

# CASES IN GLOBAL HEALTH DELIVERY

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# Maternal and Child Health in Uttar Pradesh, India: A Mother's Story

Nine months pregnant with her fifth child, Pari waited for her children to return from school and her husband, Anik, from work. She began preparing the family's dinner and lit a fire to make tea for her mother-in-law. She wore two scarves that just covered the red-painted parting of her hair—the *sindoor*, a traditional symbol of marriage for Hindu women.

This pregnancy was harder on Pari than the others. She felt weak and fatigued, and she had recently fallen while cleaning the house. Savita, her ASHA—a community health worker who helped women through pregnancy and accompanied them to the hospital for delivery—advised her to go to the hospital, but Pari's mother-in-law instructed her to apply a topical cream and rest at home.

Pari had mixed feelings about this pregnancy. She had not wanted to become pregnant because she knew she and Anik could not afford another child. They had already sent one daughter to live with relatives because of financial constraints. But Anik hoped for one more son and had dissuaded her from undergoing sterilization. Pari did not trust condoms because she had used them intermittently at the time she became pregnant with her third child. She wondered: *Will this fifth baby be the son Anik wanted? Is sterilization the solution to preventing this from happening again? How can I convince Anik that we will benefit from an operation?* 

# Life as a Girl

Pari was born in 1981 in Orissa, a poor state in eastern India, where the official language was Oriya. Her name meant "beauty" or "fairy" in Hindi. Pari lived in her grandmother's home with her parents and extended family. Before Pari turned five, her mother had two more daughters. Pari's father, a cook, moved more than 1,300 km away to a higher-paying job in the northern state of Uttar Pradesh. A few months later,

Claire Donovan, Julie Rosenberg, Amy Madore, and Rebecca Weintraub prepared this case for the purposes of classroom discussion rather than to illustrate either effective or ineffective health care delivery practice.

Editor's Note: This profile is part of a case series intended to shed light on reproductive, maternal, newborn, and child health in Uttar Pradesh, India. In this case, we aim to explore the factors influencing an individual's health-related decision making. Pari, the mother featured in this piece, generously agreed to share her story with our case writers. While this document cannot possibly represent Pari's story in full, we have tried to provide a lens into her life as she raises a family and the many factors impacting the family's health outcomes. All names have been changed to protect informants' privacy.

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Pari's mother and sisters joined him there. Pari, already enrolled in public school, stayed to continue her studies. Because it was improper for her as a female to be alone in public, she went directly home after school. She hoped to finish 12th grade and then train to become a nurse. She admired the nurses at the local public hospital, where her grandmother took her when she got sick.

When Pari was 15, her grandmother had financial difficulties and sent her to Uttar Pradesh to live with her parents, who now had four additional daughters, making Pari the oldest of seven. Pari felt like a foreigner in her family's home and their village, where other girls and boys her age had lived their whole lives. Unable to speak Hindi, the official language, Pari did not attend school. She did not know how to cook, clean, or sew, and she did not know her sisters.

Two years later, Pari's parents learned of an eligible bachelor from their neighbor and told Pari that she was to be married. Anik lived in a village 35 km away and, like Pari, was Hindu and a member of the Brahmin caste, the highest in Indian society. Anik's father had died when Anik was in second grade. Anik dropped out of school to work as a domestic servant, and his mother began working as a cook. Seeing his mother struggle to feed and educate her nine children, he decided that he would have just two sons.

Pari's parents liked that Anik was hardworking and well spoken, and arranged the marriage with Anik's mother, Daksha. Daksha's own parents were murdered when she was a young girl, so her aunt and uncle had raised her and arranged her marriage at age 16.

### Marriage and Move to Sitapur

One month before their wedding, Pari and Anik met. She was 17; he was 25. They were both shy, and communication was hard, given that Anik spoke Hindi fluently and Pari was still learning. Although she did not feel ready to be a housewife, Pari moved into Daksha's home. There were three rooms—one for Daksha, one for Anik and Pari, and one for storage—as well as a small kitchen lit with a kerosene lamp. Anik collected water daily from the village well, and the family members relieved themselves in the trees behind the house during the dry season. While the village was about 1 km from the highway, the rainy season impeded travel on the dirt road that led to it (see **Exhibit 1** for images of the village).

