

CHAPTER SIX

Maternal Mortality—One Woman a Minute

American department stores as well. If you're an American university student, there's something else that Harper did that may be more relevant: She is setting up a study abroad program for Americans who want to spend a month at ULPGL, a university in Goma. The Americans will take courses with Congolese students, spend time in the classroom and the field, and write research papers together in small groups. Harper also tries to encourage donors in the United States. The hospital has an annual budget of \$1.4 million, more than one third of which is contributed by individual Americans (more information is at www.healafrica.org). Only 2 percent of those donations go to overhead and administrative expenses; the rest is plowed into the hospital. The hospital even accepts gifts of airline miles, to fly staff back and forth, and it eagerly welcomes volunteers and visitors.

"I'd rather have someone come here and see what's going on than write a check for one or two thousand dollars, because that visit is going to change their life," Harper says. "I have the privilege of hearing from church members and other visitors about how their time at HEAL Africa has turned their worldview upside down and changed their lifestyle at home."

As Harper jabs away in Swahili with her African friends, it's clear that she is getting as well as giving. She agrees:

There are times when all I want is a fast Internet connection, a latte, and a highway to drive on. Yet the greetings I receive in the morning from my coworkers are enough to keep me here. I have the blessing of carrying a purse sewn by a woman waiting for fistula surgery at the hospital and watching how these new skills have changed her whole composure and confidence, of celebrating with my Congolese friend who was accepted for a job right after he graduated from university, of seeing children in school who previously never had the chance, of rejoicing with a family over their improved harvest, of dancing with my coworkers over a grant awarded for a program. The main factor that separates me from my friends here is the opportunities I was given as a first-world citizen, and I believe it is my responsibility to work so that these opportunities are available to all.

Preparation for death is that most Reasonable and Seasonable thing, to which you must now apply yourself.

— COTTON MATHER, IN A SERMON,
ADVISING PREGNANT WOMEN

No one reading this book, we hope, can fathom the sadistic cruelty of those soldiers who used a pointed stick to tear apart Dina's insides. But there is also a milder, more diffuse cruelty of indifference, and it is global indifference that leaves some 3 million women and girls incontinent just like Dina. Fistulas like hers are common in the developing world but, outside of Congo, are overwhelmingly caused not by rape but by obstructed labor and lack of medical care during childbirth. Most of the time, such women don't get any surgical help to repair their fistulas, because maternal health and childbirth injuries are rarely a priority.

For every Dina, there are hundreds like Mahabouba Muhammad, a tall woman who grew up in western Ethiopia. Mahabouba has light chocolate skin and frizzy hair that she ties back; today, she tells her story easily, for the most part, occasionally punctuated with self-mocking laughter, but there are moments when the old pain shines through in her eyes. Mahabouba was raised in a village near the town of Jimma, and her parents divorced when she was a child. As a result, she was handed over to her father's sister, who didn't educate her and generally treated her as a servant. So Mahabouba and her sister ran off together to town and worked as maids in exchange for room and board.

"Then a neighbor told me he could find better work for me," Mahabouba recalled. "He sold me for eighty birr [ten dollars]. He got the money, I didn't. I thought I was going to work for the man who bought me, in his house. But then he raped me and beat me. He said

he had bought me for eighty birr and wouldn't let me go. I was about thirteen."

The man, Jiad, was about sixty years old and had purchased Mahabouba to be his second wife. In rural Ethiopia, girls are still sometimes sold to do manual labor or to be second or third wives, although it is becoming less common. Mahabouba hoped for consolation from the first wife, but instead the woman whipped Mahabouba with savage relish. "She used to beat me when he wasn't around, so I think she was jealous." Mahabouba remembered angrily, and she paused for a moment as the old bitterness caught up with her.

The couple wouldn't let Mahabouba out of the house for fear she might run away. Indeed, she tried several times, but each time she was caught and thrashed with sticks and fists until she was black, blue, and bloody. Soon, Mahabouba was pregnant, and as she approached her due date Jiad relaxed his guard over her. When she was seven months pregnant, she finally succeeded in running away.

