speculum examination is necessary use the smallest valve you have and lubricate it well. If the procedure is intolerable for your patient it is better to stop. If you are working in a high-incidence area of FGM it might be worthwhile to invest in pediatric specula and a vaginoscope as described in Chapter 24 and in lignocaine cream or jelly.

In cases where a vaginal examination is impossible a rectal examination can be performed but it is very important to discuss this with the patient first. You should always discuss defibulation with the patient.

**HIV transmission and female genital mutilation**

The practice of FGM involves the use of one instrument for multiple operations under non-sterile conditions and thus carries a high risk of transmission of infection including HIV for the women or girls undergoing FGM but as well for the circumcisor. Recently, there has been a growing interest in the relationship between the practice of female circumcision and the spread of AIDS.

**POSSIBLE SURGICAL INTERVENTION TO REVERSE FEMALE GENITAL MUTILATION**

**Defibulation**

This is a surgical procedure to reverse infibulation by opening the vaginal introitus, uncovering the urinary meatus and rebuilding, as much as possible, a ‘normal’ anatomy of the external genitals. This procedure is especially necessary in patients with hematocolpos and hematometra. The operation is described step by step below:

1. Careful preoperative disinfection of the perineal and genital zone with iodate solution.
2. Local anesthesia with lignocaine 2% injected in several points of the scar (see Figure 11).
3. Identify the midline of infibulation by lifting it up using a dissecting forceps introduced in the vaginal opening and let it slide further under the scar bridge of the infibulation (Figure 12). In cases where the vaginal opening is not too narrow you can use your index finger. This helps to protect the underlying structure (urethra) and to identify the place you have to incise.
4. Cut beginning from the bottom upwards (Figure 12). Stop almost 1–2 cm above the...
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urethral orifice. Pay attention to the axis of symmetry of the incision.
5. Suture the single edge of the incision with continuous or interrupted absorbable suture (Monocryl 00) as shown in Figure 13.
6. Post-surgical advise:
   a. Check after 1 week and after 1 month postoperation.
   b. Counsel the patient on accurate hygiene.
   c. Widen the edge of defibulation daily using antiseptic and anesthetic cream to avoid the welding of incision.
   d. Counsel the patient to urinate into a bowl with her genitals submerged in warm water to avoid intense burning.
   e. Supply painkillers.

Restoration of the clitoris

The French urologist Dr Pièrre Foldes is the only surgeon who has developed a surgical technique to restore the clitoris. We describe the technique here:

1. Place the patient under general anesthesia in lithotomy position.
2. Open the scar on top of the clitoris stump staying closely to the stump, proceeding upwards to include the residual shaft of the clitoris (Figure 14).
3. Remove the scar tissue surrounding the shaft of the clitoris and the suspensory ligament (Figure 15).
4. Mobilize the suspensory ligament by transecting it vertically (Figure 16).
5. Fix the neo-clitoral shaft using single stitches with Monocryl on the lateral and inferior border of the shaft (Figure 17).
6. Adapt the skin with interrupted stitches using Monocryl (Figure 17).
7. Tissue is then removed from the thighs to create the labia (not shown here).

The surgery takes less than an hour in experienced hands and can be done as an outpatient procedure with 1 day in hospital postoperatively. This allows women to have surgery discreetly.

Post-surgery pain may last 2 weeks and 4–6 weeks later, women claim to have a new healthy sexuality and to feel again their clitoris (Figure 18). A study found a positive change in sexual arousal in 75% of the 453 patients.

It is difficult to compare pre- and postoperative results as most patients never experienced a normally functioning clitoris before their operation but patients’ satisfaction with the method could be assessed by using psychometric questionnaires.

PREVENTION

There are four groups of people who need to be informed about the consequences of FGM in order to prevent its continuation:
• Health personnel.
• ‘Ground actors’ [circumcisers, non-governmental organizations (NGOs) like women’s groups, traditional healers, traditional birth attendants].
• Patients and their families (during any contact with the health facility).
• The Community (girls, men, religious and traditional leaders).

Health personnel should receive training on the complications of FGM and how to take care of patients presenting to them. They should learn how to foresee complications, e.g. during child birth and prevent them. Ground actors are a cornerstone in the abolition of FGM. By changing their practice and sensitizing the community they can help to stop FGM. Patients often don’t know that their symptoms are related to FGM as they have no way of comparing themselves to a non-circumcised woman in areas of high incidence. They and their families need to learn about that link and about the steps to take, e.g. for an infibulated woman to deliver in a health facility or to present early in pregnancy to discuss and perform defibulation. Young girls should receive training at school to relate their symptoms to FGM if they had it or to try and resist FGM. Communities need to be aware of the consequences of FGM as well as they often do not know this, especially husbands and fathers.

CONCLUSION
Healthcare workers, particularly midwives and obstetricians, have a dual responsibility:
• To help the patients with FGM at the hospitals.
• To help the families become aware of the services available in the communities.
• Midwives, nurses and obstetricians should treat women with sensitivity and without bias.
• In some situations, education and information may be helpful in making interventions acceptable.
• Finally, we entirely agree with a feminist writer who claims that female circumcision is a manifestation of a ‘sadoritual syndrome’ that is unspeakable and incapable of being expressed in words because it is inexpressibly horrible.

REFERENCES

Further reading
Barrie ML. Wounds That Never Heal. Essence March 1996