Obstetric fistula—a devastating medical condition consisting of an abnormal opening between the vagina and the bladder or rectum—results from unrelieved obstructed labor: Unless the fetus is delivered surgically, prolonged obstructed labor often ends only when the fetus dies, decomposes, and is finally passed from the mother. In many cases the mother’s injured pelvic tissue breaks down, leaving a hole, or fistula, between adjacent organs. Fistulas also can have non-obstetric causes, such as laceration or sexual trauma (see p. 2).

Fistulas can have terrible social consequences: The physical consequences of a fistula—including the continuous leaking of urine, feces, or both—usually make a normal life difficult, if not impossible. Fistula patients are often shunned, abandoned, or divorced (see p. 3).

Fistulas occur most where health care is least available: Fistula afflicts millions of women in developing countries. It is most common among the poor in rural sub-Saharan Africa and South Asia. Many women who develop obstetric fistulas have given birth at home, often without skilled attendants or prompt access to emergency obstetric care. Fistula can occur at any age but is more common among young women, whose pelvises have not fully developed. While most fistulas can be repaired with surgery, limited access to repair facilities and trained providers, as well as inadequate information on fistula repair, keeps women from the help they need (see p. 4).

A comprehensive approach works best: The problems of fistula, both medical and social, are likely to persist until better health care reaches the poorest and most vulnerable members of society. Three elements form the core of a comprehensive approach to helping women and their families (see p. 6):

1. Reducing the number of adolescent pregnancies by encouraging later marriage and expanding access to family planning services;
2. Improving access to good obstetric care, including emergency care;
3. Providing surgical treatment and counseling to women living with fistula.
Fistula Afflicts Millions in Developing Countries

An obstetric fistula is an abnormal opening between the vagina and the bladder or rectum. The fistula results in the uncontrolled passage of urine or feces from the bladder or rectum into the vagina (10). Fistulas also can have nonobstetric causes, such as laceration, rape, and other sexual trauma.

Fistula afflicts millions of women in developing countries. Each year an estimated 50,000 to 100,000 more women develop obstetric fistulas (39, 63).

Most obstetric fistulas could be avoided if women could delay childbearing until after adolescence, if skilled attendants could monitor all labors, and if women could have timely access to good emergency obstetric care. Moreover, most women who develop fistulas could be treated surgically to have the damage repaired.

How does obstetric fistula happen?

Obstructed labor can occur when the fetus will not fit through the mother’s pelvis (cephalo-pelvic disproportion), when the fetus is not positioned correctly for delivery (malpresentation), or when uterine contractions are ineffective in delivery (40). An obstructed labor is considered prolonged after 24 hours, and it can last one week or more unless the fetus is delivered surgically.

In prolonged labor the unrelenting pressure of the entrapped fetal head against the mother’s pelvis can cut off the flow of blood to the soft tissues of the bladder, vagina, and rectum. If the mother survives, prolonged obstructed labor usually ends with the death of the fetus, followed by fetal decomposition to the point that it can slide out. The mother’s injured pelvic tissue soon sloughs away, leaving a fistula between adjacent organs (69).

If the fistula is between the vagina and bladder (vesico-vaginal, or VVF), urine leaks from the vagina; if the fistula is between the vagina and rectum (recto-vaginal, or RVF), feces leak. The great majority of fistulas are vesico-vaginal. Estimates of the extent of recto-vaginal fistulas are few but include 7% in a case series of patients in Ethiopia (31) and 4% in a series of patients in Nigeria (70). An estimated 6% to 24% of obstetric fistula cases are combined VVF and RVF (31, 70, 71).

Obstructed labor is an important maternal health issue.

Obstructed labor—the immediate cause of obstetric fistula—is one of the leading causes of maternal illness and death in sub-Saharan Africa and South Asia (40, 55). Worldwide, obstructed labor occurs in an estimated 5% of pregnancies and accounts for an estimated 8% of maternal deaths (11, 35, 78).