Anik was a cook in a local restaurant and farmed a small plot of land near his family's home. As the young woman in the home, Pari was responsible for cooking—serving her husband and mother-in-law first—and cleaning the house, which Daksha taught her how to do. Pari was pleasantly surprised that Daksha was gentle and easy to live with after hearing stories of demanding, unkind mothers-in-law. Initially overwhelmed by her new role, Pari was also grateful for Anik's patience. "If the food was bad or cold, he did not complain," Pari recalled. "He just ate it."

Pari called her younger sister daily for cooking and other advice with the cell phone Anik purchased for their family. "I don't talk much with other women because Anik doesn't like gossip," Pari said. "He says that if you say one negative word about someone, the person you're talking to will tell the other women."

### **Starting a Family**

Pari was unsure exactly how a woman became pregnant and believed that conception was "up to God." She and Anik had sex regularly without contraception. When Pari was 22, Anik's family and some villagers began asking why they had not started having children. They had sex more often, but Pari's periods continued to arrive. After several months, Anik decided they needed to see a doctor to find why they could not conceive. They took an auto rickshaw (a small, motorcycle-driven carriage) to the Khairabad

Community Health Center (CHC), a public hospital 7 km away (see **Exhibit 2** for estimated household expenses and income; see **Appendix** for a list of acronyms). It was Pari's first trip to the hospital since her childhood. A female physician, or "lady doctor," examined them both and said she saw no signs of infertility. Anik was not satisfied with the explanation and visited a traditional healer in their village. The healer sold Anik medicine (USD 22)\* for Pari and told him that he would also expect a gift if Pari conceived. Pari was embarrassed about her trouble conceiving and did not talk to any family members about it. She took the healer's medicine, and the next month, she missed her period. She returned with Anik to the healer, who took her pulse and declared her pregnant. Anik and Pari believed it was thanks to his intervention.

"I was very happy to be pregnant," Pari said, "but I was scared, too. I thought, *How will I manage the pain of labor? Will I give Anik the son he desires?*" Pari did not know what to expect. She remembered her aunt being pregnant in Orissa, but her grandmother had sent her outside the house during the delivery.

Daksha and other village elders told Pari to maintain her workload around the house. "A strong pregnant woman makes for an easy delivery," they said. Daksha encouraged Pari to drink milk and eat more green vegetables and legumes. Pari preferred to eat rice and a flatbread called *chapati* but complied.

Three months into her pregnancy, Pari became ill, with a high fever. Anik entreated her to go with him to the Khairabad CHC to see a lady doctor. Pari was reluctant—she thought she might have to get an injection. While she knew they often were the best treatment, she was scared of needles. Nonetheless, Pari followed Anik's guidance. The doctors examined her and wrote a prescription for an antibiotic. The hospital was out of the medication, so Anik filled the prescription at a private pharmacy. Pari took it, but her fever persisted. Anik then brought Pari to a private hospital in her parents' hometown of Lakhimpur. He told Pari, "The money is worth it to keep you and our long-awaited baby healthy." He believed the doctors at the public hospitals were less motivated and provided lower-quality services because care was free.

Pari did not improve. Anik's sister-in-law, suspecting "black magic," urged him to visit the local imam (a Muslim spiritual leader), who told them that a family member had used black magic on Pari in hopes that she would miscarry. He gave Anik blessed water for Pari to drink for three days. Pari also returned to the Khairabad CHC, where doctors refilled her original prescription. A few days later, her fever broke. She and Anik credited her recovery to the imam's blessed water.

For the remainder of the pregnancy, Pari did not return to a health care facility. *As long as I feel well, then the baby must be doing well,* she thought. Her younger sister-in-law, Aditi, who had delivered three sons in the hospital, called every day to check in and offer advice. Even though they disagreed about some matters, Pari enjoyed her conversations with Aditi. Pari had become nearly fluent in Hindi.

