

Policy documents on genital cutting highlight the negative effects of cutting on women's health and well-being. The conditions and potential complications of genital cutting have been documented over the years by a number of groups, including medical professionals, anthropologists, and advocates. Except for Sudan, however, national-level information on conditions and complications has not been previously available. This section includes a discussion of research findings on cutting-related health effects, with an overview of DHS results on the practitioners of these operations and the medical complications that women report.

Traditional practitioners perform most operations

In all of the countries surveyed, traditional practitioners perform the majority of genital cutting. In Côte d'Ivoire, a variety of traditional practitioners perform these procedures, most commonly traditional birth attendants (47 percent), "old women" (31 percent), and excisers (12 percent) (Sombo et al., 1995). Women in Eritrea and Mali are most often cut by operators that specialize in genital cutting. In Mali, these operators are often women from the blacksmith's "caste" (Dorkenoo and Elworthy, 1992). Traditional midwives perform the majority of procedures in Egypt, but many mothers are increasingly consulting doctors to perform these operations on their daughters (see Generational Differences section). In Sudan, a substantial proportion (35 percent) of women are also operated on by trained midwives.



Data on health effects

The effects of cutting are difficult to measure based on self-reports

DHS collected a limited amount of information on the health effects of genital cutting in CAR, Egypt, and Eritrea. For a number of reasons, measuring the physical, mental, and sexual health effects of genital cutting on women is challenging. Since many women underwent these procedures as infants, they may not remember any immediate adverse effects. Complications that develop over time or arise during childbirth may not be linked by women to surgery they underwent as children. Women also probably have different conceptions of illness than researchers. For instance, symptoms that researchers ascribe to cutting-related complications may be considered normal and natural to women, especially among populations where genital cutting is nearly universal.

The samples of women that DHS surveyed were limited to those who survived cutting-related complications. The fatalities have not been measured or inquired about via sisters or other family members. In countries such as Egypt and Sudan with samples limited to ever-married women, those whose complications rendered them "unmarriageable" would not have been included in the survey.

The survey is also probably not an adequate instrument for eliciting information from women on the possible sexual effects of these procedures. Topics related to female sexuality are often taboo, highly subjective, and complex, lending themselves more to clinical or anthropological methodologies than large-scale survey research.

Potential health effects according to the research literature

In many countries where genital cutting is practiced, infants, girls, and teenagers are especially at risk for various interrelated reasons, including:

- (1) **Practitioner.** DHS data and other research suggest that the majority of operations are performed by traditional practitioners, including midwives and barbers. Many of these "circumcisers" have no medical training or formal knowledge of anatomy.
- (2) Instruments. Field research suggests that practitioners often use unsterilized equipment such as razor blades, knives, and string or wire. To fasten the wounds of infibulated women, practitioners may use thorns or string. The use of these materials can increase the probability of infection, damage to adjacent tissues from inaccurate cutting, and other problems.

(3) Context. Since many procedures take place outside of medical facilities, post-operative care may be inadequate or unavailable. When complications result, girls may not obtain medical assistance because of limited access to health care information and services. They may also be reluctant to broach sensitive subjects with medical professionals.

Researchers have documented a number of medical complications associated with genital cutting (Baker et al., 1993; Dirie and Lindmark, 1991; Ericksen, 1996; Sami, 1986; Toubia, 1995; Verzin, 1975). In general, doctors consider infibulation to be far more physically hazardous for women than procedures such as clitoridectomy or excision. Some of the possible effects of genital cutting include:

Intense pain. Operators perform many procedures without anesthetic, cutting into genital tissue that is dense with nerve endings.

Hemorrhage. Cutting and inadequate suturing can lead to heavy, and sometimes life-threatening, blood loss. Hemorrhage may also result from the rupturing of infected scar tissue.

Shock. Girls may experience intense fear, pain, and hemorrhage during and after these procedures, resulting in shock.

Infection. In some countries, genital cutting may be performed en masse on groups of infants or girls. The use of unsterilized equipment by operators can lead to tetanus, and, theoretically, HIV infection. The wound left after cutting can become infected, increasing the risk of reproductive tract and pelvic infections. *Improper healing.* The wounded tissues may heal improperly, leading to excessive scar tissue and the fusion of tissue over the vaginal area.

Injury. The use of imprecise tools and/or the struggles of the child can result in injury to other organs and glands.

Some of the more serious complications faced by infibulated women include:

Chronic infections. Infibulation usually leaves a larger wound than other procedures, heightening the risk of infection. In addition, women may need to be recut before intercourse and at delivery, increasing their vulnerability to infection. In a tightly infibulated woman, the flow of urine and other secretions may be obstructed, leading to infection.