Worldwide, each year more than half a million women (529,000 estimated in 2000) die from...
largely preventable pregnancy-related causes (1, 77). An estimated 99% of such deaths occur in developing countries (78).

For each maternal death in a developing country, many other women suffer from illness and disability due to complications during pregnancy and childbirth. For example, in Bangladesh for each maternal death, an estimated 153 other women suffered a serious maternal medical problem; in India, 175; in Egypt, 297; and in Indonesia, 908, according to research in the late 1990s (16).

Adolescent women are particularly susceptible to obstructed labor, because their pelvises are not yet fully developed (see “Early childbearing increases risk,” p. 5). Women who suffer from malnutrition could also be at particular risk because the body’s growth may have been stunted in childhood.

In developed countries obstructed labor is almost always promptly remedied by cesarean section delivery. In developing countries, however, many women do not survive obstructed labor—usually because the complications are not recognized in time or because emergency care is unavailable, due either to great distance or high cost.

If a woman survives obstructed labor, she often sustains multiple physical problems—not only the fistula itself but also recurring infections, paralysis of muscles in the lower legs (termed “foot-drop”), amenorrhea, infertility, and damage to vaginal tissue that may make sexual intercourse impossible (4, 10, 69, 71, 80).

Surgery can repair most fistulas.

Once obstetric fistulas occur, most require surgical repair; they usually cannot heal by themselves (69). Most surgical repair is successful (see box), but many women, especially those who deliver without medical attention, may not know that the fistula could be repaired or may not be able to get care (10, 63, 71).

Moreover, few medical practitioners in the developing world have training in fistula repair. While a few specialized fistula hospitals or fistula units within general hospitals exist in some African countries, most hospitals and clinics in developing countries do not have the facilities to treat fistulas successfully or do not consider fistula repair to be an important medical priority (69).

Consequences Often Severe

A fistula can be devastating. Not only does the afflicted woman almost always lose her baby, but also the lasting physical consequences—including the constant leakage of urine, feces, or both and the resulting odor—make it difficult, if not impossible, for her to lead a normal life (see “Profiles: Living with Fistula,” p. 5 and p. 10).
The wide range of adverse consequences, social as well as medical—which has been termed the “obstructed labor injury complex” (4)—has crucial implications for care. “The understanding that one must treat the ‘whole person’ with the fistula—not just her injured bladder or rectum—is the single most important concept in fistula care,” writes Lewis Wall (69).

Often, society blames the woman for her condition, and some women even blame themselves (5). Many fistulas occur among women in traditional cultures, where women’s status and self-worth may depend almost entirely on marriage and childbearing (69). Many fistula patients are abandoned or divorced by their husbands, particularly when it becomes clear that the fistula will not go away (6, 71).

For example, 71% of patients were divorced or separated from their husbands in a recent study of 899 fistula cases at the Evangel Hospital in Jos, Nigeria (70). In India and Pakistan some 70% to 90% of patients studied in the 1980s had been abandoned or divorced (9, 10, 20).

Facing familial and social rejection and unable to make a living by themselves, many women with fistula live for years without any financial or social support (75). Many fall into extreme poverty. At the Addis Ababa Fistula Hospital, one woman in every five reported begging for food to survive (71). Some cannot cope with the pain and suffering and resort to suicide (4).

Other women living with untreated fistulas, however, show remarkable resilience and strength. Despite the stigma, they find ways to support themselves and their children, and some set aside money for years for fistula repair (18).

Fistula Most Common Where Good Obstetric Care Is Lacking

How widespread is obstetric fistula? It has been estimated that, worldwide, fistulas occur in one or two cases per 1,000 deliveries (11, 12). The actual prevalence of fistulas is not known, however. No comprehensive survey has been conducted.