Speaking from her experience, Aditi advised Anik that delivering in a hospital was safest, and together they encouraged Pari to do so. Nevertheless, Pari hoped to deliver at home with the help of a local midwife. She could not forget her neighbor's story: In her ninth month, her neighbor suddenly started bleeding and went to two local public hospitals that refused to treat her because her case was "too critical." The woman traveled to the state capital, Lucknow, where she gave birth to a stillborn baby. "I have a kind of allergy to hospitals," Pari told Anik. She thought: *So much of my life happens in this home—I don't want to be somewhere else during this difficult experience. What if I had to deliver in the same room as other women and listen to them scream in pain? Would I have to have an injection?* Anik worried about the USD 45 it might cost for supplies at a public hospital, but at least it was less than the USD 135 it cost for supplies and services at a private hospital.

<sup>\*</sup> Conversions are based on the Indian rupee (INR) to US dollar (USD) exchange rate in December 2016.

#### **Birth of Kasish**

One morning in early 2004, in her ninth month of pregnancy, Pari woke up to intense pain. Daksha called a village elder, who said she was in the early stages of labor. When the pain became unbearable the following day, Anik convinced Pari to take an auto rickshaw (a small, motorcycle-engine-driven vehicle) to Sitapur District Hospital 9 km away, and Pari called Aditi to tell her she was in labor. After paying the registration fee of USD 0.02 (one Indian rupee), a nurse gave Pari an injection in her hip to speed up her labor. Pari's contractions quickly became more frequent and more painful. Anik stayed in the waiting room while Daksha and Aditi consoled Pari. The delivery room had concrete floors, iron-framed beds with thin plastic mattresses, an old IV fluid pole, and a bucket for bleaching medical tools. A few feet away from Pari, two other pregnant women were crying in pain. Sometimes the nurses yelled at them to be quiet. "Don't worry," Aditi told Pari, "You only have to bear this pain a bit longer and then it will be fine." A staff nurse checked on her every few hours.

After four hours, Pari gave birth to a boy. The staff nurse cut the umbilical cord with medical scissors, and Daksha showed Pari how to tie it with string. The staff nurse demonstrated how to clean her nipple before breastfeeding, as well as how to place the baby on her lap and help him latch on to her breast. The nurse took the baby away a few times "to do things to prevent him from getting sick," Pari explained. The hospital provided Pari a free meal, but Anik, Daksha, and Aditi had to return home to eat.

When Pari felt weak, the lady doctor prescribed "a tonic to help build strength." Pari was relieved the hospital staff treated her well; another sister-in-law had told her that was not always the case in public hospitals. The staff nurse told Pari she had to stay for 24 hours to recover and ensure her son was healthy, but Pari was eager to go home; she missed her bed and was troubled by the wailing of other women in labor. Anik, too, wanted to return to check on the farm, and had them leave 12 hours after delivery.

The staff nurse had advised Pari to wait a few days before bathing her son at home, but Daksha insisted the baby should be bathed immediately and did so. She also showed Pari how to apply oil to her son's umbilical cord. The family's priest suggested the name Kasish, honoring the Hindu god Shiva.

### Life as a Mother

Pari enjoyed getting to know and care for Kasish. When he was two, he had persistent diarrhea. Pari gave him some medicine she had at home, but the diarrhea continued. Distressed, Anik decided they should take Kasish to the Khairabad CHC. After they paid the registration fee (USD 0.02), a doctor examined Kasish and prescribed a medicine. A few days later, Kasish had not improved, and Anik and Pari took him to the larger Sitapur District Hospital and paid another registration fee. The doctor gave Kasish an injection that stopped the diarrhea. Hours later, Pari woke up to Kasish's crying and saw that his stomach was swollen. She was scared and felt guilty—*Did the injection cause the swelling? Should we have gone to traditional healer instead?* Pari and Anik immediately took him to the hospital, where they prescribed another medicine. The swelling went down, and Kasish's diarrhea subsided.

#### Growing the Family

At age 25, Pari became pregnant again. Although Anik and Pari had not been using contraception, the pregnancy was unplanned. They were elated by the news. Pari did not have any health issues or concerns during the pregnancy, so she did not visit any doctors or other health care providers. Again, at the urging of Anik and Aditi, Pari gave birth at the Sitapur District Hospital, with Daksha and Aditi by her side and Anik

waiting just outside the curtain covering the delivery room doorway. They left the hospital with their new daughter about 14 hours after delivery.