Infertility. Chronic reproductive tract infections can lead to infertility.

Difficulty in peforming pelvic exams and monitoring labor. Medical professionals may not be able to perform a pelvic exam on a tightly infibulated woman. During delivery, infibulation can make vaginal exams difficult and painful, preventing medical professionals from monitoring the progression of labor via cervical dilation (Baker et al., 1993).

Complications in labor. During delivery, some doctors believe that infibulated women need two or more episiotomies (Dirie and Lindmark, 1991). Women who give birth unassisted are at risk of prolonged labor, which can damage organs. In some cases, these complications lead to internal tearing that cause continual urinary and/or fecal incontinence. Prolonged labor can also threaten the survival chances of both mother and child. Painful intercourse. In the case of tightly infibulated women, the husband may be unable to penetrate the vaginal opening and injure or tear the genital tissue in his attempts. Scar tissue may also make intercourse painful.

Psychological and sexual effects

Although not widely studied, a number of doctors believe that the psychological and sexual effects of genital cutting on girls and women are significant. The psycho-sexual effects of these procedures, however, are less easily measured than medical complications. Among the effects documented by researchers are anxiety, depression, trauma, as well as distrust of caregivers, frigidity, and marital conflict (El Saadawi, 1980; Toubia, 1993; WHO, 1996a).

Genital cutting usually involves the removal of some or most of the genital tissues that are primary areas of sexual sensitivity for women. Although the sexuality of women that have undergone cutting has not been widely studied, it is believed that removing the clitoris and surrounding tissue sharply reduces a woman's capacity for sexual fulfillment (Toubia, 1995). Genital cutting may also leave a woman with damaged nerve and scar tissue that makes intercourse extremely painful (WHO, 1996b).

Health problems reported by women

Substantial numbers of women in CAR and Eritrea reported health problems related to genital cutting (see Appendix Tables 8 and 9). Among women who have undergone these procedures, around one-fourth in CAR and one-fifth in Eritrea reported some type of complication. Egyptian women were less likely to say they had any problems, with fewer than 5 percent of women reporting that they or their most recently cut daughters experienced complications (El Zanaty et al., 1996).

Hemorrhage is a major problem according to women in CAR

Among women in CAR who reported problems after undergoing cutting, the most common complications were hemorrhage (64 percent), pain (41 percent), and fever (21 percent). Women were less likely to report infection (6 percent) or difficulty urinating (6 percent). The reported level of infection, however, may be an underestimate. Many women in CAR experienced fever, which is often a sign of infection.

Sex- and delivery-related problems are widespread among Eritrean women who underwent excision or infibulation'

In Eritrea, women were interviewed only about complications related to sexual intercourse and delivery. Overall, nearly one in five Eritrean women who underwent genital cutting reported a problem during sexual relations and/or delivery. Women who experienced more extensive cutting were much more likely to report complications. For instance, among infibulated women, 38 percent reported a complication. Women who underwent clitoridectomy were least likely to report a problem (6 percent).

A number of Eritrean women, especially those who underwent excision or infibulation, reported problems during sexual relations. Overall, 12 percent of sexually experienced women who have undergone genital cutting reported problems. This figure rises dramatically among women who underwent excision or infibulation, with 31 and 25 percent, respectively, reporting sex-related complications. A similar pattern is seen among those Eritrean women reporting problems during childbirth. Overall, 17 percent of mothers reported deliveryrelated problems related to genital cutting. While 5 percent of women with clitoridectomies reported complications, 33 percent of infibulated women and 40 percent of women who underwent excision had cutting-related problems during delivery.

Few Eritrean women received health care for their problems

Among Eritrean women who experienced complications, few received any type of medical treatment (see Appendix Table 10). Overall, three-fourths of women reported that they received no treatment for their cutting-related problems. The remaining women obtained services from a health institution (16 percent) or traditional healer (10 percent). Those women most likely to report problems, infibulated women and women who have undergone excision, are also least likely to obtain medical assistance. For instance, nearly 84 percent of infibulated women reported receiving no medical treatment for their complications.

¹ In Eritrea, women were asked if they had one of three types of procedures: clitoridectomy, excision, or infibulation. Since type was not defined in the survey, these figures reflect a respondent's own judgment of the type of cutting she underwent. It is generally understood that clitoridectomy is the least invasive, excision the next most invasive, and infibulation the most extreme type.

Estimated number of women adversely affected in CAR, Egypt, and Eritrea

Based on women's self-reports, problems related to genital cutting represent a public health issue of some magnitude. Women who experienced problems in CAR and Eritrea comprise a substantial proportion of the total population of women in these countries between the ages of 15 and 49. In CAR and Eritrea, more than 250,000 women experienced health-related problems due to genital cutting. Even in Egypt, where a relatively small proportion of women reported complications, more than 800,000 experienced adverse effects.