Based on the number of women seeking treatment, the World Health Organization (WHO) has estimated that over 2 million women are living with untreated obstetric fistulas (39). This estimate probably is far too low, primarily because many women with fistulas do not seek treatment (29).

Obstetric fistula appears to be most common in sub-Saharan Africa and South Asia. One study estimated the minimum incidence of obstetric fistula in rural areas of sub-Saharan Africa to be 33,450 cases per year—many more than has been estimated based on hospital reports (64). Obstetric fistula could also be widespread in parts of the Near East and North Africa, although the lack of studies precludes accurate estimates (44).

Obstetric fistula is rare in the developed world because emergency obstetric care is readily available. When fistulas occur at all, they usually are the result of cervical cancer, radiation therapy, or injuries sustained in surgery, and are treated without delay (71).

Before the 20th century, however, obstetric fistulas were common in Europe and North America (51, 81). Then, as in many developing countries today, women often married and became pregnant at young ages, many were undernourished, few had adequate access to skilled attendants, and most lacked good-quality medical care (71).
Poverty lies behind most fistulas.

While the immediate causes of obstetric fistula in developing countries are obstructed labor and lack of prompt access to emergency obstetric care, pervasive poverty is often a root cause. Studies show that fistula patients tend to live in remote areas and to be impoverished (41, 64)—factors typically associated with inadequate health care during pregnancy and delivery and thus with increased risk for obstetric complications (22).

With less access to obstetric care, rural women are more likely to suffer fistulas than urban women (47, 64). Among rural women those with lower social and economic status are more likely than others to suffer fistulas and other obstetric problems. For example, in Nigeria in a study among 50 rural hospitalized fistula patients and a comparison group of 50 women without fistula living in a nearby village, 40% of fistula patients reported having no schooling compared with 14% of the comparison group (41). The same study found that the husbands of women with fistula were likely to work as farmers, tradesmen, or cattle herdsmen, while the husbands of the women in the village group were likely to be office workers, administrators, or the like.

Recent country-level assessments conducted as part of a new international campaign to address fistula (see box, p. 11) confirm that most reported cases of obstetric fistula occur among rural, low-status women. The prevalence of untreated obstetric fistula appears closely associated with lack of skilled assistance during delivery and lack of access to emergency obstetric care, as well as the shortage of capacity for fistula repair (57, 63).

Early childbearing increases risk.

Although obstructed labor and obstetric fistulas can occur at any age during the childbearing years, adolescent women are at particular risk, especially where early marriage is common. In parts of sub-Saharan Africa, for example, many women become pregnant soon after menarche occurs, before a woman’s pelvis is fully developed for childbearing. In Nigeria more than one-quarter of 241 fistula patients studied had become pregnant before age 15, while more than one-half had become pregnant before age 18 (2). In many developing countries many adolescent women are undernourished, stunted, and underweight—factors that compound the risks of early pregnancy (43, 63).

Fistula caused by sexual violence, too.

While most fistula cases stem from obstetric causes, others result from direct trauma caused by rape or other sexual abuse (38, 46, 48, 52, 74). At the Addis Ababa Fistula Hospital, for example, 91 of 7,200 cases over a six-year period, or about 1.2%, were caused by rape or other sexual abuse (38).

Profile: Living with Fistula

Aberesh, Age 22, Ethiopia

At the age of 18 Aberesh was married to an older man in a remote rural area. She became pregnant immediately. The pregnancy was difficult. Labor was obstructed, and Aberesh was unable to deliver. On the third day her relatives decided to get help. They sold a goat and paid men to carry Aberesh on a stretcher for six hours to the nearest hospital. When she arrived, it was too late to save the baby; her son was stillborn.

Aberesh was so weak and exhausted from the ordeal that she could not get out of bed. It took another four weeks before she could walk by herself again. During this time, she began to leak urine from a fistula. Nothing would stop the flow.