Daksha's role in the home began to change as she aged. Anik was upset. He explained, "She just wakes up in the morning, has tea, and sits. But I don't want to offend her by asking her to clean up after meals or care for her grandchildren. It's better to keep the peace." So Pari managed household duties on top of being a mother.

#### New Help

Two years later, in 2007, one of Anik's extended family members, Savita, applied for and received a new government position in the village called the accredited social health activist, or ASHA. Pari heard that ASHAs were supposed to visit pregnant women and their babies to help them stay healthy.

Savita lived in the same village and visited Pari periodically. Pari and Anik wanted to have a second son, and Savita suggested they wait another year so that there would be at least two years between children. Savita advised Pari to use "family planning" in the meantime, sharing options such as condoms, a medicine that needed to be mixed with water, or insertion of a copper T. Pari and Anik already used condoms, but only occasionally. "Sometimes Anik doesn't want to use them because he says it makes sex less enjoyable," Pari said. Every once in awhile, Anik got condoms for free from Savita; otherwise, he purchased them at the local pharmacy. It was uncomfortable discussing family planning with Savita, especially for Anik.

#### **Third Pregnancy**

Pari became pregnant again at age 27. Savita visited Pari at home twice a month and whenever Pari requested. As Pari rarely received visitors, Savita's visits quickly became welcome breaks. Savita explained the importance of antenatal counseling (ANC) sessions during the months leading up to Pari's fifth month of pregnancy, when she would attend her first ANC check up. Savita accompanied Pari to a Village Health Nutrition Day (VHND) about 1 km away for the check up. There, Pari met an auxiliary nurse midwife (ANM) who felt her stomach and listened to the baby's heartbeat. The ANM and Savita encouraged Pari to get a tetanus vaccine. Savita reminded her of a neighbor who did not get the shot and gave birth at home. Her baby died of a tetanus infection shortly after the umbilical cord was cut. Nevertheless, Pari refused because of her fear of needles.

Pari knew that hospital delivery was considered safest but hoped to deliver at home now that she had experience with childbirth. Savita ultimately convinced her of the importance of giving birth at the hospital, given the way each birth can differ, and took her to the hospital when she was in labor. Savita made sure the nurses paid attention to Pari and, alongside Daksha and Aditi, stayed with her through labor and delivery to verify that the baby received all of the required immunizations and that Pari recovered well.

Now that Anik and Pari had three children, money was tight. Anik's monthly salary of USD 88 barely covered the family's expenses, and Pari knew that any more children would place an impossible financial strain on the family. She called her sister, who had undergone sterilization. "The operation only takes 10-15 minutes," she reassured Pari. Emboldened, Pari approached Anik, but he was not receptive to the idea; he had hoped for another son. "People say that if one son refuses to feed and care for you in your old age, it is better to have another son who will," Pari explained. Some Hindus also believed that a son must light his father's funeral pyre for his father to enter heaven after death. Pari was unsure if this was true but agreed to delay sterilization.

# Anik's Move to Delhi and a Fourth Child

To support his growing family, Anik moved to Delhi—a nine-hour bus ride away—to work as a cook and domestic helper for USD 133 a month. He sent money home to pay for clothing, food, and private school for their two oldest children. In their village and surrounding area, even the poorest families did everything possible to send their children to private school, which cost around USD 30 per year. Anik felt proud to be able to support his family and visited occasionally. After inconsistent condom use during a visit, Pari, now 29, became pregnant again. She was disappointed and afraid. Anik was glad for the chance to have a second son despite financial worries.

With encouragement from Savita, Pari attended ANC sessions and paid special attention to her diet. Anik returned for Pari's delivery, and he and Pari decided that she would get sterilized afterward. The financial stress of having another child outweighed the potential disappointment of not having a second son. Aditi, Anik, and Daksha accompanied Pari in an auto rickshaw to the Khairabad hospital, where Savita joined them, for the delivery of another healthy daughter.

Pari began bleeding heavily after delivery, and the staff nurse called the lady doctor. The hospital was out of the medication Pari needed, so Anik immediately sought it at a nearby pharmacy. The doctor told Anik his wife would have died without the medicine because the blood loss had caused low blood pressure. Savita advised that Pari was too weak for sterilization, so Pari and Anik postponed the sterilization surgery. After three days, the doctor sent Pari home and told her to eat more green vegetables and avoid stress.