"I thought if I stayed, I might be beaten to death along with my child," Mahabouba said. "I fled to the town, but the people there said they would take me right back to Jiad. So then I ran away again, back to my native village. But my immediate family was no longer there, and nobody else wanted to help me because I was pregnant and somebody's wife. So I went to drown myself in the river, but an uncle found me and took me back. He told me to stay in a little hut by his house."

Mahabouba couldn't afford a midwife, so she tried to have the baby by herself. Unfortunately, her pelvis hadn't yet grown large enough to accommodate the baby's head, a common occurrence with young teenagers. She ended up in obstructed labor, with the baby stuck inside her birth passage. After seven days, Mahabouba fell unconscious, and at that point someone summoned a birth attendant. By then the baby had been wedged there for so long that the tissues between the baby's head and Mahabouba's pelvis had lost circulation and rotted away.

When Mahabouba recovered consciousness, she found that the baby was dead and that she had no control over her bladder or bowels. She also couldn't walk or even stand, a consequence of nerve damage that is a frequent by-product of fistula.

"People said it was a curse," Mahabouba recalled. "They said, 'If you're cursed, you shouldn't stay here. You should leave.'" Mahabouba's uncle wanted to help the girl, but his wife feared that helping someone cursed by God would be sacrilegious. She urged her husband

to take Mahabouba outside the village and leave the girl to be eaten by wild animals. He was torn. He gave Mahabouba food and water, but he also allowed the villagers to move her to a hut at the edge of the village.

"Then they took the door off," she added matter-of-factly, "so that the hyenas would get me." Sure enough, after darkness fell the hyenas came. Mahabouba couldn't move her legs, but she held a stick in her hand and waved it frantically at the hyenas, shouting at them. All night long, the hyenas circled her; all night long, Mahabouba fended them off. She was fourteen years old.

When morning light came, Mahabouba realized that her only hope was to get out of the village to find help, and she was galvanized by a fierce determination to live. She had heard of a Western missionary in a nearby village, so she began to crawl in that direction, pulling her body with her arms. She was half dead when she arrived a day later at the doorstep of the missionary. Agghast, he rushed her inside, nursed her, and saved her life. On his next trip to Addis Ababa, he took Mahabouba with him to a compound of one-story white buildings on the edge of the city: the Addis Ababa Fistula Hospital.

There Mahabouba found scores of other girls and women also suffering from fistulas. On arrival, she was examined, bathed, given new clothes, and shown how to wash herself. Fistula patients often suffer wounds on their legs, from the acid in their urine eating away at the skin, but frequent washings can eliminate these sores. The girls in the hospital walk around in flip-flops, chattering with one another and steadily dripping urine—hospital staff joke that it is "puddle city"—but the floors are mopped several times an hour, and the girls are too busy socializing with one another to be embarrassed.

The hospital is run by Catherine Hamlin, a gynecologist who is truly a saint. She has devoted most of her life to poor women in Ethiopia, undergoing danger and hardship while transforming the lives of countless young women like Mahabouba. Tall, lean, and white-haired, Catherine is athletic, welcoming, and wonderfully gentle—except when people suggest she is a saint.

"I love this work," she said in exasperation the first time we met. "I'm not here because I'm a saint or doing anything noble. I enjoy my life tremendously...I'm here because I feel God wants me to be here. I feel I'm doing some good and helping these women. It's very satisfying work." Catherine and her late husband, Reg Hamlin, moved from

their native Australia to Ethiopia in 1959 to work as ob-gyns. In Australia, they had never seen a single case of fistula; in Ethiopia, they encountered fistulas constantly. "These are the women most to be pitied in the world," Catherine says firmly. "They're alone in the world, ashamed of their injuries. For lepers, or AIDS victims, there are organizations that help. But nobody knows about these women or helps them."

Fistulas used to be common in the West, and there was once a fistula hospital in Manhattan, where the Waldorf-Astoria Hotel is today. But then improved medical care all but eliminated the problem; now almost no woman in the rich world spends four days in obstructed labor—long before then, doctors give her a C-section.