Aberesh was fortunate, however. A doctor in the hospital told her relatives about the Addis Ababa Fistula Hospital. Once again, her family rallied to support her and raised money for bus fare to the capital city. At the fistula hospital her repair surgery was uncomplicated, and she recovered completely. While she was recovering, Aberesh learned how to knit and to read by studying the alphabet, and she received information about maternal care.

Adapted from a personal story provided by the Addis Ababa Fistula Hospital (7)
Fistula caused by rape and other sexual abuse probably is far more common than this statistic suggests, because many victims do not seek treatment, lacking access and often fearing stigmatization (25). In situations of war and civil unrest, when rape is usually far more common, the proportion of fistulas caused by sexual abuse can increase substantially (25, 72).

**Harmful traditional practices raise risks of fistula.**

In some areas harmful traditional practices, such as female genital cutting (FGC), also add, either directly or indirectly, to the risk for fistula and other gynecological and obstetric complications (56, 71). FGC is usually carried out under unsanitary conditions, often removing large amounts of tissue and possibly causing the vaginal outlet and birth canal to become scarred and constricted (27).

One well-documented practice during obstructed labor, “gishiri cutting,” occurs primarily in northern Nigeria (23, 53, 69). A traditional birth attendant or barber uses a sharp instrument—a knife, razor blade, or piece of broken glass, for example—to make a series of random cuts in the vagina in an attempt to remove the obstruction and make way for the baby. This practice can directly injure the bladder or urethra and may explain as many as 15% of fistula cases in northern Nigeria (71).

### Taking a Comprehensive Approach

An effective approach to avoiding obstetric fistula must address the needs both for prevention and for treatment—especially where access to good obstetric services is limited. The problem of fistula is likely to endure until maternal health services reach the poorest and most vulnerable members of society (37). Before all women can receive adequate maternal care, a country’s health infrastructure often must improve substantially (50).

Three elements form the core of a comprehensive approach to addressing obstetric fistula (62, 63):

- **Delaying pregnancies.**

Encouraging later marriage and delayed childbearing can help reduce the incidence of adolescent pregnancies and their risks.

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**Case Study: Addis Ababa Fistula Hospital**

The Addis Ababa Fistula Hospital in Ethiopia—also known as the Hamlin Fistula Hospital, after its founders Drs. Catherine and Reginald Hamlin—began in 1959 as a ward within a local maternity hospital. During its first year of operation, the Hamlins treated 30 cases of fistula. In 1974 they established a separate facility dedicated to fistula surgery. Over 25,000 women have had fistulas repaired at the hospital (7, 45).

Currently, the hospital treats about 1,200 patients a year (19). Services are free, as are room and board, even for patients who require a long recovery period. Counseling helps women cope with their condition and rejoin their families and communities.

Women with especially severe cases who will continue to depend on the hospital for long-term health care and supplies are provided with housing and work on the hospital grounds. Women suffering with foot-drop (paralysis of muscles in the lower legs), which often requires long-term physical therapy, also may receive accommodation in special wards (7, 19). Forty former fistula patients are trained in nursing and surgical skills.

The hospital trains Ethiopian postgraduate doctors as well as doctors from other countries. Most spend two months in residence, and there are two interns at the hospital at all times (19).

Some members of the staff make regular trips to regional sites within Ethiopia to treat fistula. These traveling units consist of complete medical teams, including doctors, nurses, and all necessary equipment and supplies (19). The hospital teams also have performed fistula repair operations and trained medical staff in other countries, including Chad, Kenya, Sierra Leone, Tanzania, Togo, and Uganda, and as far away as Bangladesh and India (8).

Funds to support the hospital’s work come from a variety of donors. The total budget is about US$550,000 per year. The Ethiopian government provides some salaries and duty-free privileges. The hospital recently obtained additional funding, which enabled it to establish permanent outreach activities in five regions (45). Further information is available at www.fistulahospital.org.
• Improving access to obstetric care, including emergency care.