Savita visited Pari's home on the third and seventh days following delivery, then visited weekly until the baby was six weeks old. When Savita visited and found Pari oiling her daughter's umbilical cord, she explained that the oil could harm the baby and told her to stop. Pari heeded her instructions.

#### Parting with a Daughter

Having two very young daughters was difficult: *By taking care of one child, I am not able to take care of the other,* she realized. Pari called her parents for advice. Her mother told her that one of Pari's younger sisters had recently moved back home after divorce, which was uncommon in India. Her sister had cried for days: *With no husband or children, what would become of her?* Pari's mother suggested Pari send one of her daughters to live with them in Lakhimpur, where Pari's sister could care for the child. The thought broke Pari's heart, but she knew this pragmatic solution would help both her sister and her own family. She presented the idea to Anik and Daksha, who agreed it was the right thing to do. Pari and Anik decided to send their two-year-old.

Pari missed her daughter dearly and checked in with her regularly. "My wife cries a lot, especially during holidays," Anik said. "Because I work so much and I am in Delhi, I sometimes forget about my daughter. But a mother is a mother, and she can never forget her."

## **Health Problems**

In 2012 at age 31, Pari had a series of health problems, starting with a severe nosebleed. Daksha suggested she lie down to stop the bleeding. When that did not work, Pari visited a healer in the village, who gave her a medicine. Pari's condition did not improve, so Daksha called Savita, who told her to go to the Khairabad CHC. The doctor gave her a free medication, but the bleeding continued. Pari believed that the medication she received was poor quality and went to the private hospital. There, a doctor told her the

bleeding could reach her brain and cause long-term damage. He gave her a prescription for a medication, which cost USD 13.50. A few hours after she took it, her bleeding stopped.

A few months later, Pari got her period twice in one month. She consulted Savita, who encouraged her to visit the public hospital. There the lady doctor conducted an ultrasound and concluded Pari had ovarian cysts that were causing the bleeding. The doctor prescribed medicine to normalize her cycle.

Pari's family also had health troubles. Not long after she was treated for bleeding, Anik called to tell her that he was sick. He had recently cooked for a wedding and had eaten many of the leftover sweets and pastries. He experienced intense pain afterward and had trouble using the bathroom. His boss offered to take him to the hospital and pay for treatment; Anik was considering it.

A few days later, eight-year-old Kasish developed severe pain in his penis and was unable to urinate. Pari rushed him to the hospital, where the doctors told her that his condition required surgery. When she shared the news with Anik, he decided not to treat his own illness and took leave to return home.

After Kasish's surgery at Sitapur District Hospital, Anik was diagnosed with diabetes at the Khairabad CHC. The doctor explained he needed to take his medicine regularly and change his diet to control his condition. Anik bought the prescribed medication, but quickly felt guilty about the cost and began taking it only when symptoms were especially bad. Pari urged him to follow the doctors' orders and take the medicine as prescribed.

Instead of returning to Delhi, Anik decided to take out a loan to open a restaurant locally. Pari was uncomfortable with the idea. Anik could not be deterred, however, and borrowed USD 2,200 to lease a building and hire staff. The restaurant failed after two years, and Anik took a job as a chef. He asked Pari to manage the family's finances moving forward.

### **Fifth Pregnancy**

At 35, Pari became pregnant again. Pari's 10-year-old daughter believed babies were bought from a store and asked, "My father does not have much money—how will he bring back a brother or sister for me?" Fearful after the complications of her last pregnancy and concerned about finances, Pari decided to get an abortion, but Anik and Savita discouraged her. It would be too hard on her body, Savita explained, especially because she had hemorrhaged after her fourth child. Anik added, "If it's a son, he will support us in our old age just as I support my mother." Pari reluctantly agreed to keep the baby and told herself she would get sterilized immediately afterward.

Savita periodically visited Pari to monitor her weight and accompanied her to ANC consultations and VHNDs. When Pari was three months pregnant, Anik's brother connected their home to the electrical grid, and the family got a small TV. Anik saw a program that warned a husband could harm his unborn baby and contaminate his wife's breast milk if he has sex with his pregnant wife, and he heeded the warning.