In 1975, Catherine and Reg founded the Addis Ababa Fistula Hospital, and it remains a lovely hillside compound of white buildings and verdant gardens. Catherine presides over the hospital, living in a cozy house in the center of the compound, and she plans to be buried in Addis Ababa alongside her husband. Catherine has presided over more than twenty-five thousand fistula surgeries and has trained countless doctors in the specialty. She is an exceptionally skilled surgeon, but because some patients don't have enough tissue left to repair they are given colostomies, so that feces leave the body through a hole made in the abdomen and are stored in a pouch that must be regularly disposed of. Patients with colostomies require ongoing care and live in a village near the hospital.

Mahabouba is one of those who couldn't be fully repaired. Physical therapy got her walking again, but she had to settle for a colostomy. Still, when she had recovered her mobility, Catherine put her to work in the hospital. At first Mahabouba simply changed linens or helped patients wash, but gradually the doctors realized that she was smart and eager to do more, and they gave her more responsibilities. She learned to read and write, and she blossomed. She found a purpose in life. Today, if you were to visit the hospital, you might well see Mahabouba walking around—in her nurse's uniform. She has been promoted to the position of senior nurse's aide.

It costs about \$300 to repair a fistula, and about 90 percent of them are repairable. But the vast majority of women who suffer fistulas are impoverished peasants who are never taken to a doctor and never receive medical assistance. L. Lewis Wall, a professor of obstetrics at the Washington University School of Medicine who has campaigned



*Mahabouba on
the grounds
of the Addis Ababa
Fistula Hospital in
Ethiopia (Nicholas
D. Kristof)*

tirelessly for a fistula hospital in West Africa, estimates that 30,000 to 130,000 new cases of fistula develop each year in Africa alone.*

Instead of receiving treatment, these young women—often just girls of fifteen or sixteen—typically find their lives effectively over. They are divorced from their husbands and, because they emit a terrible odor from their wastes, are often forced to live in a hut by themselves on the edge of the village, as Mahabouba was. Eventually, they starve to death or die of an infection that progresses along the birth canal.

"The fistula patient is the modern-day leper," notes Ruth Kennedy, a British nurse-midwife who worked with Catherine at the fistula hospital. "She's helpless, she's voiceless . . . The reason these women are pariahs is because they are women. If this happened to men, we would have foundations and supplies coming in from all over the world."

Oprah Winfrey interviewed Catherine and was so taken with her that she later visited the fistula hospital and donated a new wing for it. Yet maternal health generally gets minimal attention because those who die or suffer injuries overwhelmingly start with three strikes against them: They are female, they are poor, and they are rural.

*It was Professor Wall's campaign that, in the 1990s, first introduced us to obstetric fistulas. Dr. Wall heads the Worldwide Fistula Fund (www.worldwidefistulafund.org) and is finally seeing his longtime dream of a fistula hospital in West Africa being realized. With support from Merrill Lynch and private American donors, the hospital is being built in Niger, although funding is still tight. Professor Wall has truly been a hero in the struggle to help these neglected women.

"Women are marginalized in the developing world," says Catherine. "They are an expendable commodity."

Granted, health care is deficient in poor countries even for men. Eleven percent of the world's inhabitants live in sub-Saharan Africa, and they suffer 24 percent of the world's disease burden—which is addressed with less than 1 percent of the world's health care spending. But maternal care is particularly neglected, never receiving adequate funding. For the 2009 fiscal year, President George W. Bush actually proposed an 18 percent cut in USAID spending for maternal and child care to just \$370 million, or about \$1.20 per American per year.

Conservatives battle forced abortions in China, and liberals fight passionately for abortion rights in foreign lands. But meeting the challenge of women dying in childbirth has never had much of a constituency. We in the news media can count inattention to the issue as another of our failures. The equivalent of five jumbo jets' worth of women die in labor each day, but the issue is almost never covered. The remedy? America should lead a global campaign to save mothers in childbirth. Right now the amount we Americans spend on maternal health is equivalent to less than one twentieth of 1 percent of the amount we spend on our military.

The World Health Organization estimates that 536,000 women perished in pregnancy or childbirth in 2005, a toll that has barely budged in thirty years. Child mortality has plunged, longevity has increased, but childbirth remains almost as deadly as ever, with one maternal death every minute.