Improving access to obstetric care is the most important step that can be taken to prevent fistula, in particular by avoiding the three stages of delay: (1) delay in deciding to seek care; (2) delay in reaching a health care facility; and (3) delay in receiving sufficient care at the facility.

• Providing surgical repair and counseling for women with fistula.

Creating more specialized fistula repair centers, expanding the capacity of existing hospitals to provide repairs, establishing hostels for fistula patients, and training surgical and nursing staff are important components in successful fistula repair. Pre- and postoperative counseling and other reintegration services, such as literacy classes and job skills training, also provide valuable help for the fistula patient.

Delaying Pregnancy Reduces Fistula Risk

Reducing the number of adolescent pregnancies is one of the first steps to decreasing the frequency of pregnancy complications, including obstetric fistulas. As mentioned, most fistulas occur to adolescent girls, whose bodies may not be fully developed for childbearing (58).

Postponing age at first marriage, delaying age at first pregnancy, and spacing births further apart would help reduce complications of childbirth. Changes in traditions that encourage early marriage and child-bearing would allow more young women to reach full physical maturity before beginning childbearing (71).

Helping women plan pregnancies is important to reducing the incidence of fistula. Many women living in rural areas, where fistula is most common, have little access to family planning information and services (63).

Strengthening the capacity of health care systems could improve family planning services to the rural poor. Better access to a range of contraceptive methods would help more people choose and continue using a method of their choice.

Offering more schooling and family life education for women also can help reduce obstetric fistulas (71). In particular, expanding health education and family planning programs will provide more women with information and services to delay childbearing until they are ready. Schooling helps young women raise their economic and social status and promotes maternal health (21).

Obstetric Care Saves Lives

Improving access to good-quality obstetric care, including skilled attendance during labor and delivery, helps women avoid obstetric fistulas. A skilled birth attendant can recognize obstructed labor before it becomes prolonged and quickly refer cases to emergency obstetric care.
Avoid the three delays.

Avoiding the three stages of delay—in deciding to seek care, in reaching a health care facility, and in receiving care at the facility—can substantially reduce the risks of prolonged obstructed labor and thus of obstetric fistula (54, 63, 70):

1. Delay deciding to seek care.

The first delay can occur if a woman or her family delays seeking care from a skilled birth attendant, or if the attendant delays making a referral to an emergency obstetric facility. Cultural taboos, low status of women, lack of knowledge and skills, limited options for transport, and lack of resources often contribute to such delays (54). For example, in the Jos, Nigeria, study 29% of the patients delayed seeking care during obstructed labor because they did not have permission from the family (70).

To avoid delays, the family during the antenatal period should develop a plan for the birth and be prepared to deal with complications, including arrangements for transportation to a health care facility. A health care provider can help families prepare their plans (34). Families, midwives, and other rural health providers can learn to recognize the warning signs of maternal complications during delivery. Raising awareness of women's reproductive health among families and community members, including husbands, mothers-in-law, community elders, and religious leaders, can support efforts both to prevent and to treat fistula (71).

In particular, skilled birth attendants should monitor labor through the use of a partograph, or partogram—a simple chart for recording information about the progress of labor and the condition of a woman and her baby (see left). WHO recommends use of a partograph with every labor (76). This decision-making tool is a key to prevention and treatment of prolonged labor and its complications, but in many developing countries it is still not widely used (26, 76).

WHO recommends use of a partograph, a chart for recording information about the progress of labor, as a key to avoiding prolonged labor and its complications. The partograph can help providers assess the conditions of the mother and fetus and identify when immediate medical care is needed. This partograph indicates an obstructed labor. The provider promptly recognized that action was needed and performed a cesarean section (82).
(2) Delay reaching a health care facility.

It has been said that obstetric fistula results from a combination of obstructed labor and obstructed transportation (66, 71). Even after a decision to seek care has been made, a woman may not reach a facility in time to receive emergency care.

