Disease spreads fear Doctor who warned public lost his life in the process M.A.J. MCKENNA 2218 words 2 April 2003 The Atlanta Journal-Constitution Copyright (c) 2003 The Atlanta Journal-Constitution, All Rights Reserved

Dr. Scott Dowell pressed against the window separating him from the hospital isolation room.

In a bed on the other side of the glass, Dr. Carlo Urbani of the World Health Organization lay gray and unmoving.

Six doctors and nurses wearing spacesuit-like protective gear stepped back, exhausted. They had worked for hours to keep the desperately ill physician alive through four heart attacks. But the effort was fruitless. It was time to let him go.

It was 11:45 a.m. Saturday morning in Bangkok, Thailand. Urbani, an infectious disease specialist who treated some of the earliest cases of severe acute respiratory syndrome and alerted health authorities to its seriousness, had died of the disease.

Dowell was stunned. He had collaborated on Urbani's care since the big Italian arrived in Bangkok 18 days earlier, mildly feverish and deeply worried about what lay ahead.

"I never really thought that he would not pull through," Dowell said. "It still doesn't seem quite real that he didn't make it."

A compassionate healer

More than 1,800 people are now known to be ill with SARS, including an elderly Atlanta woman who is said to be recovering. At least 62 have died, all but four of them in Asia.

But Carlo Urbani put a face on the disease.

The 46-year-old parasitologist from a village on Italy's northeastern coast had worked since medical school to improve the health of people in poor countries. Married with three young children, he was living with his family in Hanoi on a WHO assignment when a traveler from Hong Kong brought the disease to Vietnam.

A Chinese-American businessman named Johnny Chen arrived ill on Feb. 26 and checked into the Vietnam-France Hospital. He triggered an explosive outbreak. More than 80 hospital staff --- more than half of those who came in contact with Chen --- developed SARS after treating him or mingling with those who had.

SARS had been circulating in China for months already and had made its way to Hong Kong. Chen is believed to have been infected when he shared a floor at the Metropole Hotel with a Guangdong doctor who spread the disease to a dozen other people.

But in early March, none of that had come to light. The Hanoi outbreak was the first visible signal of something very wrong.

Chen was airlifted to Hong Kong, where he died. The Vietnam-France Hospital closed its doors. Urbani, who had been summoned by anxious hospital staff, alerted his supervisors in Geneva and began to research the outbreak.

Urbani had a philosophy. He expressed it in 1999, when he helped accept the Nobel Peace Prize for Doctors without Borders, the humanitarian group whose members are famous for charging into danger with little thought for themselves.

"Health and dignity are indissociable in human beings," he said at the time. "It is a duty to stay close to victims and guarantee their rights."

In Hanoi, Urbani stayed close to the victims of the still-unnamed disease. He returned several times to the hospital, tracing the paths of infection and taking samples from the sick. He began to be worried that the illness was a particular threat to health care workers, who are in such close contact with patients. He alerted the WHO that precautions were needed to keep health workers from getting sick.

And then he began to feel ill himself.

'Worse than you imagined'

Scott Dowell had never heard of Urbani. The infectious disease physician, an employee of the Centers for Disease Control and Prevention in Atlanta, is director of a program set up to detect new diseases in Asia.

On March 11, Dr. Tim Uyeki of the CDC joined Dowell in Bangkok. Uyeki is a member of the Epidemic Intelligence Service, the shock troops who agree to be dispatched anywhere at a moment's notice. In Atlanta the day before, he had gotten the call: Go to Hanoi immediately; stop in Bangkok to get a visa and lab supplies.

Uyeki told Dowell and Dr. Michael Martin, a recent EIS graduate on Dowell's staff, about the burgeoning Hanoi outbreak. With no lab results yet to go on, the three doctors guessed the illness might be influenza, possibly a fatal, fast-moving strain.

"We were very concerned," Dowell recounted Tuesday in a telephone interview. "Bangkok is a regional hub for airlines, and people throughout Asia come here for medical care. We assumed it would come here."

Dowell met immediately with the local WHO representative. He left reassured that the agency knew how serious the problem might be. But the reassurance did not last long. At 9:45 that night, his phone rang. It was the WHO official.

"What we talked about this afternoon has happened," he said. "And it is worse than you imagined. It is one of our staff."

It was Urbani, who was coming to Bangkok for medical care. His plane would land in 20 minutes.

Dowell raced to the airport through Bangkok's notorious traffic, trying by cellphone to alert the Thai Ministry of Health, the local quarantine officers and hospital staff. By the time he arrived, the flight had landed. The bus that brings passengers across the tarmac was on its way to the gate.

"We held up a piece of paper with his name on it," Dowell said. "But we noticed him as soon as he got off the bus. He had a grim look on his face."

Dowell and the quarantine officer greeted Urbani gingerly, staying several feet away and taking care not to shake hands. They led him through an unused part of the airport to a driveway that travelers would not use, to meet an ambulance.

The ambulance wasn't there. Its crew, frightened by news of the disease coming their way, had stopped to get protective gear. Then they had gotten lost in the airport. It would take them 90 minutes to find the right door.