Some 99 percent of those deaths occur in poor countries. The most common measure is the maternal mortality ratio (MMR). This refers to the number of maternal deaths for every 100,000 live births, although the data collection is usually so poor that the figures are only rough estimates. In Ireland, the safest place in the world to give birth, the MMR is just 1 per 100,000 live births. In the United States, where many more women fall through the cracks, the MMR is 11. In contrast, the average MMR in South Asia (including India and Pakistan) is 490. In sub-Saharan Africa, it is 900, and Sierra Leone has the highest MMR in the world, at 2,100.

While MMR measures the risk during a single pregnancy, women in poor countries undergo many pregnancies. So statisticians also calculate the lifetime risk of dying in childbirth. The highest lifetime risk in the world is in the West African country of Niger, where a girl or

woman stands a 1-in-7 chance of dying in childbirth. Overall in sub-Saharan Africa, the lifetime risk of dying in childbirth is 1 in 22. India disgraces itself, because for all its shiny new high-rises, an Indian woman still has a 1-in-70 chance of dying in childbirth at some point in her life. In contrast, in the United States, the lifetime risk is 1 in 4,800; in Italy, it's 1 in 26,600; and in Ireland a woman has only 1 chance in 47,600 of dying in childbirth.

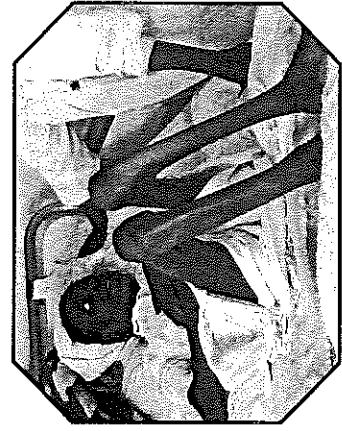
So lifetime risk of maternal death is one thousand times higher in a poor country than in the West. That should be an international scandal.

The gap, moreover, is getting wider. WHO found that between 1990 and 2005, developed and middle-income countries reduced maternal mortality significantly, but Africa reduced it hardly at all. Indeed, because of growing populations, the number of African women who died in childbirth rose from 205,000 in 1990 to 261,000 in 2005.

Maternal morbidity (injuries in childbirth) occurs even more often than maternal mortality. For every woman who dies in childbirth, at least ten suffer significant injuries such as fistulas or serious tearing. Unsafe abortions cause the deaths of seventy thousand women annually and cause serious injuries to another 5 million. The economic cost of caring for those 5 million women is estimated to be \$750 million annually. And there is evidence that when a woman dies in childbirth, her surviving children are much more likely to die young as well, because they no longer have a mother caring for them.

Frankly, we hesitate to pile on the data, since even when numbers are persuasive, they are not galvanizing. A growing collection of psychological studies show that statistics have a dulling effect, while it is individual stories that move people to act. In one experiment, research subjects were divided into several groups, and each person was asked to donate \$5 to alleviate hunger abroad. One group was told the money would go to Rokia, a seven-year-old girl in Mali. Another group was told that the money would go to address malnutrition among 21 million Africans. The third group was told that the donations would go to Rokia, as in the first group, but this time her own hunger was presented as part of a background tapestry of global hunger, with some statistics thrown in. People were much more willing to donate to Rokia than to 21 million hungry people, and even a mention of the larger problem made people less inclined to help her.

In another experiment, people were asked to donate to a \$300,000 fund to fight cancer. One group was told that the money would be used



to save the life of one child, while another group was told it would save the lives of eight children. People contributed almost twice as much to save one child as to save eight. Social psychologists argue that all this reflects the way our consciences and ethical systems are based on individual stories and are distinct from the parts of our brains concerned with logic and rationality. Indeed, when subjects in experiments are first asked to solve math problems, thus putting in play the parts of the brain that govern logic, afterward they are less generous to the needy.

So we would prefer to move beyond statistics and focus on an individual: Simeesh Segaye. If more people could meet this warm twenty-one-year-old peasant with a soft voice, we're sure "maternal health"

would suddenly become a priority for them. Simeesh was lying on her back in a bed at the end of the main ward in the Addis Ababa Fistula Hospital when we first saw her. Ruth Kennedy, the hospital's nurse-midwife, translated as Simeesh told us how she had enjoyed an eighth-grade education—very impressive for rural Ethiopia. She had married at nineteen and was thrilled when she became pregnant. Her girlfriends all congratulated her, and they all prayed that she would be blessed with a son.

