Obstetric Fistulas

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Patuma Banda, like most Malawian women, was a farmer. Her husband made a small income with his bicycle taxi. In order to feed her family, she grew corn and cassava on the small plot of land left by her father. The Bandas had two children: a five-year-old daughter, a one-year-old son, and another child on the way.

Contrary to what most of her friends had said, the third pregnancy was no easier than her first. Her growing belly, bigger than either of her previous pregnancies, and made her daily chores more difficult. Her back ached from clearing the fields to prepare for the rainy season. Her wrists ached from preparing meals by wood fire every day. With two children and her farming responsibilities, it was difficult for her to get medical care. At the beginning of her pregnancy, she saw a nurse at the closest health center, which was 3 hours away by bicycle. She was supposed to go back, but given the distance of the health center and the need to prepare the fields, she simply could not attend another visit. Besides, this was her third pregnancy – she knew the warning signs of something gone wrong.

In early December, Patuma woke up with painful contractions. She knew it was time for the baby. She called her mother, who was a traditional birth attendant. Patuma's water broke, and she felt the baby descend. There was a growing sensation of rectal pressure. She was eight centimeters dilated. The baby was surely on its way. Four hours, eight hours, and twelve hours went by. Her mother performed a vaginal exam – Patuma was still eight centimeters dilated. Something was wrong.

Patuma's husband put her onto his bicycle, and pedaled as fast as he could to the closest health center. Upon arrival, the nurse evaluated Patuma, and quickly referred her to the regional hospital. The nurse explained to Patuma that she had cephalo-pelvic disproportion. This means that the baby does not fit into Patuma's pelvis, which is why her cervix stopped opening. When Patuma arrived at the regional hospital, she had been in labor for over twenty-four hours. She was whisked into the operating room for an emergency Cesarean section.

The baby did not survive.

For the next few days, Patuma recovered from her Cesarean section at the hospital. Finally, on the fourth day, she was released to her home, to her fields, to her children and to her family. Something was different. She began to notice wetness on her underwear. At first the symptoms were not noticeable, but within a few days, it was clear that the leaking was from her vagina. It smelled like urine. She knew it was not normal. She knew that she needed to go see the nurse again. Yet, she needed to stay home to tend to the fields. If she did not do so, her family would not have food for the year.

For twenty years, she put up with the continuous trickling and the foul odor. She was willing to sacrifice her own body to make sure that her children were fed. Finally, after years of hard work, Patuma took the same journey she took twenty years before to the closest regional hospital, where the doctor told her that she had a vesico-vaginal fistula.

What is a fistula?

A fistula is an abnormal connection between two places in the body. In low-resource settings, the most common types of fistulas are obstetric fistulas. According to the United Nations Population Fund, there are more than 2 million women living with fistulas worldwide. The majority of these patients live in sub-Saharan Africa and Asia. There continues to be 50,000 to 100,000 new cases annually.
Obstetric fistulas usually result from obstructed labor. When there is obstructed labor, the baby's head presses against the bladder or the rectum. This causes tissue necrosis, or tissue death. The dead tissue sloughs off and a fistula appears. This abnormal connection results in urine or feces leaking uncontrollably through the vagina. The two types of obstetric fistulas are:

- vesico-vaginal fistula, an abnormal connection between the bladder and vagina
- recto-vaginal fistula, an abnormal connection between the rectum and vagina.

What can happen when a woman develops an obstetric fistula?

Obstetric fistulas can result in devastating physical, psychological, and social complications. Women with fistulas are at risk of developing bladder stones, bladder infections or kidney infections. Their skin becomes irritated from the constant leaking of urine and stool. These women are often isolated by their community, even their husbands. They may find it difficult to get a job. With the medical complications, and social isolations, many of these women suffer from depression as well.

Foundation for Female Health Awareness

Why do women develop obstetric fistula in low-resource settings?