The findings suggest that in these countries alone more than one million women ages 15 to 49 experienced health problems related to genital cutting. For a number of reasons, this figure probably represents a substantial underestimate of the people adversely affected. The number of infants and girls under age 15 who experience problems is unknown. In Eritrea, women were interviewed only about complications related to sex or delivery. They were not queried about problems that they may have experienced outside of sexual relations or delivery such as hemorrhage and infection. Finally, cutting-related problems a woman experiences may adversely affect the health and well-being of her family. Deliveryrelated complications, for example, can affect the health and survival of both mother and child.

Opposition to genital cutting for health reasons

In a number of countries, medical complications are a common reason respondents give for opposing female genital cutting. These data, however, represent only the attitudes of respondents opposed to genital cutting. The findings do not reflect overall respondent knowledge about potential health complications. Except for Egypt, researchers did not query all respondents about their knowledge of health complications. Since this is the case, the findings on opposition for health reasons probably underestimate the extent to which women associate health problems with cutting. Women who support the continuation of genital cutting may also understand the potential health risks involved. To them, however, the perceived benefits of cutting may outweigh the risks.

Country	Type of problems covered in survey	Percent of women who have undergone cutting who report problems	Percent of all women age 15-49 affected	Estimated number of women age 15 or older affected in population
CAR	Any health problems	27	12	115,868
Egypt	Any health problems	5	4	856,704
Eritrea	Problems with sexual relations and/or delivery	19	15	141,925

¹ These estimates are based on the United Nations medium variant population projections for 1995. To obtain these figures, the percentage of women that experienced health problems in the survey was applied to the population projections for all women ages 15 and older in CAR, Egypt, and Eritrea. In calculating these figures, two assumptions have been made: (1) The incidence of problems for women 15 to 49 also reflect the experiences of women ages 50 and older; and (2) The incidence levels for never-married and ever-married women in Egypt are equivalent.

These data may also underestimate the extent of opposition for medical reasons because the most common response women give for opposing genital cutting is that it is a "bad tradition or custom." Respondents were not prompted to elaborate on this response. It is possible, however, that respondents consider genital cutting a "bad tradition" for any number of reasons, including adverse health effects. Only those who specifically mention health complications as a reason for their opposition are considered in this section. For these respondents, health complications may be a particularly salient reason for opposing cutting. Their opposition may serve as a rough proxy for respondent recognition of the severity of health risk associated with these procedures.

Medical complications are a common reason given for opposition to genital cutting

In all countries surveyed except for CAR, medical complications are a commonly given reason for female and, in the case of Eritrea, male opposition to genital cutting. Around onehalf of women opposed to genital cutting cite medical complications as a reason for their opposition in Egypt, Mali, Sudan, and Yemen. Eritrea has somewhat lower levels of opposition for health reasons among women. Eritrean men, however, show strong concern for the health effects of genital cutting, with 76 percent of those opposed to these practices giving medical complications as a reason.

	Respondents Opposed to Genital Cutting		All Respondents	
Country	Percentage opposed for health reasons	Number of women/men	Percentage opposed for health reasons	Number of women/men
CAR	13	3,285	7	5,884
Egypt	46	1,882	6	14,779
Eritrea Women Men	37 76	1,940 462	14 32	5,054 1,114
Mali	45	1,234	6	9,704
Sudan	50	1,256	11	5,860
Yemen'	52	3,436	32	5,687

¹ In Yemen, this figure represents women opposed to genital cutting because the practice is "not good for the girl." The assumption is that this response is based on health-related reasons. In the other countries, respondents specifically mentioned medical complications as a reason for opposition.

Opposition for health reasons among all respondents

In most of the countries surveyed, those who oppose genital cutting are a minority of the total population of respondents. Those opposed who specifically mention health reasons comprise an even smaller group. Opposition for health reasons exceeds 10 percent of the respondent populations in only three countries: Eritrea, Sudan, and Yemen. Eritrean men and Yemeni women are most likely to find health reasons a compelling rationale for opposition. Nearly one in three Eritrean men is opposed to genital cutting because of medical complications. This surpasses the level of opposition among Eritrean women, which is 14 percent. One-third of Yemeni women also oppose genital cutting because it is not "good for the girl."

In Egypt and Eritrea, the proportion of women opposed for health reasons is close to the level of women in the sample population that reported experiencing cutting-related complications, 5 and 15 percent, respectively. The figure for CAR (7 percent) is somewhat lower than the 12 percent that reported health problems related to genital cutting.