When she went into labor, no baby emerged. After two full days of obstructed labor, Simeesh was barely conscious. Her neighbors carried her for hours to the nearest road and put her on a bus when one finally arrived. The bus took another two days to get to the nearest hospital, and by then the baby was dead.

When Simeesh began to recover back in the village, she found that she was crippled and leaking urine and feces. She was shattered and humiliated by the constant smell of her wastes. Her parents and husband saved \$10 to pay a public bus to take her back to the hospital in the hope that her fistula could be repaired. When the bus came along, the other passengers took one whiff of her and complained vociferously: *We shouldn't have to ride next to somebody who stinks like that! We paid for this ride—you can't make us put up with that stink! Put her off!*

The bus driver returned Simeesh's \$10 and ordered her off the bus. Any prospect of a repair vanished. Simeesh's husband then abandoned her. Her parents stood by her, but they built a separate hut for her because even they couldn't abide her odor. Every day, they brought her food and water and tried to reassure her. Simeesh stayed in that hut—alone, ashamed, helpless. By one estimate, 90 percent of fistula patients

Simeesh Segaye, her legs stuck in this bent position, in the Addis Ababa Fistula Hospital (Nicholas D. Kristof)

have contemplated suicide, and Simeesh, too, decided she wanted to die. Depression swept over her, turning her numb and almost catatonic. People suffering from depression sometimes revert to the fetal position, and that's what Simeesh did—except that she almost never moved.

"I just curled up," she says, "for two years."

Once or twice a year, her parents took her out of the hut, but otherwise she just lay on the ground, hidden away, hoping that death would be her escape. She barely ate, because the more she ate or drank, the more wastes trickled down her legs. And so she began to starve to death.

Simeesh's parents loved their daughter, but they didn't know if doctors could help, and they had no money. She didn't ask for anything, barely spoke, just lay in her hut wishing she were dead. After two excruciating years of watching their daughter suffer, her parents sold their livestock—all of their assets—to try to help Simeesh. It was clear that no bus would transport her, so they paid \$250 for a private car to take them to a hospital in the city of Yirga Ale, a day's drive away. The doctors there found Simeesh's case too complex and referred her to the fistula hospital. The doctors there reassured Simeesh, telling her that they could solve her problems, and she began to emerge from her depression. At first she spoke only in furtive whispers, but slowly she began to reengage with people around her.

Before the doctors could try to repair the fistula, they had to address her other problems. After two years of constantly lying curled up in a fetal position, Simeesh's legs had withered and become permanently

bent: She couldn't move them, let alone straighten them, and she was too emaciated and weak to operate on. Catherine and the other doctors tried to strengthen Simeesh by giving her good food, and nurses were helping her with physical therapy so that she could straighten her legs. Then doctors found that seven centimeters of her pubic joint had disappeared, apparently because of infection. The doctors performed a temporary colostomy, and after long and painful rounds of physical therapy—which Simeesh embraced as her depression faded—she was able to stand up again.

Then she developed stress fractures in her feet. So the doctors prescribed intensive physiotherapy, and several former patients massaged her and worked with her, always careful to stop when the pain grew too agonizing. Finally, after months and months of grueling work, Simeesh was able to stretch her legs and stand. Eventually she could even walk unassisted. Just as important, she had recovered her dignity and enthusiasm for life. Once she was strong again, the surgeons repaired her fistula, and she made a full recovery.

Women like Simeesh have been abandoned by almost everyone in the world. But for decades, one American doctor has led the fight to call attention to maternal health. Even as he lost ground to a lethal degenerative disease, he fought daily to lessen the toll of childbirth.

A Doctor Who Treats Countries, Not Patients

Allan Rosenfield grew up in the 1930s and 1940s in Brookline, Massachusetts, the son of a successful obstetrician in Boston. He went to medical school at Columbia and did a stint for the air force in South Korea. While in Korea, he volunteered on weekends at a local hospital—and was shaken as he walked up and down the wards. Rural Korean women were suffering horrendous childbirth injuries unimaginable in the United States. Allan returned to America, but he was haunted by the memories of those stoic peasant women.