To help avoid delays in reaching care, health care systems can develop better referral processes. Better transportation and communication between rural areas and hospitals and other centers that offer emergency obstetric care are vital to a functioning referral process. Families and communities can improve obstetric emergency preparedness by setting aside funds for emergency transport and related needs (36).

(3) Delay receiving attention at the facility.

The third delay can occur at the treatment facility itself. Many hospitals and clinics do not have enough skilled personnel to offer prompt surgical treatment for emergency obstetric cases. Emergency care may be delayed because supplies are lacking, diagnoses are late or wrong, or actions are incorrect. To help avoid delays at the facility, doctors, nurses, and other medical personnel need better training, equipment, and supplies. Policies should promote prompt emergency obstetric care for all who need it (62).

Surgical Repair and Counseling Restore Health

Health care systems in developing countries must improve their ability to meet the need for treating obstetric fistulas. The Addis Ababa Fistula Hospital, one of the best equipped facilities in Africa, for example, is able to repair less than 15% of the nearly 9,000 estimated new cases in Ethiopia each year (19). More fistula hospitals and more trained medical staff are needed.

Training more doctors in fistula surgery and encouraging them to maintain their skills should be a high priority, according to the United Nations Population Fund (UNFPA) (42, 62). Team-based training that includes not only surgeons but also nursing and counseling staff can be particularly effective, because postoperative care is important to a patient’s recovery (see p. 10).

One expert recommendation is that training for surgeons last between one and two months, during which surgeons observe or assist in 50 repairs and perform a minimum of 10 repairs (42). After training, surgeons should maintain their skills by performing fistula operations at least once a week.

The costs of providing fistula treatment (US$200–$500) are far beyond the means of almost all who need it. To offer widespread access to treatment, developing countries need to subsidize fistula surgery and care, including affordable or subsidized transportation to enable women to reach treatment facilities (62).
Counseling and other social services can help.

Successful reconstructive surgery is only the first step to recovery. After surgery many women need help to reintegrate into their families and communities, particularly if they have been living with fistula for a long time (5, 10). Social and other support services can help women develop the skills and confidence needed to improve well-being as they recover their health (63). Compassionate counseling and support from former fistula patients is especially helpful (23).

In Uganda the Nsambya Mission Hospital counsels not only fistula patients themselves but also their husbands, to stress the importance of three to four months of sexual abstinence following treatment to allow for full recovery (74). Most hospitals that perform fistula repair, however—other than those that specialize in the procedure—do not offer counseling (5).

Obstetric fistula remains “one of the most neglected issues in international reproductive health” (75). To end the neglect requires commitment and action from policy-makers, governments, and the international health community. The more that opinion leaders recognize the scope of obstetric fistula and understand the severity of its medical and social consequences, the more likely that a consensus will develop to take action (63).

Profile: Living with Fistula

Neema, Age 17, Tanzania

When she was 15, Neema was raped repeatedly for three days by a man who had tricked her into going home with him. In Neema’s culture she could never go home to her family again. Her family arranged for the man to take Neema as his wife, in exchange for six cows. He took her to Dar es Salaam, where they lived by selling vegetables.

When Neema became pregnant, she sought care at a local maternity clinic. The staff reported no problems with the fetus but advised her to deliver at a hospital. When her time to deliver approached, however, her husband refused to buy her the supplies and food needed for a hospital delivery.

When she was nearly ready to give birth, she moved into her mother-in-law’s house. After a day of painful labor and no end in sight, her husband’s family provided bus fare and accompanied her to the hospital. Next morning, still in labor, she was told to go to another hospital, where she was given a cesarean section. After the operation, a nurse told her that the baby had died.

Soon after the operation, Neema discovered that she was leaking urine. The doctors told her the problem would correct itself. She spent the next two months in the hospital, visited only twice by family members and dependent on other people's relatives for food and water. When Neema returned home, still suffering from fistula, her husband said he no longer needed her because he had a new wife. But he let her stay, as she had nowhere else to go.

