

THE HUMAN FACE OF PNEUMOCOCCAL DISEASE IN AFRICA

"Fatima Mwadori was admitted to Kilifi District Hospital in September 2004 with severe pneumonia. The family's finances were hit hard by the cost of treatment."



Fatima is the second youngest of five children. Her grandmother looks after Fatima and her siblings and tends crops at the family homestead in Kilifi, Southern Kenya. Fatima's mother works as a casual laborer in nearby Mombasa, sending money back to her large family when she can.

In September 2004, Fatima became very ill. She had a fever, was coughing constantly and refused to eat. Her grandmother had already tried traditional remedies, but found that in this case they weren't effective. She then took Fatima to the nearest private health clinic where the child was given oral and intravenous drugs. But her condition worsened over the week and Fatima's grandmother took the little girl to hospital where she was immediately admitted with pneumococcal pneumonia.

At the same time, Eustin, a 13-month-old girl from the same district arrived with a fever, an extremely hot body and a visible rash. She could not move her arms or legs; her mother worried that Eustin would never walk again. The diagnosis was pneumococcal meningitis. Eustin stayed in the hospital for 14 days and received life-saving treatment.

While the children were in the hospital, Fatima's grandmother and Eustin's mother were glued to their bedsides—not only to comfort the children, but to feed, clean and care for the young girls. Because nurses are in short supply, caregivers—usually

mothers—must stay with a sick child in the hospital.

Sick with fear over the thought that her granddaughter might die, Fatima's grandmother couldn't sleep or eat. Fatima's breathing sounded "like a bush baby." For the first two days she could not catch her breath enough to be able to eat. But after one week at Kilifi District Hospital that included a series of intravenous medicines, pills and fluids, Fatima's condition improved.

Fatima's illness hit her grandmother's finances hard. Fatima's hospital stay and medicine cost more than the price of two weeks' worth of food for the family. And while her grandmother cared for Fatima in the hospital she had to rely on relatives to take care of her other grandchildren. Crucial farm work—the family's source of income—went undone for two weeks.



"Thirteen month old Eustin Ziro was admitted to Kilifi District Hospital with life-threatening pneumococcal meningitis. She is lucky to be alive."

Eustin also got better. Under the circumstances she was extremely lucky, given that many other children suffer longterm disability and hardship following a case of meningitis.

In places like Kenya, disabled children—and later adults—are denied many things that healthy children have. They may never have access to an education or a productive job and will likely be dependent on their family members and community for their survival. In short, the effects of pneumococcal disease may last a lifetime and be felt by all the members of a family or community.

THE HUMAN FACE OF PNEUMOCOCCAL DISEASE IN ASIA

"At only four months old, Nattakamon ("Beer") contracted life-threatening pneumococcal meningitis. Luckily, she made a good recovery."



Nattakamon ("Beer") is an only child who lives with her grandparents in the Sa Kaeo province of Thailand. Her parents work near Bangkok, a nine hour drive away, to earn money for their family.

At just four months old, Beer became ill and her grandmother took her to a community hospital, where she was admitted. Within the first week of her stay, Beer experienced a seizure and high fever. As her condition did not improve, despite frequent treatment, she was referred to the provincial hospital 31 km away from her home town.

At the provincial hospital, Beer slipped into a coma for four days, also developing conjunctivitis and a prolonged fever, and was eventually diagnosed with pneumococcal meningitis. After six days, Beer regained consciousness, and spent the next three weeks in hospital slowly recovering.

In Bangladesh, Nayeem was just five months old and had been suffering with a fever for eight days when he started experiencing periodic convulsions. His parents rushed him to hospital, leaving their other two children (including Nayeem's twin sister) with a neighbor. After waiting in the outdoor patients' service queue for over an hour, Nayeem was immediately admitted to the hospital.

The doctors confirmed Nayeem was suffering from pneumococcal meningitis. The disease had already caused severe and irreversible damage to the child's brain, leaving him with serious physical and mental disabilities.

Struggling to keep up with hospital bills and against the advice of the doctors, Nayeem's parents took him home, hopeful that with their care and love, their child would start to improve.

The entire family was impacted by Nayeem's illness. His father realized that with a daily income of less

than \$5, and no savings, it would be impossible to pay for his son's stay in the hospital. He had to seek out extra work and money and was forced to sell his cultivating land to meet the hospital costs. When Nayeem's elder brother, Zahir, reached school age, the family was unable to afford to pay for supplies for him. Nayeem's mother spent all her time caring for all her young son's needs, leaving her tired and with little time for the rest of the family.

Back in Thailand, Beer's hospitalization was not only emotionally trying for her family, but was also very expensive. Though the hospital incurred the costs of hospitalization and medications, Beer had to stay in a special ward with extra fees, and her family had to cover the cost of commuting 31 km from their home to the provincial hospital along with food for their daughter. This had a tremendous impact on a family who were already struggling to make ends meet.

To her family's relief, Beer was eventually able to return home to her grandparents' house. She recovered with partial hearing loss in her left ear, and visits the hospital every three months for follow-up.



"Nayeem was diagnosed with pneumococcal meningitis at five months old. The disease affected the standard of living of his entire family"

Sadly, two years after first contracting pneumococcal meningitis, Nayeem lost his fight for life and died from complications caused by this easily preventable disease.

Although Thailand and Bangladesh are two Asian countries with differing cultures and health systems, the sad outcome of pneumococcal disease for Nayeem could just as easily have been as tragic for Beer. These children are just two examples of the millions of children worldwide who suffer from vaccine-preventable pneumococcal disease, the effects of which may last a lifetime and be felt by all the members of a family or community.