"I had heard enough about transmission in Hanoi to be nervous, and Carlo emphasized that he didn't want me too near him," Dowell said. "So we arranged two plastic chairs about 8 feet apart --- far enough to be safe, we thought, but close enough to talk over the noise of cars going by. And then the ambulance pulled up, and out spilled people in full spacesuits to scoop up the three of us in street clothes."

The ambulance took Dowell and Urbani to a hospital where workers had improvised a negative-pressure room, a key component of Western infection isolation that is seldom available in the developing world. With no way to seal it off, they had rigged fans to suck air through the room and blow it out the window, in an effort to keep disease organisms from drifting into the rest of the hospital.

"Carlo was quiet," Dowell recalled. "He wasn't particularly sick --- he wasn't short of breath, he wasn't coughing. Mostly he had a bit of fever, and he was scared he would get worse."

A sudden downturn

Urbani did get worse --- but not immediately. For a week, he seemed relatively well. His fever remained at about 100 degrees, his chest X-rays stayed clear, and his lungs did a good job of getting oxygen into his blood.

"For the most part, he was not a patient who needed to be in a hospital," Dowell said.
"But he was scared, and depressed. In Hanoi he had seen patients who were well in the morning and very sick in the afternoon, and he feared it would be quick."

The number of SARS cases was climbing throughout Asia. Dowell went to northern Thailand for a meeting, and then to Taiwan where new cases had triggered an urgent request for help. Martin took over Urbani's care. Dowell called Urbani's hospital room from Taiwan, trying to keep his spirits up.

It was the second week of Urbani's illness. The doctors had tried every treatment they could think of: broad-spectrum antibiotics, in case there was an undetected bacterial infection; new drugs against influenza; an antiviral that Hong Kong doctors had reported some success with. Nothing was working.

Urbani had come alone from Hanoi. Dowell called Urbani's wife.

"Carlo didn't want me to," he said. "He thought they should remain where they were. But she asked me what she should do, and I told her I thought she should come to him. So she sent their kids to relatives in Italy, and she came."

By the time she arrived, the hospital had built an isolation suite around Urbani, with double walls of glass that made two layers around the room. To treat him, staff pulled on two layers of gloves, gowns, masks and paper booties. When they left the room, they discarded the first set in the glass corridor, and the second set when they reached the outside.

Patients who become very ill with SARS need breathing tubes to force oxygen into their lungs. Urbani's wife arrived just in time, before he was put on the respirator that would cut off his ability to speak to her.

More needs to be done

By the third week of his illness, Urbani's lungs had filled with fluid. Dowell and Martin wanted advice. The World Health Organization flew in an intensive-care specialist from Australia.

"He was on high ventilator settings, and we worried that there wasn't much more we could do," Dowell said. "But the specialist thought his lungs were all right. She was more worried about complications. Mike and I laughed a bit. We thought, if she could get oxygen into his blood, we could take care of the rest. We were kind of upbeat."

That was Friday evening. Early Saturday morning, Martin called Dowell urgently: Urbani had suffered a heart attack.

Dowell ran for the hospital. With no time to don a spacesuit, he grabbed a protective mask and slid between the two layers of glass. Inside the room, health care workers worked furiously to revive Urbani. Martin knelt on the bed, compressing the big man's chest in CPR.

Three times, Urbani's heart stopped and the team started it up again --- but the stress of severe lung disease had taxed his system too far. When his heart stopped again, Dowell accepted the inevitable and pronounced him dead.

The team filed out into the glass corridor, deeply upset and drenched in sweat beneath their spacesuits.

Telling the story, Dowell took a deep breath.

"To be by yourself in a strange country, in a room full of people in spacesuits who cannot touch you," he said. "That is not a good way to die."

Three days later, the shock of Urbani's death has barely begun to wear off. Dowell and his staff are still digesting the loss of someone who, in the three weeks they knew him, became a friend.

"In the evenings, I thought about what we would say to each other when this was over and we could discuss it," Dowell said.

Urbani is not the first friend Dowell has lost to a disease he was investigating. In 1994, as an Epidemic Intelligence Service officer, he was sent to Zaire (now known as the Democratic Republic of Congo) to help control outbreaks of Ebola. Six years later, a Zairian colleague died of Ebola when the disease recurred; he had made a small mistake in the infection control procedures that protected him.

Dowell broods about his team now. In their frantic rush to save Urbani's life, were any of them contaminated? He does not think so --- but until the 10-day incubation period for SARS is over, he will not know for sure.

He has felt the same disquiet for himself. On the day Urbani died, Dowell sat at his desk at home. He began to feel warm; he found it difficult to breathe. He decided --- just in case --- not to kiss his kids good night.

The next morning, he was fine.

"It is hard," he said, "picking apart the early symptoms of SARS from your own fear."

Dowell worries whether Urbani will be considered merely a casualty. To the Bangkok team, he is a hero.

Health care workers around the world may owe their lives to Urbani's recognition of the need for stringent protections, although that recognition came too late to save him.

"This is a much more serious illness than many people, including some health officials, appreciate," Dowell said. "It is dramatically more severe than other diseases that are spread by the same route. People need to recognize that more needs to be done. Otherwise, I fear SARS is going to be with us for a long time."