The Korean experience left Allan with a deep interest in the medical needs of poor countries. When he later heard about a position at a medical school in Lagos, Nigeria, he signed up. In 1966, he took his new bride, Clare, to Lagos, where they started a new life together. Allan was bowled over by what he saw in Nigeria, particularly by the need for family planning and for maternal care. He also was beset by doubts.

"I began to feel that the model of care we were giving wasn't appropriate for Nigeria," he recalled. That practical encounter with the realities of Africa was the beginning of a lifelong interest in public health, preventing disease rather than just treating patients as they turned up. In the West, we tend to think of disease and mortality as the province of doctors, but by far the greatest strides in global health have been made by public health specialists. Models of the public health approach include smallpox vaccination programs, oral rehydration therapy to save babies with diarrhea, and campaigns to encourage seat belts and air bags in vehicles. Any serious effort to reduce maternal mortality likewise requires a public health perspective—reducing unwanted pregnancies and providing prenatal care so that last-minute medical crises are less frequent.

Sometimes the most effective approaches aren't medical at all. For example, one out-of-the-box way to reduce pregnancies is to subsidize school uniforms for girls. That keeps them in school longer, which means that they delay marriage and pregnancy until they are better able to deliver babies. A South African study found that giving girls a \$6 uniform every eighteen months increased the chance that they would stay in school and consequently significantly reduced the num-



Allan Rosenfield
at Columbia
University's Mailman
School of Public
Health in New York
City (Tanya Braganti)

could do it.” The trajectory of his career was set: public health work to make it safe for women to have babies. In 1975, Allan moved to New York to head the Center for Population and Family Health at Columbia University. He developed a global network of allies in the field, and in 1985 published a landmark article along with Deborah Maine, a colleague, in *The Lancet*, the British journal that has been at the forefront of global health issues. It declared:

It is difficult to understand why maternal mortality receives so little serious attention from health professionals, policy makers, and politicians. The world’s obstetricians are particularly neglectful of their duty in this regard. Instead of drawing attention to the problem and lobbying for major programmes and changes in priorities, most obstetricians concentrate on subspecialties that put emphasis on high technology.

ber of pregnancies they experienced. Allan Rosenfield struggled to combine this public health perspective with practical medicine—and he became a social entrepreneur in the world of maternal health.

Allan had intended for his service in Nigeria to be an interlude, his own version of the Peace Corps. But surrounded by such overwhelming needs, he began to feel a calling. He signed up for a job with the Population Council in Thailand. The Rosenfields spent six years there, starting a family, learning the Thai language, and utterly falling in love with the country. Yet the beauty of Thai beaches were a world apart from the horrors of the maternity wards. Moreover, IUDs and the Pill were available only by prescription from a doctor, which meant that some of the most effective forms of contraception were unavailable to 99 percent of the population. So Allan worked with the ministry of health on a revolutionary scheme: allowing trained auxiliary midwives to prescribe the Pill. First, he developed a checklist of questions, so that a midwife could talk to a woman and either give her a prescription for the Pill or, if there were risk factors, refer her to a doctor. Soon the program was rolled out to three thousand sites around the country, and eventually the auxiliary midwives were authorized to insert IUDs as well. It’s difficult to appreciate today how unusual this approach was, for physicians closely guarded their prerogatives, and it was heresy to entrust mere midwives with medical responsibilities.

“Because it was so different an approach, I would have trouble getting it approved today,” Allan said. “But because I was on my own, I

The article led to a global advocacy movement on behalf of maternal health, and it coincided with Allan’s appointment as dean of Columbia’s Mailman School of Public Health. Then, in 1999, with a \$50 million grant from the Bill & Melinda Gates Foundation, he launched an organization called Averting Maternal Death and Disability (AMDD), which undertook a pioneering global effort to make childbirth safe.

Increasingly, Allan began approaching maternal death not just as a public health concern but also as a human rights issue. “The technical solutions to reduce maternal mortality are not enough,” Allan wrote in one essay. “As a basic human right, women should be able to have a child safely and with good quality of care. The human rights ‘system’—laws, policies, and conventions—must be used to hold states accountable for obligations undertaken pursuant to treaties.”