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There is a correlation between access to maternity services and the rate of obstetric fistula. This means that areas with the least access to maternity services have the highest rates of obstetric fistula.
Without trained healthcare providers, obstructed labor may not be quickly diagnosed. Without access to health facilities with an operating room, a Cesarean section may not be performed in time to relieve the labor obstruction. As a result, when there is a high patient-to-physician ratio, and few healthcare centers, there is a high rate of obstetric fistula.

How can obstetric fistulas be prevented?

Fistulas are preventable.
In order to prevent fistulas, it is important to identify pregnant women who are at risk of developing this condition. Typically, the risk factors for developing obstetric fistulas include:

- poverty
- small stature
- narrow pelvis
- young age
- a large baby or a baby with abnormal positioning
- living in areas with poor access to healthcare

Many fistula patients are young. It is estimated that 1 in 3 girls in low- and middle-income countries (excluding China), will marry before the age of 18 (UNFPA 2012). These young women are at very high risk of developing a fistula as their pelvises are not fully developed for childbirth. However, many of them became pregnant because they are unaware about family planning. It is important to educate them on family planning options as it allows these young women to delay childbearing.

Many fistula patients live in rural areas. These women are at high risk of delayed obstetric care, simply because of how long it takes for them to reach a health center. Each minute delayed puts the pregnant women at higher risk of an obstetric complication, death of the baby and an obstetric fistula. Patients who are from rural areas should be encouraged to attend a maternity waiting home. A waiting home is typically a non-medical building next to a health center. It is a place where pregnant women can stay while they await labor, so that they can avoid the delays of care from living in a rural area.

Many fistula patients had labor dystocia, or obstructed labors.
Obstructed labor can be diagnosed by a trained nurse-midwife or physician. It is important that women have access to quality maternity services so that if their labor is abnormal, it can be promptly diagnosed and referred. In order to achieve this, there is a need for more training and support for healthcare professionals and community health workers.

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In summary, fistulas can be prevented with

- Timely access to high-quality obstetric care
- Presence of trained obstetric provider at time of delivery (physician, clinician or nurse-midwife)
- Access to family planning options

How are obstetric fistulas repaired?

Fistulas can be closed with a relatively short vaginal procedure, under regional anesthesia, in often less than 90 minutes. Patients are then closely observed in inpatient units for 10-21 days with a bladder catheter until the fistula closes. The success rate of a complete closure of a fistula is 80-95% at the first surgical repair.

What are some barriers to obstetric fistula repair surgery?

As of now, there are not enough fistula surgeons in the world. Most fistula surgeons receive specialized training to perform fistula repair. There is a need to invest in healthcare professionals who are skilled in repairing fistulas.
Surgeries should be performed at dedicated hospital units where women can be cared for after the surgery. The patients need nurses who are aware of the unique needs of fistula repair recovery. Hospitals also need staff who are attentive to the mental fragility of these women. Moreover, some patients may not be aware that fistulas are repairable. Education and community activism is needed to encourage women with fistula to seek care. For example, in Malawi's Freedom from Fistula Foundation Hospital, former patients undergo training on community awareness of obstetric fistulas and become patient ambassadors. They educate women in their community and escort new patients to the fistula hospital for treatment.

Take Home Points

- Patuma's story is the reality of many women in low-resource settings.
- Typical risk factors for fistula include poverty, small stature, young age, and lack of access to health care
- The local government and international community must continue to support access to maternity care and train medical professionals.
- It is important to not only to save a woman's life during childbirth, but to ensure that she can live with dignity.

Reference

- United Nations Population Fund (UNFPA), *Marrying Too Young: End Child Marriage* (New York, 2012).

About the Author

Olivia H. Chang, M.D., M.P.H. graduated from Tulane University School of Medicine and completed her OB/GYN residency at Beth Israel Deaconess Medical Center in Boston, MA. She worked at the Freedom from Fistula Foundation hospital in Lilongwe, Malawi. She is now a fellow in Urogynecology and Reconstructive Pelvic Surgery at the Cleveland Clinic in Cleveland, OH.

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