Neema’s brother gave her the money to go for a fistula repair, but her husband stole it and refused to take her to the hospital. Later, Neema’s brother took her. The repair was partially successful. She had to urinate through a catheter, but at least urine was no longer leaking down her legs.

When Neema returned home, her husband refused to give her food. When she borrowed money to buy vegetables to sell in the market, he stole them and threw her out of the house. Neema began working and finally found a job growing vegetables, investing half of her earnings into a woman’s revolving credit fund. With help from a local organization she established a small business selling vegetables. She is alone, but she can support herself and is working to rebuild her life.

Adapted from Faces of Dignity,
Seven Stories of Girls & Women with Fistula,
Women’s Dignity Project, Tanzania, 2003 (18)
www.womensdignity.org

Neema, a fistula patient from Tanzania.
Case Study: International Campaign Strives To End Fistula

The International Campaign to End Fistula began in 2003, with the goal of drawing attention to obstetric fistula both as a medical issue and in its social and economic dimensions. The campaign builds on earlier but little-recognized efforts by doctors and other medical practitioners in sub-Saharan Africa to address the serious problem of fistula.

The international campaign focuses on the regions thought to have the highest numbers of fistulas—sub-Saharan Africa, South Asia, and parts of the Near East and North Africa. Fistulas occur in other developing regions as well, but estimates are few. The long-term goal is to make fistula as rare a problem in developing areas as it is in developed countries today (49, 61).

The international campaign is sponsored by UNFPA in cooperation with WHO, the International Federation of Gynecology and Obstetrics (FIGO), the Averting Maternal Death and Disability Program of Columbia University’s Mailman School of Public Health, EngenderHealth, the Women’s Dignity Project (Tanzania), and other nongovernmental organizations (NGOs) (62). Also, UNFPA country offices are forming partnerships with government agencies, health professionals’ associations, and national and international NGOs to raise awareness of fistula and to help prevent and treat it.

Such partnerships inform health professionals, policy-makers, community leaders, and the public about fistula prevention and treatment, as well as the importance of good maternal health care. Further information about the campaign is available on the UNFPA website at www.unfpa.org/fistula. Information about obstetric fistula also can be found on the Worldwide Fistula Fund website at www.wfmic.org; the EngenderHealth website at www.engenderhealth.org; the Women’s Dignity Project website at www.womensdignity.org; and the African Medical & Research Foundation (AMREF) website at www.amref.org.

Assessing country needs. To help identify the incidence of fistula in various countries and the capacity of existing health facilities to treat it, UNFPA and EngenderHealth conducted initial needs assessments in nine sub-Saharan countries—Benin, Chad, Malawi, Mali, Mozambique, Niger, Nigeria, Uganda, and Zambia (63). In Tanzania the Women’s Dignity Project conducted a similar assessment, and other assessments have been conducted in Bangladesh, Djibouti, Eritrea, Kenya, Ghana, and Rwanda (13, 14, 32, 68, 75). As of mid-2004 similar reviews are underway in Burkina Faso, Mauritania, Senegal, Sierra Leone, Sudan, Togo, and Yemen (73).

Most assessments are based primarily on interviews with fistula care providers and patients in hospitals and treatment centers, as well as government health officials and policy-makers. While the assessments are not nationally representative surveys, nor are they comparable, they can help policy-makers and program managers understand and deal with the problems in each country.

Some sub-Saharan countries that have completed needs assessments are starting to carry out national strategies for fistula prevention and treatment (59). Also, in South Asia UNFPA organized the first regional conference on fistula, held in Bangladesh in December 2003 and attended by more than 50 participants from Bangladesh, India, Nepal, and Pakistan. Plans are for Bangladesh to establish South Asia’s first national fistula center, which eventually will be able to offer information and training about fistula treatment throughout the region (60).