Allan was a trailblazer when he first headed abroad, but the field has caught up with him. “In my day, we didn’t even know what global health care was,” he recalled. “What I did was off the wall. But today a lot of kids want to get into it.” In medical schools today, global public health is a hot topic, and doctors like Paul Farmer of Harvard Medical School, who spends more time running hospitals in Haiti and Rwanda than in his office in Boston, are viewed by students as icons.

Allan’s own life took a tragic course in 2005. He was diagnosed with ALS and also myasthenia gravis, two diseases that affect motor nerves. He had always been athletic and outdoorsy, but now he found himself

increasingly frail. He lost weight, had trouble walking and breathing, and then was consigned to a wheelchair. He worried about being a burden to his family. Yet he went to work every day and even attended international conferences. At the International Women's Health Coalition banquet in January 2008, he could barely move but was a center of attention, lionized by admirers from all over the world. In October 2008, he died.

AMDD is now saving lives in fifty poor countries. We saw its impact when we stopped by a clinic in Zinder, in eastern Niger, the country with the highest lifetime risk of maternal mortality in the world. Niger has only ten ob-gyns in the entire country, and rural areas are lucky to have a physician of any kind in the vicinity. The Zinder clinic staff were startled and excited to see a couple of Americans, and they happily gave us a tour—even pointing out one heavily pregnant woman, Ramatou Issoufou, who was lying on a stretcher, gasping and suffering convulsions. Between gasps, she complained that she was losing her vision.

The sole doctor in the clinic was a Nigerian, Obende Kayode, placed there as part of a Nigerian foreign aid program (if Nigeria can send doctors abroad as foreign aid, so can America!). Dr. Kayode explained that Ramatou probably had eclampsia, a pregnancy complication that kills about fifty thousand women a year in the developing world. So she needed a cesarean section; once the baby was out, the convulsions would end as well.

Ramatou was a mother of six, thirty-seven years old, and her life was ebbing away in the little hospital waiting room. "We're just calling for her husband," Dr. Kayode explained. "When he provides the drugs and surgical materials, we can do the operation."

The Zinder clinic, it turned out, was part of a pilot program in Niger arranged by the United Nations Population Fund (UNFPA)* and AMDD to fight maternal mortality. As a result, all the materials needed for a C-section were kept in sealed plastic bags and available if the family paid \$42. That was a great improvement over the previous approach of having the families run all over town, spending far more

*The UN is so wretched at public relations that it can't even match its abbreviations with its organizations. This agency originally was called the UN Fund for Population Activities, and it remained UNFPA even after it changed its name to the UN Population Fund.

to buy bandages here, gauze there, scalpels somewhere else. But what if Ramatou's family didn't have \$42?

In that case, she would probably die. "If the family says they have no money, then you have a problem," Dr. Kayode acknowledged. "Sometimes you help with the expectation that you will be paid back. At the beginning, I helped a lot, but then afterward people didn't pay me back." He shrugged, and added: "It depends on the mood. If the staff feel they can't pay out again, then you just wait and watch. And sometimes she dies."

Still, the hospital staff didn't want Ramatou to die with us watching. The nurses wheeled her into the operating room and scrubbed her belly, and a nurse administered a spinal anesthetic. Ramatou lay on the gurney, breathing heavily and irregularly, otherwise motionless, apparently unconscious. Dr. Kayode came in, quickly sliced through Ramatou's abdomen, and held up a large organ that looked a bit like a basketball. That was her uterus. He carefully cut it open and pulled out a baby boy, whom he handed to a nurse. The baby was quiet, and it wasn't immediately clear if he was alive. Likewise, Ramatou was suspiciously comatose as Dr. Kayode stitched up her uterus, put it back in her abdomen, and then sewed up the outer cut on her stomach. But twenty minutes later, Ramatou was regaining consciousness, wan and exhausted but no longer suffering convulsions or labored breathing.

"I'm okay," she managed to say, and then the nurse brought her baby son to her—now squawking, wriggling, and very much alive. Ramatou's face lit up, and she reached out with her hands to hold her baby. It truly seemed a miracle, and it showed what is possible if we make maternal health a priority. One doctor and a few nurses in a poorly equipped operating theater in the middle of the desert of Niger had brought a woman back to life and saved her baby as well. And so Allan Rosenfield's public health legacy included two more lives saved.