At Pari's first ANC session, the ANM tested her blood and told her she was anemic and needed an injection. Savita, who knew Pari was afraid of needles, tried to convince her to comply. Pari refused and went directly to the pharmacist, who recommended a tonic. The ANM also prescribed her daily iron and folic acid supplementation, which she took irregularly because of the side effects of nausea and constipation. Even when the side effects were mild, she often forgot to take the pills. She tried to follow Savita's advice to eat more green vegetables.

Pari visited the Khairabad CHC for her final ANC session. An ultrasound showed the baby to be in good health and, based on its size, likely to be born in mid-January. Savita helped Pari decide which public

hospital she wanted to deliver in and budget for potential hospital supply costs and clean clothes for dressing the baby after delivery. Savita called these decisions her "birth preparedness plan."

### Looking Ahead

Pari continued caring for her 12-, 10-, and 5-year olds and tending to Anik and Daksha. She worried about her seven-year-old daughter in Lakhimpur: *Is she happy? Does she remember me? What will she think of me when she is older?* Still, Pari felt lucky for her kind husband, a mother-in-law who loved her, and four healthy children. She had not pursued her dream to become a nurse, but she had moved to a new state and learned a new language. She thought, *Surely, I can handle the challenges ahead of me: Anik's diabetes, Daksha's eventual passing, the restaurant debt, my recovery from childbirth. What if this new baby is a girl? Will Anik finally agree to sterilization?* 

# **Exhibit 1** *Photos from Pari's Life and Community*



Figure 1: Village well



Figure 2: Cow feeding in village



Figure 3: Community Health Center (CHC) hallway



Figure 4: Auto rickshaw on the streets of Lucknow



Figure 5: Village roads that become impassable in rainy season



Figure 6: Pregnant women waiting for the ANM at a Village Health Nutrition Day



Figure 7: Dung patties used as fuel for cooking



Figure 8: Khairabad Community Health Center (CHC)



Figure 9: Paved village road



Figure 10: Solar panel for charging cell phone outside of a village home, next to pail of water for the family cow



Figure 11: Delivery room at Khairabad CHC

Expenses	Average Cost (USD)
Medicine from traditional healer for suspected infertility	22.00
Delivery services and supplies at public hospital (Anik's estimate)	45.00
Delivery services and supplies at private hospital (Anik's estimate)	135.00
Registration fee at public hospitals	0.02
Savita's nosebleed medication	13.50
Tempo transportation to Khairabad public hospital (CHC)	0.30 for a round trip
Tempo transportation to Sitapur public district hospital	0.50 for a round trip
Anik's loan to open a restaurant	2,200
Books, uniforms, school supplies	6.43/year
Basic cell phone and SIM card	21.00
Cell phone minutes	0.37/person/month
Bag of local rice (6.6 kg/week)	1.85/week
Cooking oil (0.84 kg/week)	1.09/week
Tea (0.1 kg/week)	0.28/week
Clothing and shoes for a family of six	53.16/year
Kerosene fuel tank	3.15/week
Farming supplies (seeds, fertilizer, tools, equipment rental)	100/year
Income	Average Income (USD)
Anik's salary as a domestic worker in Delhi	132.30/month
Anik's salary as a cook in local restaurant	88.2/month

# Exhibit 2 Examples of Pari and Anik's Household Expenses and Income

Source: Case writer interviews; USAID India "Value Chain Analysis of Wheat and Rice in Uttar Pradesh, India;" Global Living Wage Coalition 2016 *Living Wage Report*: Bhadohi, Uttar Pradesh, India (Rural); *The Economic Times of India*; "Affordability of private schools: Exploration of a conundrum and towards a definition of 'low-cost'," Oxford Review of Education; Household Consumption of Various Goods and Services in India 2011–12, Government of India (June 2014).

Note: Conversions are based on the Indian rupee (INR) to US dollar (USD) exchange rate in December 2016.

# Appendix Common Acronyms and Abbreviations

- ASHA Accredited social health activist
- ANC Antenatal counseling
- ANM Auxiliary nurse midwife
- CHC Community health center
- VHND Village Health Nutrition Day